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

SUMMARY RECORD OF THE TWENTY-SECOND (22ND) MEETING OF EXPERT $11^{\text{TH}} - 13^{\text{TH}}$ APPRAISAL COMMITTEE HELD ON **SEPTEMBER** 2017 FOR **APPRAISAL** OF **INDUSTRY-I PROJECTS ENVIRONMENTAL** SECTOR **CONSTITUTED UNDER EIA NOTIFICATION, 2006.**

The Twenty-second meeting of the Expert Appraisal Committee (EAC) for Industry-I Sector as per the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-I Sector Projects was held on $11^{\text{th}} - 13^{\text{th}}$ September 2017 in the Ministry of Environment, Forest and Climate Change. The list of participants is annexed.

22.1 After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim. The meeting was chaired by Dr. Jagdish Kishwan, IFS(Retired) (vice chairman) on first day i.e. on 11th September and remain two days by Dr. Chhavi Nath Pandey, IFS(Retired) (regular chairman).

22.2 Confirmation of the minutes of the 21stMeeting

The minutes of the 21stmeeting, as circulated were confirmed.

DATE:11thSeptember 2017

22.3. Expansion of Asbestos Cement Sheet manufacturing unit (72,000 TPA to 1,75,000 TPA) of M/s HIL Limited located in Industrial Area, Jasdih, District Deogarh, Jharkhand. [Proposal No. IA/JH/IND/42684/2016; File No. J-11011/01/2016-IA-II(I)]- Environmental Clearance - Further Consideration based on ADS.

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons of absence by the applicant

22.4. Expansion of Integrated Steel Plant & Captive Power Plant (WHRB 8 MW; AFBC 17 MW) at village Punjipatra, District Raigarh, Chhattisgarh by M/s Scania Steels and Powers Limited [Online proposal No. IA/CG/IND/67506/2007; MoEF&CC File No J- 11011/1267/2007-IA II (I)- Environmental Clearance.

1.0 The proposal for Expansion of Integrated Steel Plant & Captive Power Plant (WHRB 8 MW; AFBC 17 MW) of M/s Scania Steels and Power Limited located in Village Punjipatra, Tehsil Tamnar, District Raigarh, State Chhattisgarh was initially received in the Ministry on 27th November 2007 and 7th April 2008 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 80th meeting held on 15th April 2008 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment and Forests had prescribed ToRs to the project on 25th April 2008 vide Lr. No. J-11011/1267/2007-IA.II(I) the expansion of Sponge Iron plant production capacity from 66,000 TPA to 1,32,000 TPA, establishment of Induction furnaces with CCM to produce MS Billets of 1,35,000 TPA, Power Plant of 8 MW, based on WHRB & 17 MW, based on AFBC Boiler, a Ferro

Alloys manufacturing plant of 1x5 MVA capacity to produce 7,500 TPA of Ferro Alloys. MoEFCC had accorded Environmental Clearance (EC) for the project vide Letter No. J11011/1267/2007-IAII(I) dated 5th November 2008. The project was exempted from the requirement of Public Hearing due to expansion of the project at the same site under 7 (ii) of the EIA Notification 2006.

2.0 Subsequently, MoEFCC issued two amendment letters; one dated 3rdJuly 2009 pertaining to the change of the configuration of the Induction Furnace and the other dated 1stJune 2011, vide which it granted the permission for the disposal of Char, to be generated by Sponge Iron Plant to the other companies till the coal linkage is available for the AFBC boiler.

3.0 In the meantime, M/s Jan Chetana filed an appeal in National Environment Appellate Authority (NEAA) vide appeal No. 8/2009 against the issue of EC for this expansion project. Subsequently, Hon'ble National Green Tribunal issued an order dated 9th February 2012 directing "MOEF&CC to take prompt steps for completing the exercise of public consultation (Public Hearing) and curing the deficiency in EIA/EMP, and re-visit the entire project in the light of the observations made by it and complete the exercise as expeditiously as possible".

4.0 The company requested the Hon'ble Supreme Court of India (I.A. No. 3 in Civil Appeal No(s). 6025 of 2012) to stay the order issued by Hon'ble NGT, as cited above and requested to give permission to start production of the expansion project as all required clearances have been obtained and lot of investment has been made in the expansion project.

5.0 The Hon'ble Supreme Court of India vide order dated 16th May, 2014 issued order "to complete the public hearing as per the Act/ Notification, duly considering the objections received from the public and the decision thereon shall be taken by MoEF&CC. It further directed the entire process to be completed within two months and the report to be submitted to court in a sealed cover".

6.0 Subsequently, Chhattisgarh Environment Conservation Board wrote a letter vide Lr. No. TS/CECB/2014 dated 06.06.2014 to MoEF&CC, Govt. of India, with the clear intimation of the Supreme Court Order dated 16th May 2014 and requested for the guidance to comply with the said order. The letter emphasized on the validity of the already prescribed ToRs by MoEFCC and raised the concern whether the public consultation/ hearing should be conducted based on the previously prepared EIA Report. In response, MoEF&CC issued a Letter No. L-11011/28/2009-IA.II(I) dated 24th September 2014, with the clear mention of the collection of fresh one-season data while addressing all the deficiencies, pointed out in the order, including the following and revise the draft EIA-EMP Report accordingly:

- i. Collection of baseline data more than 4 months before the ToRs were communicated by MoEF (para 36, page 27 of the judgment)
- ii. Authenticity of data, collected particularly for SO₂, which was reported below detectable limits (para 36, page 27 of the judgment), hence unrealistic air quality data has been presented.

- iii. The overall impacts worked out based on mathematical modelling does not appear to reflect the true picture, as AAQ levels of mercury, which would be found in an area where a number of sponge iron units are located, has not been estimated (page 28 of judgment).
- iv. Water quality data in Tables 3.10 and 3.11 of the EIA Report, which states that the fluoride levels are the same in ground water and in surface water, which is unrealistic (page 28 of judgment).
- v. Re-examine the water balance on how the treated effluents can be utilized and for what purpose (page 29 of judgment).

7.0 MoEF&CC further advised the project proponent to submit the Draft EIA Report, thus prepared by a QCI/NABET accredited consultant to Chhattisgarh Environment Conservation Board for conducting public hearing as per provisions, laid out in the EIA Notification 2006. After public hearing, it advised to revise the EIA-EMP, incorporating the issues raised in the public hearing in a separate chapter with specific capital and recurring costs for the implementation of the measures/issues contained therein and then to submit the final one to the Ministry.

8.0 As advised, the Draft EIA/EMP Report was prepared, accommodating all the components, based on the finalized ToRs for its submission to Chhattisgarh Environment Conservation Board for the conduct of Public Hearing/Consultation. Subsequently, the Public Hearing was conducted on 25th May 2017 near Banjari Mandir, Tehsil Tamanar, District Raigarh in Chhattisgarh. The project proponent submitted an application for environmental clearance to the Ministry online on 17th August 2017 vide Online Proposal No IA/CG/IND/67506/2007.

9.0 The project of M/s Scania Steels and Power Limited located in Punjipatra Village, Tehsil Tamnar, District Raigarh, Chhattisgarh State is for expansion of production of sponge iron from 66,000 to 132,000 tonnes per annum (TPA). The existing project was accorded environmental clearance vide Lr.no. J-11011/1267/2007–IA.II(I) dated 5th November 2008. The Status of compliance of earlier EC was obtained from Regional Office, Nagpur vide Lr. No. J-11011/1267/2007-IA II (I) dated 5th November 2008.

Product/ Unit	Units under	Units (as per EC	Units under	Units
	operation before	obtained vide	Operation with	commissioned (but
	EC obtained vide	Letter No. J-	valid Consent to	not under
	Letter No. J-	11011/1267/200	Operate from	Operation) after EC
	11011/1267/200	7-IA II (I) dated	Chhattisgarh	obtained vide Letter
	7-IA II (I) dated	5 th November	Environment	No. J-
	5 th November	2008 and	Conservation	11011/1267/2007-
	2008	Amendment	Board	IA II (I) dated 5 th
		Letters dated 3 rd		November 2008
		July 2009 & 1 st		and after valid
		June 2011)		Consent to
				Establish from
				Chhattisgarh
				Environment
				Conservation Board
Sponge Iron Plant	66,000 TPA	66,000 TPA	66,000 TPA	66,000 TPA
	(2x100 TPD)	(2x100 TPD)	(2x100 TPD)	(2x100 TPD)

10.0 The overall plant scenario is presented hereunder:

Steel Melting	-	1x6 T + 1x8 T +	1x6 T *	1x8 T
Shop - Induction		2x15 T		
Furnaces				
(with matching				
LRF & CCM)				
Ferro Alloys	-	7500 TPA	-	-
Plant		(1x5MVA SAF)		
Captive Power	-	25 MW	-	-
Plant		(8 MW WHRB		
		based & 17 MW		
		AFBC based)		
* Presently not in	operation. Renewal	for Consent to Ope	rate is under proces	55.

11.0	the overall	capacity	of the	plant after	expansion	will be as	s follows:
11.0	the overun	cupacity	or the		CAPUIISION	will be u	10110 105.

Name of unit	No. of units	Production Capacity
Sponge Iron Plant	2x100 TPD	200 TPD
Steel Melting Shop - Induction Furnaces	(1x6 T + 1x8T + 2x15 T) (with matching LRF & CCM)	1,35,000 TPA
Ferro Alloys Plant	(1x5 MVA SAF)	7500 TPA
Captive Power Plant	8MW WHRB based & 17 MW AFBC based	25 MW

12.0 At present, 2x100 TPD Sponge Iron Plant is in operation, for which valid 'Consent to Operate' from Chhattisgarh Environment Conservation Board (CECB) is available. In expansion proposal, 2x100 TPD Sponge Iron Plant & 1x8T Induction Furnace have been commissioned after obtaining the necessary 'Consent to Establish' and 'Consent to Operate' for the same from CECB. However, these units under the expansion proposal are presently not in operation as the case is pending in Supreme Court. Apart from the above, another 1x6T Induction Furnace has also been implemented after necessary approvals from CECB, obtained separately. The unit is presently not in operation. Renewal for "Consent to Operate" is under process.Besides, one Rolling Mill of 30,000 TPA capacity to manufacture M. S. Rod/TMT Bar along with a Producer Gas Plant with 100 TPD capacity, using coal gas technology is also operating as Unit-2 after necessary approvals from CECB in the adjoining land.

13.0 The total land required for the project is 23.472 ha (58 acres) which is already under the possession of the company. No /forestland involved. The entire land has been acquired/ not acquired for the project. Kelo River which flows at a distance of 6.3 kms at ESE direction from the project site. This river is a main tributary of River Mahanadi. Kurket River which is another important river in the study area is flowing about 7.6 Km away at WNW direction from the project site. The Rabo dam which is situated on the way of the Kurket River is located about 7 Km distance at west direction from the project site.

14.0 The study area has a slightly rugged topography with ridges and isolated hills of Cuddapah sandstones, running in a more or less N.W. – S.E. direction and the geographical coordinates of the project site are Latitude $22^{\circ}04'09.50$ "N to $22^{\circ}04'26.50$ "N and Longitude $83^{\circ}20'43.90$ "E to $83^{\circ}21'03.60$ "E with Above Mean Sea Level (AMSL) 323 meters (1059 ft).

15.0 The ground water table reported to ranges between 2.95 to 7.9 m below the land surface during the post-monsoon season and 5.69 to 14.9 m below the land surface during the pre-monsoon season.

16.0 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

17.0. M/s SSPL is presently operating 2x100 TPD DRI Kilns. The other 2x100 TPD DRI Kilns, which are already commissioned, will also be operational in future. The total annual capacity of sponge iron production for all 4 kilns will be 1,32,000 TPA, considering 330 working days in a year. The DRI plant consists of castable lined rotary kiln, a rotary cooler, feed circuit & day bins and the product processing unit. Sponge iron or direct reduced iron (DRI) is used as raw material in induction furnace for the manufacture of steel. It is produced in lumps or pellet form, compacted and briquettes form. It has a honeycomb structure with small pores and used as a substitute of iron scrap. The waste heat gas from the rotary kiln is routed through dust settling chamber (DSC) and then taken to waste heat recovery boiler (WHRB) to produce steam and 8 MW Power. After recovery of heat the flue gas is treated in an Electrostatic Precipitator (ESP) to remove the particulate matter. Bag filters are used as de-dusting system for controlling fugitive emission from the product handling section.

18.0. The targeted production capacity of the sponge iron is 1,32,000 MTPA. The ore for the plant would be procured from (Iron and manganese ores from open market in Odisha, Coal from SECL and open market, Dolomite from open market). The ore transportation will be done through Rail/Road.

19.0. Total water to the tune of 868.8 m³/day is required for both the existing and the future projects. The source of raw water is ground water, drawn through bore well. The permission for drawl of groundwater is obtained from Central Ground Water Authority (CGWA) vide Letter No. 21-4(33)/CGWA/NCCR/2008-969 dated 02.06.2016.

20.0. The power requirement of the total project is estimated as 20 MW, which will be sourced from Captive Power Plant after the implementation of all the projects.

21.0. Baseline Environmental Studies were conducted during winter season i.e. from December 2014 to February 2015 and additional period of 1st June 2017 to 15th June 2017. Ambient air quality monitoring has been carried out at 8 locations during 1st December 2014 to 28th February 2015 and the data submitted indicated: PM10 (97.1 μ g/m³ at Gourmuri to 174.9 μ g/m³ inside project site), PM2.5 (38.1 μ g/m³ at Tumidih to 68.4 μ g/m³ inside project site), SO₂ (7.2 μ g/m³at Baraplai to 15.5 inside project site μ g/m3) and NOx (7.2 μ g/m3at Baraplai to 23.0 inside project site μ g/m3). The results of the modeling study indicated that the maximum incremental values of SO₂, NOx & PM would be about 20.74 μ g/m³, 11.47 μ g/m³ & 2.46 μ g/m³ respectively, which will occur in 'SE' direction at a distance of 0.8 Km, 1 Km. & 1.0 Km. respectively w.r.t. the origin.

22.0. Ground water quality has been monitored in 8 locations in the study area and analysed. The pH ranges to (5.1 - 6.9); Total Dissolved Solids (TDS) (34 to 232) mg/lit; while Total Hardness (10 to 186) mg/lit; alkalinity (4 to 176) mg/lit; Calcium (3 to 47) mg/lit; and Magnesium (0.5 to 17) mg/lit respectively. Sulphate, Nitrate and Chloride were observed in the ranges of (2 - 7)

mg/lit, (0.5 - 2.5) mg/lit and (11 - 41) mg/lit respectively. Values of Iron content were found from below detectable limit (<0.05 mg/lit.) to 0.1 mg/lit in these water samples. Surface water samples were analysed from 8 locations. pH: 6.0 to 7.7; DO: 5.8 to 6.7. mg/l and BOD: < 4 to 5mg/l.

23.0. Noise levels are in the range of 54.2 to 65.8 dB(A) for daytime and 46.9 to 57.3 dB(A) for nighttime.

24.0. It has been reported that as per 2011 census, the total population in the 10-km radius area is 55,746. No R&R is involved in the project.

25.0. It has been reported that a total of $20,000 \text{ tons/m}^3$ of dolo-char will be generated due to the project, entire quantity will be used in AFBC boiler. The slag waste of 2250 tons/m3 shall be used for land filling and road construction. It has been reported that a total of 1.73 lac tons per annum of waste will be generated due to the project, which will be used for power generation, brick making, ferro alloy production besides land filling and road construction. There will be the provision of temporary storage yard for the solid wastes within the plant area.

26.0. It has been reported that the Consent to Establish / Consent to Operate from the Chhattisgarh Environment Conservation Board obtained vide Lr. No. 1481/TS/CECB/2017 dated 29.06.2017 and consent is valid up to 30.06.2020.

27.0. The Public Hearing of the project was held on 25th May 2017 at Banjari Mandir, Tehsil Tamanar, district Raigarh under the chairmanship of ADM Raigarh for production of 135000 TPA induction furnace with CCM for billet caster, 7500 TPA ferro alloy plant, 17 MW AFBC boiler based & 8 MW WHRB based power plant in connection with the expansion of the existing plant. The issues raised during public hearing are related to pollution, employment, solid waste management, fly ash etc. An amount of Rs. 3.75 crore (2.5% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues. The details of Enterprise Social Commitment as follows:

Sl. No	Proposed Activities under ESC	Fund provision (IN LACS)
1	Construction of W/C/Toilet (2) each for 4 schools. (@ Rs. 6.25	25.0
	Lakhs per set of 2 Toilets)	
2	Drinking Water Infrastructure (Tubewell in nearby villages like	
	Punjipatra; Padkipahri, Chaidoria & Charratangar – 10 nos. @ Rs.	15.0
	1.5 Lakhs)	
3	Construction of metal consolidation road (7 km) in villages	105.0
	(Punjipatra – 3 km; Padkipahri-2 km & Charratangar-2 km) (@Rs.	
	15 Lakhs per km)	
4	Development of Community Hall, one each for four villages like	
	Punjipatra; Padkipahri, Chaidoria & Charratangar - Total 4 nos.	36.0
	(@ Rs. 8 Lakhs per Hall)	
5	Local Village Pond upgradation - 6 ponds (2 ponds in each three	
	villages- Punjipatra; Padkipahri, Chaidoria) (@ Rs. 5 Lakhs per	30.0
	Pond)	
6	Street Lighting (solar) provision at suitable public places – 100	50.0
	nos. (@ Rs. 0.5 Lakhs per Solar Light)	50.0

7	Financial Support to the Local School for extension of building / class room	24.0
8	Construction of charitable Dispensary – 1 no.	10.0
9	Primary health for the surrounding villages	20.0
10	Financial Support to Local Tample	15.0
11	Training to unemployed educated local youth for personality	
	development.	25.0
12	Developments of parks, plantation of trees in the nearby area.	20.0
	TOTAL	375

28.0. The capital cost of the project is Rs.150 Crores and the capital cost for environmental protection measures is proposed as Rs. 300 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 30 Lakhs. The detailed CSR plan has been provided in the EMP in its page No. 202. The employment generation from the proposed expansion project is 400 persons [150 persons (Direct) & 250 persons (Indirect)].

29.0. In the existing plant area, there is significant presence of the greenbelt. Out of the total plant area of 23.472 hectares (58 acres), the area covered under plantation is 7.85 hectares (19.4 acres). Hence, over 33% of the total plant area is covered under plantation.

30.0. The entire project including the existing units occupies the total 23.472 hectare (58 acres) of land. The average rainfall in the area is recorded as 1.2 m. Hence, the total run-off will be 2,81,664 cu.m/annum, out of which about 2,00,000 cu.m rain water can be harvested. The company has planned for 4 nos. ponds for rain water harvesting. In the existing plant area, a rain water harvesting tank has been recently constructed, while another one is under construction. The dimension of the existing RWH tank is Top area (50m x 33m), Bottom area (44m x 27m) and depth as 3.5 m. This can fulfil the water requirement of the plant for around 9 days, considering the maximum water requirement of the plant after the implementation of the proposed project as 905 KLD. Rest 2 nos. will be constructed after the issuance of the necessary Environment Clearance from MoEFCC.

31.0 The PP along with accredited EIA Consultant, M/s Envirotech East Pvt Ltd., Kolkata made a detailed presentation. The Committee observed from slide no. 14 and slide no.92 that the PP expanded the existing sponge iron plant (66000 TPA which is in operation since 2003) by installing 30000 TPA rolling mill and 100 TPD producer gas plant since 2011-12 without obtaining prior Environmental Clearance and mentioned that these units were operating with Consent to Operate from Chhattisgarh Environment Conservation Board.

32.0 After deliberations, the Committee opined that the implementation of 30000 TPA rolling mill and 100 TPD producer gas plant without prior EC will be treated as violation of EIA Notification 2006 and subsequent amendments. Accordingly, the Committee sought the clarification in this regard from the Project Proponent.

33.0 The Committee also desired to revise the following information presented by the PP.

i. The PP shall make a commitment on the issues raised in the Public Hearing along with time bound action plan and fund allocation in the form of CAPEX against each issue under Enterprise Social Commitment (ESC).

- ii. Material balance and revised Water balance of the process flow diagram shall be provided.
- iii. The AAQ parameters should be given in 98 percentile values instead of range.
- iv. Additional baseline data for one month, other than monsoon period, shall be collected and submitted.
- v. Since several pages of the EIA/EMP uploaded on the web site of the Ministry are not readable, the PP should upload the legible copy of EIA /EMP report on the website of this Ministry.
- 22.5. Proposed Expansion of Cement Plant capacity (From 2600 TPD to 2 MTPA) Clinkerisation & Captive Power Plant (From 10 MW to 40 MW) at Village: Thangskai, P.O: Lumshnong, Dist: Jaintia Hills, State: Meghalaya by M/s Meghalaya Cements Limited [Online proposal No. IA/ML/IND/67644/2017; MoEF&CC File No. IA-J-11011/423/2017-IA-II(I)] – Terms of Reference for expansion proposal.

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons of absence by the applicant

22.6. Expansion of Total Production Capacity and augmentation of integrating melting and rolling facility (from 54000 TPA to 92500 MT/Annum) at Vil: Baliana, Post: Barotiwala, Tehsil: Baddi, Dist: Solan, State: Himachal Pradesh by M/s. Kundlas Loh Udyog [Online Proposal No. IA/HP/IND/65822/2017; MoEF&CC File No. IA-J-11011/350/2017-IA-II(I)] – Terms of Reference – Further Consideration based on ADS.

1.0 The proponent has made online application vide proposal no. **IA/HP/IND/65822/2017** dated **30th June 2017** along with the application in prescribed format (Form-I), copy of prefeasibility 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 Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category "A" of the Schedule of EIA Notification, 2006 and appraised at the Central Level.

2.0 M/s KundlasLoh Udyog is existing secondary steel based industrial unit located at Kasra No.414, 415, 416, 418 and 133 of Mauza Baliana, Village Baliana, Tehsil-Baddi, Distt. - Solan, State-Himachal Pradesh. The existing industrial unit has installed production capacity of ~54000 TPA. Earlier there is no requirement of Environmental Clearance for the existing project due to the plant is running since 11th April 2006 i.e. before EIA notification dated 14th September 2006 with existing capacity around 54000 TPA and also project cost is less than the 100 Crs. Therefore, not attracted the provisions of EIA Notification, 1994.

3.0 M/s Kundlas Loh Udyog is proposed for expansion and augmentation to increase 92500 TPA from 54000 TPA.

4.0 The project is located at industrial unit located at Kasra No.414, 415, 416, 418 and 133 of mauza Baliana, Village Baliana, Tehsil-Baddi, Distt. -Solan, State-Himachal Pradesh. Total Plot Area is around 0.778941 Hectares.

5.0 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

6.0 The capital cost of the proposed expansion is about Rs. 1019.75 Lakhs.

7.0 Pulverized Coal around 19000 kg and FO around 9216 kg would be required for the existing coal based furnaces. The electrical power will be required up to 11000 KVA sourced from Himachal Pradesh State Electricity Board (HPSEB). In case of power failure DG sets of 2X125 KVA is also provided.

8.0 Water for construction and domestic purpose will be drawn from bore well. Approximately 65 KLD water will be used for industrial and domestic purposes.

9.0 Around 20 T Slag would be generated. The disposable waste would be around 18 T which would be stored along with generated Slag dust from cyclones and Bag filters around 600- 800 kg and transported to TSDF. The rest 2 T would be reusable for recovery of metal and same would be recycled for the production process. Domestic waste water generated will be send to septic tank followed by soak pit, hence no generation of sewage. Water shall be used for cooling purpose in proposed project activity and same shall be reused within the plant premises after neutralization and addition of makeup water. Slag from furnaces, Dust from cyclones & Bag filters are hazardous materials generated on site which will be stored and transported to TSDF site. Transport of material for construction & transport of the raw material/finished products during the operation phase shall be met by existing road transport. However, no significant adverse impacts are envisaged as the traffic will not increase considerably after the proposed project.

10.0 The proponent has mentioned that there is no court case or violation under EIA Notification, 2006 to the project or related activity.

11.0 The proposal was considered in the 20^{th} meeting of the Expert Appraisal Committee (Industry – 1) held during 10^{th} to 12^{th} July 2017.

12.0 The PP has made detailed presentation on the proposal along with EIA Consultant. The committee observed that the existing plant has no valid consent to operate from State Pollution Control Board and it was informed that the plant is not in operation.

13.0 After detailed deliberations, the Committee opined that since there is no consent to operate for the plant, the expansion proposal can be considered by the committee only after submission of Consent to Operate by PP. Therefore, the proposal is deferred for ADS.

14.0 The project proponent submitted on 2^{nd} August 2017 the copy of consent to operate from Haryana State Pollution Control Board vide Consent No. HPSPCB/PCB-ID15312, dated 1^{st} August 2017 and is valid up to 31^{st} March 2018.

15.0 After detailed 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 <u>Annexure I read with additional ToRs at Annexure-2.</u>

- i. Public Hearing to be conducted by the concerned State Pollution Control Board.
- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and Enterprise Social Commitment (ESC) related issues. The social impact assessment study so carried out should form part of EIA and EMP report.
- iv. Certificate compliance of Consent to Operate from the Regional office of SPCB shall be submitted along with EIA/EMP.
- v. Filer bag house shall be designed for 150% of the air flow rate. The filter bag shall be PTFE dipped PPS type.
- 22.7. Modernisation of existing 150 TPD wastepaper based Writing and Printing Paper Plant to Agro Residue Based Writing and Printing Paper Plant and Installation of 12.5 MW Cogen power plant of M/s Satia Industries Limited at village Rupana, District Muktsar, Punjab [Online proposal No. IA/PB/IND/61921/2015; MoEF&CC File No. J-11011/196/2014-IA.II(I)] – Environmental Clearance – Further consideration based on ADS.

1.0 The proponent has made online application vide proposal no. **IA/PB/IND/61921/2015**, dated **21st January 2017** along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 5(i) Paper and Pulp industry as Category "A" under EIA Notification 2006 and subsequent amendments. Therefore, the project is appraised at central level

2.0 The Project Proponent (PP) informed that proposed modernisation of existing 150 TPD wastepaper based writing and printing paper plant to agro residue based writing and printing paper plant and installation of 12.5MW Co-gen Power Plant of **M/s Satia Industries Ltd**., located at Village Rupana, Taluka and District Muktsar, Punjab, was initially received in the Ministry on 1st December 2015 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006.

3.0 The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 2nd meeting held during 28th -30th December 2015 and prescribed ToRs to the project vide F. No. J-11011/196/2014-IA.II(I) dated 22nd June 2016. Based on the ToRs prescribed to the project, the project proponent applied for environmental clearance to the Ministry online.

4.0 The PP informed that the project of M/s Satia Industries Ltd., located at Village Rupana, Taluka and District Muktsar, Punjab Stateis presently operating 150 TPD agro residue based

writing and printing paper plant (Unit-I), 150 TPD wastepaper based writing and printing paper plant (Unit-II), 12.5 MW Captive Co-Generation Plant, 5 MW Condenser based Power Plant including 5 MW standby. Now it is proposed to replace the existing 150 TPD wastepaper based writing and printing paper plant (Unit-II) with 150 TPD agro residue based writing and printing paper plant and replace 5 MW Condenser based Power Plant with 12.5 MW Captive Co-Generation Plant. The details of expansion as follows:

Existing	Proposed	Remarks
150 TPD agro residue based	150 TPD agro residue based	• 150 TPD wastepaper
writing and printing paper	writing and printing paper plant	based writing and
plant (Unit-I)	(Unit-I)	printing paper plant
+	+	(Unit-II) will be
150 TPD wastepaper based	150 TPD agro residue based	replaced with new
writing and printing paper	writing and printing paper plant	150 TPD agro residue
plant (Unit-II)	(Unit-II)	based writing and
+	+	printing paper plant
12.5 MW Captive Co-	12.5 MW Captive Co-	• 5 MW Condenser
Generation Plant	Generation Plant	based Power Plant
+	+	will be replaced with
5 MW Condenser based Power	12.5 MW Condenser based	12.5 MW Captive Co-
Plant	Power Plant	Generation Plant
+	+	
5 MW standby	5 MW standby	

5.0 The Status of compliance of earlier EC was obtained from Regional Office, Chandigarh vide Lr. No. 5-309/2011-RO(NZ)/81-83, dated 2^{nd} March 2017.

6.0 The PP informed that the existing plant is operating in an area of 14.5763 Ha and proposed expansion will be carried in same premises, thus no additional land is required to be acquired for the present expansion. No forestland is involved. The entire land has been acquired for the project. The Arniwala Canal passes through the project area. It has been reported that no water body exist around the project and modification / diversion in the existing natural drainage pattern at any stage has not been proposed.

7.0 The topography of the area is flat and reported to lies between latitudes from $30^{\circ}25'$ 7.30" North to $30^{\circ}25'$ 20.98" and Longitude from 74° 30' 55.02" East to 74° 31' 19.15" East at an elevation of 198 m above MSL. The ground water table reported to ranges between 2-5 m below the land surface during the post-monsoon season and 5-7 m below the land surface during the premonsoon season. Industry only uses canal water for meeting the demand of fresh water and after modernization, the source of water will remain the same. Industry will not use groundwater for meeting the fresh water demand. The stage of groundwater development is not reported.

8.0 PP reported that there is no national park / wildlife sanctuary / biosphere reserve / tiger reserve / elephant reserve or any other protected area etc. located in the core and buffer zone of the project. The area also does not report to forms part of corridor for Schedule-I fauna.

9.0 PP informed that the process of project showing the basic raw materials will be used are wheat straw, sarkanda, baggase, cotton sticks to produce the final output. ETP sludge, boiler ash and lime sludge are generated as waste during the process. The targeted paper production capacity

of Unit No. 2 will remain the same i.e.150 TPD. Paper will be made from agro-residues which will be procured locally. The water requirement of the project is estimated as 16500 m^3 /day, which shall be met through Arniwala Canal which is 2.5 km from the mill and is already connected with the industry.

10.0 PP informed that the industry was sanctioned load of 15 MW (11750 KVA Contact Demand) from Punjab State Power Corporation Ltd (PSPCL). The Power requirement for the existing unit no. 2 is around 4.5 MW (Total 13 MW for both units). After modernization, power requirement of both unit no. 1 & 2 is expected to be around 18 MW. The industry has already installed captive Co-generation plant of capacity 12.5 MW, one backpressure steam turbine of capacity 5 MW and another condensing steam turbine of capacity 5 MW. The industry proposes to install additional 12.5 MW capacity turbine and the existing steam condensing Turbine of 5 MW will be kept as standby. Excess power generated from proposed turbine will be sold to the grid.

11.0 Ambient air quality monitoring has been carried out at 8 locations during 3 months i.e. March, April and May 2016 and the data submitted indicated: PM_{10} (67.7 to 90.7 μ g/m³), $PM_{2.5}$ (33.9 to 47.9 μ g/m³), SO_2 (12.1 to 20.2 μ g/m³) and NOx (17.5 to 25.7 μ g/m³). The results of the modelling study indicate that the maximum increase of GLC for the proposed project is 95.01 μ g/m³ with respect to the RSPM and 29.21 μ g/m³ with respect to the NOx.

12.0 Ground water quality has been monitored in 8 locations in the study area and analyzed. pH: 6.84 to 7.5, Total Hardness: 140 to 700 mg/L, Chlorides: 37 to 830 mg/L, TDS: 200 to 3190 mg/L.

13.0 Noise levels are in the range of 42.5 to 99.4 dB(A) at plant site and 38 to 59.7 dB(A) in buffer area.

14.0 It has been reported that there is no population in the core zone of the project and no R&R is involved.

15.0 It has been reported that a total of 246.7 TPD of waste will be generated due to the project, out of which 10 TPD of ETP sludge waste will be used by Paperboard mill and 63.75 TPD of boiler ash and 173 TPD of lime sludge shall be dumped to low lying areas in the surrounding areas on requests of farmers. It has been envisaged that an area of 74500 m² for green belt around the periphery has been developed as green belt to attenuate the noise levels and trap the dust generated due to the project development activities. It was reported that rain water will be harvested through 2500 m³ reservoir.

16.0 It has been reported that the Consent to Operate has been obtained from Punjab State Pollution Control Board.

17.0 The Public hearing of the project was held on 19.10.2016 under chairmanship of Shri Kulwanth Singh, IAS, Additional Deputy Commissioner, Sri Muktasar Sahib for modernization of 150 TPD writing and printing paper from waste paper to agro residue based and 12.5 MW Co-Gen power plant. The issues raised in the Public Hearing inter alia include generation of employment; infrastructure development; utilisation of agricultural residue, etc.

18.0 The capital cost of the project is Rs 100 Crores and the capital cost for environmental protection measures is proposed as Rs 35 Crores for ESP; Pure oxygen Injection system in Aeration tank, etc. The annual recurring cost towards the environmental protection measures is proposed as Rs 1.5 Crore. The expansion will generate an additional employment of 150 persons directly and 800 persons indirectly.

19.0 The wheat straw is supplied by local farmers / suppliers at factory gate. The promoters are already procuring wheat straw from local sources for Unit No. 1 and therefore, the Company does not expect to face any difficulty in sourcing the required quantity of wheat straw for the enhanced capacity. Peak availability season is April to July.

20.0 Paper industry is one of the water intensive industry, so two types of effluents are generated in the integrated pulp & paper plants, i.e., black liquor & mill effluent. Black liquor, which is highly polluted, is treated in Chemical Recovery plant to produce value added product - Sodium hydroxide. Balance mill effluent is treated in conventional effluent treatment plant to achieve the prescribed norms of final discharge.

21.0 The proponent has mentioned that there is no court case/litigation pending with regard to the project or related activity.

22.0 The proposal was considered in the 16^{th} meeting of Expert Appraisal Committee [EAC (Industry-I)] held during $6^{th} - 7^{th}$ March 2017 and after detailed deliberations, the committee desired the following information for further consideration of the proposal:

- i. Contingency plan for disposal of wastewater in monsoon season.
- ii. Action plan for recycling, reuse and reduce the waste water specified by PP.
- iii. Details of bleaching sequence.
- iv. The quantity of the primary and secondary sludge generation and the method of disposal.
- v. Quantified assessment of impacts, mitigation measures and monitoring.
- vi. The project proponent shall reassess the quantity of water required for the pant and provide a revised water balance statement.
- vii. Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan.
- viii. Socio-economic development activities including skill development programme.
- ix. Rectification of non-compliances reported by Regional officer in implementation of earlier EC conditions.

23.0 The project proponent has submitted the reply to ADS on 17th May 2017. The project proponent along with EIA consultant made presentation on the reply to ADS. The committee satisfied with the details submitted for point No. (i) to (vi) and observed that the details against point no (vii) and (viii) are not satisfactory. The non-compliances were not closed by Regional officer of MoEFCC. The committee desired that the PP shall obtain certificate from the regional office to the effect that the action plan for closure of non-compliances is acceptable. Therefore, the proposal is deferred till the certificate is submitted to the ministry.

22.8. Expansion of Metallurgical unit at MIDC, Ph-I, Aurangabad, Daregoan, Jalana Maharashtra by M/s Om Sairam Steel and Alloys Pvt Ltd [Online proposal No. IA/MH/IND/62864/2015; MoEF&CC File No. J-11011/57/2015-IA II (I)] – Environmental Clearance – Further Consideration based on reply to ADS.

1.0 The proponent has made online application vide proposal no. IA/MH/IND/62864/2015, dated 01.03.2017 along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The ToRs to the project were prescribed by the Ministry vide letter number J-11011/57/2015-IA.II (I) dated 01.01.2016. The proposed project activity is listed at Sl. No. 3(a) in Metallurgical industries (ferrous and non-ferrous) and 1(d) Thermal Power Plants under Category "A" EIA Notification 2006.

2.0 The proposed project of M/s Om Sairam Steel and Alloys Pvt. Ltd. at Plot No. F-1, 2, 3, 8, 9, 10, ADD. MIDC Phase – II and adjacent Gut No. 46 & 63, Daregaon, Tehsil and District Jalna, Maharashtra State was initially received in the Ministry in February 2015 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 37th meeting held between 30th April – 1st May 2015 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project dated 01.01.2016. Based on the ToRs prescribed to the project, the project proponent applied for environmental clearance to the Ministry online on 01.03.2017 along with EIA/MP report.

3.0 The existing plant of M/s Om Sairam Steel and Alloys Pvt. Ltd. is currently manufacturing 528 TPD Billet and/ or 1000 TPD TMT Bars/angles/channels. Now the company proposes to expand the capacity and add new product, Sponge Iron, using iron ore/pellets and coal and generate its own power from waste heat as well as coal fired boiler. The existing project was accorded Environmental Clearance vide Letter SEAC-2009/CR-200/TC-2 dated 29th December 2010. The Status of compliance of earlier EC was obtained from Regional Office, Nagpur vide Lr. No. 5-22/2009(Env)/1333, dated 08.12. 2015. The Regional officer inspected and issued the certificate vide 5-22/2009(ENV)/1333 dated 08.12.2015. The details of proposed expansion as follows:

S1.	Particulars	Capacity		Total
No		Existing	Proposed	
1	Sponge Iron (TPD)	0	1000	1000
2	Billets/ Ingots (TPD)	528	472	1000
3	TMT bars (TPD)	1000	0	1000
4	Power generation (MW)	0	50	50

4.0 The total land required for the project is 6.09 ha, out of total 2.6 ha is for green belt development. No /forestland involved. The entire land has been acquired for the project. The Kundalika River passes through the study area. It has been reported that no other water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat terrain and reported to lies between 19° 50' 52.39" N Latitude to 75° 50' 41.51" E Longitude in Survey of India topo sheet No. 47M-9 & 47 M13, at an

elevation of 552 m AMSL. The northern part forms the highly dissected basaltic plateau; the ground water potential is expected to be poor. The depth to water levels in the district during May 2011 ranges between 3.84 and 16.20 m bgl. The depth to water levels during post monsoon (Nov.) ranges between 1.05 and 14.65 m.

6.0 No national park/wildlife sanctuary/ biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The authenticated list of flora and fauna provided and no schedule-I fauna in the study area.

SI	Product	Raw Material	Quantity	Transport & Linkage
No.	Trouuct	Kaw Material	TPD	Transport & Emikage
1	DRI Plant	Iron Ore and Pellet	1450	By road from Raipur,
	Sponge Iron	Coal B Grade	1200	Bellari, Bhilwara and
		Dolomite	50	Raigarh
2	Billets and/or TMT	Sponge Iron	1000	By Road from Captive
	bars	Scrap	100	Mumbai & Local
		Pig Iron	80	Raipur, Bellari
		Silico manganese	10	
3	Power Plant (FBC	Dolochar + char	312	By road from
	Boiler 24 MW &	Coal	420	Chandrapur
	WHR 26 MW)			

7.0 The process of project showing the basic raw material used and the various processes involved to produce the final output, waste generated in process.

8.0 The only solid waste produced by the induction furnace is about 170 MT slag per day. It will be used for road making and land levelling. In addition, office waste generated shall be disposed off to local authority.

9.0 The targeted production capacity of the 1000 TPD. The ore for the plant would be procured from (linkage attached to EIA Report). The ore transportation will be done through road.

10.0 The water requirement of the project is estimated at 11,682 m³/day, out of which 752 m³/day of fresh water requirement will be obtained from the MIDC and the remaining requirement of 10945m³/day will be met from the recycled water. No drawl of groundwater / surface water.

11.0 The power requirement of the project is estimated as 5 8 MW, out of which 50MW will be obtained from the self and 8 MW from MSEDCL.

12.0 Baseline Environmental Studies were conducted during winter season (i.e. October 2014 - December 2014) Ambient air quality monitoring has been carried out at 14 locations during October 2014 - December 2014 and the data submitted indicated: PM10 (69.74 μ g/m³ to 64.04 μ g/m³), PM_{2.5}(26.7 to 20.06 μ g/m³), SO₂ (18.9 to 12.5 μ g/m³) and NOx (24.05 to 19.22 μ g/m³). The results of the modelling study indicates that the maximum increase of GLC for the proposed project is 72.79 μ g/m³ with respect to the PM10, 35.13 μ g/m³ with respect to the SO₂ 25.93 μ g/m³ with respect to the NOx.

13.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.10 to7.81, Total Hardness: 99 to 235 mg/l, Chlorides: 42 to 78 mg/l, Fluoride: 0.2 to 0.4 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 8 locations. pH: 7.1to 7.5; DO: 2.1 to 4.6 mg/l and BOD:<2 to 5.2 mg/l. COD from7.08 to11.68 mg/l.

14.0 Noise levels are in the range of 53.7 to 47.6 dB(A) for daytime and 48.9 to 42.3 dB(A) for night time.

15.0 It has been reported that no R&R is involved.

16.0 It has been reported that a total of 170 TPD of waste will be generated due to the project, which will be resale and used for Building construction material, road making. It has been envisaged that an area of 2.6 ha will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

17.0 It has been reported that the Consent to Operate from the Maharashtra State Pollution Control Board obtained vide Lr. No. BO/JD(APC)/EIC No. AD-18272-16/R/CC- 10758 dated 02.12.2016 and consent is valid up to 31.05.2021.

18.0 The Public hearing of the project was held on 28.10.2015. for production of Sponge Iron 1000 TPD, Billets and /or TMT Bar 1000 TPD and Power 50 MW on Waste-heat setting up of plant. The issues raised during public hearing are on Air Pollution Control; Health o workers; discharge of waste water; employment; infrastructure development for village; efficiency of ESP; rain water harvesting; etc. An amount of 1307 Lakhs (2.5 % of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues.

19.0 The capital cost of the project is Rs 523 Crores and the capital cost for environmental protection measures is proposed as Rs. 1300 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 504 Lakhs. The detailed CSR plan has been provided in the EMP in its page No.97 to 98. The total employment generation from the proposed expansion is 610 nos. (existing 400 + proposed 210)

20.0 It was reported that Greenbelt will be developed in 2.6 Ha which is about 33% of the total acquired area. Greenbelt, consisting of at least 2 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. It is proposed that total 4000 no. of saplings will be planted and nurtured in next 3-4 years.

21.0 The proponent has mentioned that there is no court case to the project or related activity.

22.0 The proposal was considered in the 17th meeting of Expert Appraisal Committee [EAC(industry-I)] held during $6^{th} - 7^{th}$ April, 2017. After detailed presentation by PP along with their consultant M/s Ultara Tech Environmental Consultancy & Laboratory, the committee noted the following:

i. The baseline data was collected i.e. during October 2014 - December 2014 before submission of application to this Ministry i.e. February 2015.

- ii. The proponent has mentioned in the presentation made before 37thEAC that the Baseline was collected earlier. However, the same was not reflected in the ToR letter.
- The public hearing was conducted (on 28.10.2015) before issue of the ToR (1.1.2016). The PP informed that the district authorities have conducted based on the minutes of the 37th EAC.
- iv. Whether draft EIA/EMP was prepared as per the prescribed ToR or not could not be ascertained due to non-availability of Draft EIA/EMP copy submitted to SPCB.
- v. The certified compliance report submitted is also of more than one year old. It is also noted that there are several non-compliances to the conditions of the existing EC such as development of green belt and other issues. The PP has uploaded copy of analysis report on the MoEF&CC web-portal while making application in place of compliance report from the RO.
- vi. The issues raised during the public hearing is also not properly presented.

23.0 After detailed deliberation, the committee sought following information for further consideration of the proposal:

- i) A certified copy of draft EIA/EMP submitted to SPCB for conduct of public hearing
- ii) Latest status of compliance on the earlier EC conditions from the Regional office of MoEF&CC
- iii) The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto.
- iv) Environment Policy prescribing standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions.
- v) Skill development plan shall be prepared and implemented in consultation with skill development council of India.
- vi) The project proponent shall give the reasons as to why it should not apply for a change in EC condition for changing the plantation site.

24.0 The project proponent has submitted reply to above additional details sought on 17th July 2017. The project proponent along with EIA consultant made presentation on the reply to ADS. The committee satisfied with the details submitted except for point No. (ii). It was observed several non-compliances were reported by the Regional officer and PP explanation on the non-compliances were not satisfactory. The committee desired that the PP shall obtain certificate from the regional office to the effect that the action plan for closure of non-compliances is acceptable. Therefore, the proposal is deferred till the certificate is submitted to the ministry.

22.9. Proposed Integrated Cement Plant - Clinker (1.0 MTPA), Cement (1.371 MTPA), Captive Power Plant (18 MW) and D.G. Set (5 MW) at Village: Ghorawat, Tehsil: Bhopalgarh, District: Jodhpur (Rajasthan) by M/s Marwar Cement Limited (Formerly Vedanta Industries Limited) [Online proposal No. IA/RJ/IND/2884/2010; MoEF&CC File No. J-11011/154/2009- IA-II(I)] – Extension of Validity of EC – Further Consideration based on reply to ADS.

1.0 The proponent has made online application vide proposal no. IA/RJ/IND/2884/2010 dated 30th June 2017 seeking extension of validity of environmental clearance granted to the above said project under the provisions of amendment in EIA notification, 2006 vide SO 1141 (E), dated 29thApril, 2015.

2.0 M/s. Marwar Cement Limited (Formerly Vedanta Industries Limited) obtained environmental clearance for the proposed Integrated Cement Plant - Clinker (1.0 MTPA), Cement (1.371 MTPA), Captive Power Plant (18 MW) and D.G. Set (5 MW) at Village: Ghorawat, Tehsil: Bhopalgarh, District: Jodhpur (Rajasthan) vide File No. J-11011/154/2009- IA.II(I) dated 27th July 2010.

3.0 It was informed that the proposed Integrated Cement Plant was not implemented due to unavoidable reasons. Therefore, the PP requested for extension of validity of EC. 4.0 During detailed deliberations, the committee observed the following:

- a. There was no physical progress on the ground related to the installation of plant and machinery.
- b. The creation of green belt, as stipulated under the EC condition, was not even initiated.
- c. The PP has already obtained TOR for a proposal for expansion from 1. MTPA to 1.3 MTPA.

In response to the aforesaid observations at para 4.0, the project proponent presented the following:

- a. As per Rajasthan State Government Rules, the minerals taken from miner mines are meant only for small and petty local uses. In order to be able to use the limestone taken from his own miner mines, the PP had to apply to the State Authorities for conversion of miner mines to major mines. After following the due process, the State Authorities have issued orders for conversion of his miner mines into major mines only in February 2017. Therefore, there was serious uncertainty about the availability of main raw material. Hence, they were unable to start any physical work on the site.
- b. They have now already completed all engineering designs and finalised the procurement of machinery and equipment.
- c. The PP informed that they have already made substantial financial investment in the form of payments already made for procurements.

6.0 For the issue of raw material problem stated by the PP, the Committee further observed that the PP was at liberty to procure raw material from any open source, The EC condition did not impose any restrictions in this regard. The PP needs to satisfactorily justify as to why they could not procure raw material from open source.

7.0 After detailed deliberation, the Committee desired the following information:

- i. substantiating evidence of financial investment made as on the date of the meeting (10th July 2017) by way of accepted copy of PO and details of advance payment/payments made.
- ii. Status of land acquisition and possession by the PP.
- iii. Details regarding the rules of the State Government regarding the use of minerals from miner mines.
- iv. The progress report of various works done so far.
- v. Full justification to be provided to satisfy the committee that all the pending works would be completed in three years if the validity of the EC period is extended as requested by PP. The schedule of completion of balance works in the form of bar chart should be provided.
- vi. Full justification to be provided by PP to satisfy the committee regarding the reasons for not initiating the action for procurement of raw material in the open market.

8.0 The project proponent has submitted reply to ADS on 17th August, 2017. It was informed that M/s Marwar Cement Limited has signed contract with M/s. Humboldt Wedag India Pvt. Ltd. for Main Plant Equipment on 12th March, 2015 and informed that 127.7 Crs has been invested towards advance payments; land acquisitions; technical studies; etc. It was also informed that out of 80 Ha of land require 74.2 Ha was already acquired. A bar chart was provided detailing the schedule of completion activities balance in the plant.

9.0 After detailed deliberations, the committee recommended for extension of validity of Environmental clearance for further period of 3 years i.e. up to 26th July 2020.

22.10. Setting up of induction furnace (MS Ingots 224 TPD) and Rolling Mill (TMT Bars 200 TPD) at Village Kumbra, Tehsil Amloh, Mandi Gobindgarh, District – Fatehgarh Sahib, Punjab by M/s Rajdhani Castings Private Limited [Online Proposal No. IA/PB/IND/3867/2010; MoEF&CC File No. J-11011/271/2009-IA.II(I)] – Extension of Validity of EC.

1.0 The proponent has made online application vide proposal no. **IA/PB/IND/3867/2010**dated **7th August 2017** seeking extension of validity of Environmental Clearance granted on 30th September 2010.

2.0 It was informed that Rajdhani Castings Pvt. Ltd. have already purchased the land measuring 2.37 heactares in an approved Industrial Area of Mandi Gobindgarh. Earthfilling of the land has been done and partial boundary wall of the land has been done.

3.0 The reasons reported for delay in implementation of the project inter alia include:

i. Induction Furnace Industry is a power intensive industry. Around 600 KW of power is required for 1 MT melting of MS scrap. In the past, at the time of grant of EC to the project, there was scarcity of electrical power in Punjab. Punjab became power surplus state in the Year 2015-16 after the completion of 1400 MW and 2100 MW new Supercritical Thermal Power Plants at Bathinda and Rajpura.

- ii. After becoming power surplus state, the cost of electrical power in Punjab was very high (Rs. 7.50 per KW) as compared to some other states. Due to high rate of electrical power, the conversion cost of MS scrap to MS ingot was high and the project was commercially not viable. Now, the State Govt. has promised to supply Industrial Power @ Rs. 5.00 per KW. With the reduction in the power cost, the project will now become commercially viable.
- iii. In the past, due to multiple taxation, the industry had to bear CST @ 2 % and entry tax in some states. Due to this, the industries from Punjab were not competitive for the export of MS ingot/MS rolled products to other states. Now, due to GST, the rates are competitive throughout India and industries from Punjab can export the MS ingot/MS rolled products to other states

Schedule of completion of balance works is reported as belo	vv.
Activity	Tentative Schedule
Grant in the extension in the validity of EC	30 th October, 2017
Finalisation of the layout plan of the factory	31 st December, 2017
Civil Works for Induction Furnace Section	30 th June, 2018
Industrial Sheds for the Induction Furnace Section	30 th September, 2018
Installation of Induction Furnaces and other allied	31 st March, 2019
equipments	
Trial run of the Induction Furnace Plant	April, 2019
Civil Works for Rolling Mills Section	30 th September, 2019
Industrial Sheds for the Rolling Mills Section	31 st December, 2020
Installation of Rolling Mills and other allied equipments	30 th June, 2020
Trial run of the Rolling Mills	July, 2020
Commercial operation of Induction Furnaces and Rolling	1 st August, 2020
Mills	
	ActivityGrant in the extension in the validity of ECFinalisation of the layout plan of the factoryCivil Works for Induction Furnace SectionIndustrial Sheds for the Induction Furnace SectionInstallation of Induction Furnaces and other alliedequipmentsTrial run of the Induction Furnace PlantCivil Works for Rolling Mills SectionIndustrial Sheds for the Rolling Mills SectionInstallation of Rolling Mills and other allied equipmentsTrial run of the Rolling MillsCommercial operation of Induction Furnaces and RollingMills

4.0 Schedule of completion of balance works is reported as below:

^{5.0} The project proponent made presentation. During the presentation, the project proponent has submitted revised schedule of completion of the project. The revised schedule is as follows:

S1.	Activity	Tentative Schedule
No		
1	Grant in the extension in the validity of EC	30 th October, 2017
	Finalization of the layout plan of the factory and Financials	31 st December, 2017
3	Civil Works for Induction Furnace Section	30 th June, 2018
4	Industrial Sheds for the Induction Furnace Section	30 th September, 2018
5	Installation of Induction Furnaces and other allied equipment	31 st March, 2019
6	Trial run of the Induction Furnace Plant	May, 2019

6.0 After detailed deliberations, the committee recommended for extension of validity of EC for further period of 18 months as agreed by the project proponent.

22.11. Expansion of cement plant [Clinker (1.0 MTPA to 2.50 MTPA) and Cement (1.5 MTPA to 3.80 MTPA) of M/s Rain Cements Limited located at Village Ramapuram, Mellachervu Mandal, District Suryapet, Telangana [Online proposal No. IA/TG/IND/59969/2016; MoEF&CC File No. J-11011/152/2008-IA.II(I)] – Amendment in ToRs granted on 30thJanuary 2017.

1.0 The proponent has made online application vide proposal no. **IA/TG/IND/59969/2016** dated **1**st**August 2017**seeking amendments in Terms of Reference granted to the above mentioned project on 30th January 2017.

2.0 Environmental Clearance for the existing cement plant (Line-I) of M/s Rain Cements Limited (RCL) under the name of "Expansion of Integrated Cement Plant Clinker (0.80 to 1.00 MTPA) and Limestone Mine (1.30 to 1.60 MTPA) at village Ramapuram, Mandal Mellacheruvu, District Nalagonda in Andhra Pradesh" was obtained vide letter F. No. J-11011/152/2008-IA.II(I) dated 27th October, 2010.

3.0 M/s Rain Cements Limited (RCL) proposed for expansion of Cement Plant [Clinker (1.0 MTPA to 2.50 MTPA) and Cement (1.50 MTPA to 3.80 MTPA)] as Line-II at Ramapuram Village, Suryapet District, Telangana.ToR for the proposed Line-II was issued vide letter F. No. J-11011/152/2008- IA.II (I) dated 30th January, 2017.

4.0 M/s RCL is spread over an area of 126.3 ha. The existing cement plant (Line-I) encompasses 9.61 ha area. Expansion of cement plant (Line-II) is planned in an area of 11.53 ha within the existing premises. About 600 KLD of additional water is required for the expansion of cement plant and will be sourced from rain water collected in the rain water harvesting system and from the existing bore wells. Additional power required for cement plant expansion is 20 MW and will be sourced from State Electricity Board Grid.

5.0 In addition to the expansion of Cement Plant (Line-II), M/s RCL proposed to install 0.325 MTPA Calcined Petroleum Coke (CPC) Plant with 12 MW Waste Heat Recovery Boiler (WHRB) Power Plant in the existing cement plant complex.

5.0 Area required for CPC plant is 6.07 ha (15 acres). Additional water requirement for CPC plant is about 700 KLD and 300 KLD for WHRB power plant, will be sourced from Krishna River which is within 10 km radius from the project site.

6.0 The estimated total power requirement for the proposed plant is about 40 MW which will be met from the State Electricity Board grid. Further, 12 MW of WHRB is envisaged.

7.0 Estimated cost of the expansion project proposal for both Line-II cement plant and CPC plant with WHRB is Rs. 529 crores.

8.0	0 The	e details of earlier	r ToR	and amendmen	ts sought are a	as follows;	

S.No.	Particulars	ToR approved for	ToR Amendment sought for	Resultant Changes
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1	Clinker	1.0 to 2.50 MTPA	1.0 to 2.50 MTPA	No Change	
2	Cement	1.5 to 3.80 MTPA	1.5 to 3.80 MTPA	No change	
3	Calcined Petroleum Coke Plant	Not included	0.325 MTPA (CPC plant is proposed)	Addition of 0.325 MTPA CPC plant	
4	WHRB Power	10 MW	12 MW	Increase in power generation by 2 MW	
5	Land	11.53 ha (Line-II cement plant)	6.07 ha (CPC plant)	Additional land of 6.07 ha (within available 126.3 ha RCL plant premises)	
6	Water Requirement	1800 KLD (Line-I + Line-II cement plant) Source: Bore well and rain water collected in mines pit.	2800 KLD Source: bore well, rain water collected in mines pit, rain harvesting ponds and also from nearby Krishna river.	Additional 1000 KLD water required	
7	Power Requirement	30 MW from State Electricity Board & WHRB	40 MW from State Electricity Board & WHRB	Additional 10 MW requirement	
8	Project Cost	Rs. 379 crores	Rs. 529 crores	Additional Rs. 150 crores required	
9	Manpower	Operation Phase- 80	Operation Phase- 110	Additional 30 manpower during operational phase	
10	Raw Material F	Requirement			
	Limestone	3.94 MTPA	3.94 MTPA	No Change	
	Laterite & Iron ore	0.16	0.16 MTPA	No Change	
	Coal	0.465 MTPA	0.333 MTPA	0.132 MTPA reduction in coal consumption in cement kiln.	
	Gypsum	0.190 MTPA	0.190 MTPA	No change	

	Flyash	1.150 MTPA	1.150 MTPA	No Change
	Green Petroleum Coke	Not included	0.455 MTPA	0.455 GPC is required
	De-dust Oil	Not included	990 TPA	990 TPA
11	Emissions	$\begin{array}{l} SO_{2} < 100 \ mg/\\ nm^{3}\\ NO_{x} < 800\\ mg/nm^{3}\\ SPM < 30\\ mg/nm^{3} \end{array}$	$\begin{array}{l} SO_2 \!$	No Change
12	Flue gas Utilization	Only Kiln Flue gases are utilized for raw material drying and WHRB	Both Kiln and CPC plant flue gases will be utilized for raw material drying and WHRB	
13	Pollution Control Equipment attached to kiln Stack	RABH	RABH	No change
14	Ratio of Clinker and CPC production (Clinker: CPC)	4.5:0	4.5:1	Increase in CPC production ratio from 0 to 1

9.0 After detailed deliberations the committee recommended for grant of proposed modifications in the ToR granted earlier and mentioned that the validity of the ToR will remain same as mentioned in the earlier ToR.

22.12. Expansion cum modification of existing 0.07 MTPA billets, 0.0048 MTPA sections & 0.027 MTPA Ferro alloy plant to 0.054 MTPA TMT bars, 0.020 MTPA GI pipes, 0.040 MTPA sections & 0.046 MTPA Ferro alloy plant of M/s Shivam Iron & Steel Co. Ltd, at Dhukhia Mahadev Temple Road, Jambad, P.O. Udnabad, Giridih District, Jharkhand. [Online proposal no. IA/JH/IND/63840/2017; MoEFCC File No. J-11011/365/2009- IA-II(I)] – Corrigendum in Terms of Reference regarding.

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons of absence by the applicant 22.13. Expansion of 4x100 TPD DRI unit by addition of 2 Induction Furnaces 2×12T (73,500 TPA), Billet Caster 72,000 TPA along with Captive Power Plant of capacity 16 MW at Village: Lapanga, PO-Bhadaninagar, District - Ramgarh, State Jharkhand by M/s Sri Venkatesh Iron & Alloys (India) Limited [Online proposal no. IA/JH/IND/67490/2017; MoEFCC File No. IA-J-11011/417/2017-IA-II(I)] – Terms of Reference.

1.0 The proponent has made online application vide proposal no **IA/JH/IND/67490/2017** dated **17th August 2017** 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 Sl. No. 3(a) Metallurgical industries (ferrous & nonferrous) under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level.

2.0 M/s. Venkatesh Iron & Alloys (India) Limited is operating 4 x 100 TPD Sponge Iron Plant with Consent to Establishment from Jharkhand state pollution Control Board vide letter dated 16th July 2005 at village Lapanga, P.O. – Bhadaninagar, District – Ramgarh Jharkhand.

3.0 Now, M/s. Venkatesh Iron & Alloys (India) Limited is proposes for expansion of its existing manufacturing unit for 4 x 100 TPD Sponge Iron Plant. It is proposed to install additional units for 16 MW Power Plant using WHRB and AFBC boiler, 2 x 12 T SMS with 6/11 radius 2 strand Concast based on latest technology. The Final capacity will be Sponge Iron – 120000 TPA, Billets – 72000 TPA and Power – 16 MW. The proposed capacity for different products for new site area as below:

S.	Unit	Existing	Existing	Proposed	Proposed	Total after	Total
No.		configuration	Capacity	configuration	capacity	Expansion	capacity
1	Sponge	4X100 T	120000	Nil	Nil	4X100 T	120000
	Iron		TPA				TPA
	(DRI)						
2	CPP	Nil	Nil	WHRB - 4 x	8 MW 8	WHRB - 4	8 MW 8
	(WHRB			2MW AFBC	MW	x 2MW	MW
	+			- 1 x 8MW		AFBC - 1	
	AFBC)					x 8MW	
3	SMS -	Nil	Nil	2 x 12 T	72000	2 x 12 T	72000
	IF &				TPA		TPA
	Billet						
	Caster						

4.0 The project site is bounded by latitudes from $23^{0}38'25.235$ to $23^{0}38'33.062''$ N and longitude from $85^{0}23'45.472''$ to $85^{0}23'56.318''$ E. The project area is covered in Survey of India Toposheet No. 73 E/6. The land area acquired for the proposed plant is 5.82 Ha. The entire land has been acquired for the project. Of the total area 1.78 Ha (33%) land will be used for green belt development.

5.0 No national park / wildlife sanctuary / biosphere reserve / tiger reserve / elephant reserve etc. are reported in the core and buffer zone of the project. The area also does not report to from corridor for Schedule-I fauna.

6.0 Total project cost is 128.49 Crore rupees. Proposed employment generation from proposed project will be 250 direct employment and 700 indirect employment.

7.0 The electricity load of 0.85 MW procured from JSEB for preliminary work. Company has also proposed to install 16 MW Captive Power Plant and will be source of power after expansion.

8.0 Proposed raw material for existing sponge iron Plant are Iron Ore -1,92,000 TPA, Non-Coking Coal -1,56,000 TPA, Dolomite / Limestone -3600 TPA, For 16 MW Captive power plant is DRI gases in WHRB, In AFBC Non-coking coal -45,000 TPA and dolochar with approx annual requirement is 30,000 T for project and Requirement would be fulfilled by linkages and e-auctions.

9.0 Water Consumption for the proposed project will be 1655 KLD and waste water generation will be 6 KLD domestic waste water and 85 KLD industrial waste water which will be treated and reused for water sprinkling, dust suppression, horticulture etc.

Sl.	Plant section	Nature	Qty (TPA)	Utilization
1	DRI Process	Char	30000	Use as Fuel in AFBC Power Plant – in house
2	DRI APCS	Fines & Dust	9000	Reuse in Process & Low Land Filling
3	WHRB ESP	Fly ash	21000	Sale to fly ash bricks/blocks manufacturers – outside party
4	SMS & CCM (Induction Furnace)	Slag	15000	Sale to slag processing units for village & other road making after recovery & removal of iron content by outside parties
5	CPP (AFBC - ESP)	Bottom Ash / Fly ash	5100 / 20400	Fly Ash Sale to Cement manufacturers. Bottom Ash for Road Making

10.0 The solid waste management will be as follows:

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

12.0 The Project Proponent along with EIA Consultant M/s Vardan Environet, Gurgaon made detailed presentation on the proposal.

13.0 After detailed 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 <u>Annexure I read with additional ToRs at Annexure-2.</u>

- i. Public Hearing to be conducted by the concerned State Pollution Control Board.
- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and Enterprise Social Commitment (ESC) related issues. The social impact assessment study so carried out should form part of EIA and EMP report.
- iv. Certificate compliance of CTO from the Regional office of SPCB shall be submitted along with EIA/EMP
- v. Action plan for dry collection and dry disposal of 100% fly ash generated shall be detailed in EIA/EMP Report along with MoU from the users.
- vi. A dedicated environmental cell with qualified personnel shall be operationalized and details shall be furnished in the EIA/EMP.
- vii. Management and disposal of hazardous waste as per the Hazardous and Other Waste Management Rules, 2016 shall be addressed in the EIA/EMP
- viii. The slag shall be characterised including the TCLP test for the hazardous metals in the slag.
- 22.14. Proposed expansion Ferro alloys in the existing plant site premises of M/s Shri Girija Alloy & Power (I) Private Limited located at Sy. No. 149p, 149p, 151, 152p, 153p, 162p,164, 355p, 397p, 400p, 429p, Village Peddapuram & Mandal, East Godavari, Andhra Pradesh [Online proposal No. IA/AP/IND/59604/2016; MoEF&CC File No. J- 1011/679/2009-IA-II(I)] – Environmental Clearance based on ToR regarding.

1.0 The proponent has made online application vide proposal no. **IA/AP/IND/59604/2016** dated 10th August 2017along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

2.0 The proposed expansion of Ferro Alloy unit of **M/s Shri Girija Alloy & Power (I) Pvt. Ltd.** located at Sy. No.s 148 P, 149 P, 151, 152 P, 153 P, 162 P, 164, 355 P, 397 P, 400 P, 428 P, Peddapuram Village, Peddapuram Mandal, East Godavari District, Andhra Pradesh state was initially received in the Ministry on 12th October, 2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 12th meeting held on 27th to 28th October, 2016 for prescribing ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 20th March 2017 vide Lr. No. J-11011/679/2009-IA.II(I). 3.0 The present proposal of M/s Shri Girija Alloy & Power (I) Private Limited is for enhancement of production of existing Ferro Alloy products and also produce new Ferro alloy products, noble alloys & Calcium Aluminate based Synthetic slag. The existing project was accorded environmental clearance vide order No. J-11011/679/2009-IA.II(I) dated 24th December 2010. The Status of compliance of earlier EC was obtained from Regional Office, Chennai vide F. No. EP/12.1/2010-11/49/AP/0218 dated 10-02-2017. There are no non-compliances reported by Regional officer. The proposed capacity for different products for proposed expansion project as below:

S1.	Product	E	xisting	Proposed		Production Capacity After
No	110000	Unit	Production Capacity	Unit	Production Capacity	proposed expansion
1.	Ferro Manganese (High carbon / medium carbon / low carbon)	SEAF - 5X 9 MVA & 1 X	36,000 TPA		1,20,000 TPA	1,56,000 TPA
2.	Silico Manganese (High carbon / medium carbon / low carbon)	504 MVA	72,000 TPA	SEAF – 4X 9 MVA	85,000 TPA OR	1,57,000 TPA
3.	Ferro Chrome (High carbon / medium carbon / low carbon)				85,000 TPA	85,000 TPA
4.	Ferro Silicon (High carbon / medium carbon / low carbon)			SEAF – 2 X 9 MVA	25,000 TPA	25,000 TPA
5.	Low carbon Ferro chrome / Ferro Molybdenum / Ferro Titanium / Ferro Vanadium			Crucibles – 8 X 400 Kg	3,600 TPA	3,600 TPA
6.	Calcium Aluminate based Synthetic slag			SEAF – 3 X 500 KVA	15,000 TPA	15,000 TPA
7.	Power generation		108 MW			108 MW

4.0 The total land required for the existing and expansion project is 60.73 ha (150 acres). This entire land is already acquired and adequate land is available for proposed expansion project and existing project is under operation on the same land. No forest land involved in the existing plant site. No River passes through the project area. A stream is passing through the site. Culverts have been constructed. Hydrological regime is not being disturbed.

5.0 The topography of the area is flat and reported to lies between $17^{\circ} 04' 7.1"$ to $17^{\circ} 04' 30.5"$ North Latitude and $82^{\circ} 06' 40.7"$ to $82^{\circ} 07' 24.6"$ East longitude in Survey of India Topo Sheet No. 64 K/4 & 64 L/1 at an elevation of 48 - 50 m AMSL. The ground water table reported to ranges between 2 - 5 m below the land surface during the post-monsoon season and 10 - 20 m below the land surface during the pre-monsoon season.

6.0 No national park / wildlife sanctuary / biosphere reserve / tiger reserve / elephant reserve etc. are reported in the core and buffer zone of the project. The area also does not report to from corridor for Schedule-I fauna.

7.0 Ferro Alloys will be smelted at about 1350 – 1500 °C Temperature. This will be achieved by a conventional, Open Submerged Electric Arc Furnace. The three carbon Electrodes, partially submerged in the charge, are supported on hydraulic cylinders for upward and down ward movements to maintain the desired electrical conditions. The detailed process for ferro alloy; Ferro Manganese; Silico Manganese; Ferro Chrome; Ferro Silicon; Low carbon Ferro chrome; Ferro Molybdenum; Ferro Titanium; Ferro Vanadium; Calcium Aluminate based Synthetic slag etc. The list of raw material for the proposed expansion project is given below:

Raw Material	Quantity (TPA)	Sources	Mode of Transport
Ferro alloys			
Manganese Ore	Manganese Ore 4,41,000 Imported / indigenous from		Sea, rail, road
Chrome Ore	1,95,500	Karnataka / Orissa / Madhya Pradesh / Andhra Pradesh	Sea, rail, road
Coke	1,14,320	Imported / Indigenous /	
Coal	1,59,975	Singareni Collieries /	Sea, road
Charcoal	40,000	imported	
Quartz	1,05,250	Andhra Pradesh	Rail, road
Dolomite	82,000	Andhra Pradesh	Rail, road
Mill Scale	10,000	Andhra Pradesh	Rail, road
EC paste	7,815	Andhra Pradesh	Rail, road
Magnesite	5100	Andhra Pradesh	Rail, road
Ferro manganese slag	34,000	In plant generation	conveyor
Noble Ferro alloys			
Chrome Ore	7,059	Import & Indigenous – Orissa	Sea, rail, road
Aluminimum Telic	5,690	Import –Dubai	Sea, road
Flourspar	630	Import – China	Sea, road
Ferrosilicon	1,525	Captive	
Ilmenite	3,727	Indigenous - Orissa / Kerala	Road
Iron Nails	1,680	Indigenous – Andhra Pradesh	Road
lime	784	Indigenous – Gujarat	Road

Raw Material	Quantity (TPA)	Sources	Mode of Transport
mill scale	5690	Indigenous – Andhra Pradesh	Road
Sodium Nitrate	530	Indigenous – Gujarat	Road
rutile	508	Import & Indigenous – Orissa / Kerala	Sea, road
V ₂ O ₅	4,000	Import	Sea, road
MO ₃ (Moly Oxide)	3,600	Import	Sea, road
Calcium aluminate base	d Synthetic	slag	
Hydrated Lime	9000	Indigenous – Rajasthan	Road
Bauxite	4500	Indigenous - Chhattisgarh / Orissa	Road
Aluminium telic	900	Import	Sea
Aluminium catalyst	600	Indigenous / Gujarat	Road

8.0 Manganese ore, Chrome ore & Quartz ore would be procured from various mines from open market / online bidding and transportation will be done through rail / road.

9.0 Water requirement for proposed expansion project will be 106 KLD. Total water requirement after proposed expansion project will be 1400 KLD which will be sourced from Samalkot canal. The company has obtained permission from Irrigation department for drawing water of 1400 KLD from Samalkot canal through vide Memo No. ENC (I) DCEIV / OT / GDS / AEE4 SHRIGIRIJA11 dated 12-04-2013 and Proceedings no. EE / GE / DB / AO / 591 dated 29-05-2013.

10.0 The power requirement of the proposed expansion project is estimated as 51.5 MW and existing project is 56 MW. Total power required after proposed expansion project will be 107.5 MW which will be met from the existing power plant of 108 MW.

11.0 Baseline Environmental Studies were conducted during post monsoon season i.e. from October 2016 to December 2016. Ambient air quality monitoring has been carried out at 8 locations during 1st October, 2016 to 31st December, 2016 and the data submitted indicated: PM_{10} (32.4 to 65.8 µg/m³), $PM_{2.5}$ (18.9 to 36.4 mg/m³), SO_2 (9.8 to 16.3 mg/m³) and NOx (11.7 to 20.4 mg/m³). The results of the modelling study indicates that the maximum increase of GLC for the proposed project is 1.9 µg/m³ with respect to the PM_{10} 17.6 µg/m³ with respect to the NOx.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.3 to 7.6; Total Hardness: 451 to 562 mg/l; Chlorides: 372 to 457 mg/l; Fluoride: 0.18 to 0.36 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 2 locations. pH: 7.2 to 7.3; DO: 6.7 to 6.8 mg/l and BOD: 2 mg/l.

13.0 Noise levels are in the range of 45 to 61 dB(A) for daytime and 39 to 55 dB(A) for night-time.

14.0 As the present proposal is for expansion of existing industry and no additional land is acquired for the expansion project, no R&R is involved.

15.0 It has been reported that 96,000 TPA of Ferro manganese slag generated will be utilized for manufacture of Silico manganese as it contains high MnO_2 . Ferro Chrome slag will be utilized for road construction or land filled after recovery of ferro chrome. Ferro silicon & Silico manganese slag generated will be utilized for road construction or landfilled. It has been reported that an area of 20.24 ha (50 acres) has been developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

16.0 It has been reported that the Consent to Operate from the Andhra Pradesh State Pollution Control Board has been obtained vide order no. APPCB / VSP / KKD / 327 / CFO / HO / 2015 dated 07-07-2015 and consent is valid up to 31^{st} March, 2018.

17.0 The Public hearing of the project was held on 23-06-2017 in the existing plan premises under the chairmanship of Joint Collector, East Godavari District for proposed expansion project Ferro alloy unit. The issues raised during public hearing are related to control of pollution, employment and development of surrounding villages. An amount of 325 Lakhs (2.5 % of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues. The details of Enterprise Social Commitment proposed by PP as follows;

S. No	Item	Expenditure (Rs. in Croros)	Year of implementation
1.	Primary health center	0.2	
2.	Basic amenities in surrounding villages	0.2	
3.	Providing RO plants to villages, sanitation etc. in surrounding villages under Swacch Bharath	1.0	
4.	Road construction in villages	1.0 During proj	
5.	Rain water harvesting system in the villages	0.25	implementation
6.	Tree plantation in and around the surrounding villages	0.15	period in Phases over a period of
7.	Skill development	0.25	5 years
8.	Educational facilities in the schools in nearby villages	0.1	
9.	Providing farm techniques, mechanization and agriculture development to local farmers	0.1	
	TOTAL	3.25	

18.0 The capital cost of the project is Rs 130 Crores and the capital cost for environmental protection measures is proposed as Rs 1300 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 100 Lakhs. The employment generation from the proposed expansion project is 150. The capital cost and recurring cost break up of environmental protection measures as follows:

Sl. No	Item	Capital Cost (Rs.in	Recurring Cost / Annum
		Crores)	(Rs.in Lacs)
1.	Air Emission Management	8.0	55.00
	• Dust Extraction systems with Bag filters		
	• Stacks		
	Water Sprinklers		
	Environment Monitoring		
2.	Solid waste Management	4.0	10.00
	• Construction of Pucca Platform for storage		
	Hazardous & Municipal solid waste		
	storage		
3.	Greenbelt development, Land scaping Noise		10.00
	Management		
4.	Occupational Health & Safety	1.0	25.00
TO	ΓAL	13.0	100.00

19.0 Greenbelt has been developed in 20.24 Ha (50 acres) which is about 33% of the total acquired area. Local and native species have been planted with a density of 2500 trees per hectare.

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

21.0 The Project Proponent along with EIA Consultant M/s Pioneer Enviro Laboratories & Consultants Private Limited, Hyderabad made detailed presentation on the proposal. During the presentation, it was informed that Sintered plant is proposed in the plant but not addressed in the EIA/EMP. It was informed that, clearance for sinter plant will be obtained as amendment subsequently. It was confirmed that the dust collected from the bag filters will be completely recycled and reused in the plant; possible Hazard Identification and Risk Assessment (HIRA) was carried and emergency response plan will be implemented in the expansion; regular submission of six-monthly EC compliance reports to Regional office of the ministry; and also submitted under taking to carry out additional plantation in 4 to 5 Acres in the vacant land available near entrance of the plant.

22.0 After detailed deliberations, the committee recommended for grant of environmental clearance with following specific conditions along with any other conditions prescribed by the ministry:

- i. The Project Proponent shall obtain environmental clearance for the proposed sintered plant subsequently.
- ii. The Filer bag house shall be designed for 150% of the air flow rate. The filter bag shall be PTFE dipped PPS type.
- iii. The company shall ensure 100% utilization of the fly generated from the plant. No dumping of fly ash is allowed in the premises.

- iv. The proposed fund under Enterprise Social Commitment (ESC) (Rs. 3.25 Crs) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.
- v. Green belt shall be developed in 55 Acres within the plant area with native tree species in accordance with CPCB guidelines. The greenbelt shall *inter alia* cover the entire periphery of the plant.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.
- vii. Water shall be drawn only from the permitted source. No ground water shall be used for industrial purpose.
- viii. The project proponent shall strengthen the Environmental Monitoring cell with suitable qualified persons.
- ix. Suitable system for waste heat recovery shall be adopted.
- x. Blast furnace (BF) slag granulation system shall be provided for further utilization. BF Flue dust and gas cleaning plant sludge shall be re-cycled / re-used. The dust collected from the APCD in the raw material handling section shall be reused / recycled.
- xi. The project proponent shall provide for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- 22.15. Steel/sponge Iron Manufacturing plant of (3x60 TPD) 54000 MTPA in existing steel Manufacturing unit having capacity 72 TPD of steel Ingots of M/s Eden Steel Alloys located at Village Mullanpur Kalan, Ambey Majra Road Mandigobindgarh, Tehsil Sirhind, District [Online Fatehgarh Sahib, Punjab proposal no. IA/PB/IND/59542/2016; **MoEFCC** File No. J-11011/233/2016-IA-II(I)] _ **Environmental Clearance based on ToR.**

1.0 The proponent has made online application vide proposal no. **IA/PB/IND/59542/2016**, dated **19th August 2017** along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'B' of the Schedule of EIA Notification, 2006. Since the project is located in the Critically Polluted Area of Mandigobindgarh notified by Central Pollution Control Board, the proposal is appraised at the Central Level as Category A.

2.0 The project of **M/s Eden Steel Alloys** located at Ambey Majra Road, Village-Mullanpur Kalan, Tehsil- Sirhind, District- Fatehgarh Sahib, Punjab was initially received in the Ministry on 8th October 2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 12thmeeting held on 27th– 28th October 2016, and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of

Environment, Forest and Climate Change had prescribed ToRs to the project on 23rd January 2017 vide Lr. No. J-11011/233/2016/IA.II(I). Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry.

3.0 The project of M/s Eden Steel Alloys located in Ambey Majra- Mullanpur road, Village-Mullanpur Kalan, Tehsil- Sirhind, District- Fatehgarh Sahib, Punjab is running an integrated steel plant since October 2010 making steel ingots capacity of 72 TPD by using induction furnace (23,760 TPA). Now the project proponent proposes to add 3 tunnel furnaces for sponge iron manufacturing increasing their production capacity of sponge iron to 54,000 TPA, along with Char as by product of 600 TPA. EC was not applicable for the existing plant, as the production capacity was less than 30, 000 TPA. The details of the existing and proposed expansion are as follows;

Sl.	Product	Existing	Proposed	Total Capacity
No		Capacity (TPA)	Capacity (TPA)	after expansion
				(TPA)
1	Steel Ingot	23,760	Nil	23,760
2	Sponge Iron	Nil	54,000	54,000
3	Char	Nil	600	600

4.0 The total land is 0.885 ha. This is an existing project in industrial area of Mandi Gobindgarh. No forestland is involved. The entire land has been acquired for the project. Bhakhra Canal passes 1.41Km away from project site. There will not be any diversion in course of canal.

5.0 The topography of the area is flat and reported to lies between 30° 37'43.00'' N Latitude and 76°18'59.00''E Longitude in Survey of India Topo sheet No. 53 B/6 at an elevation of 264.m AMSL.

6.0 There is no National Park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

7.0 The raw material is Scrap & Ferro alloys, Iron ore/Mill scale fines, Coal/ Coke fines, Bentonite, Lime.

8.0 The targeted production capacity of Sponge iron is 54,000 TPA. The raw material will be sourced from local market.

9.0 The water requirement of the project is estimated as $4.5 \text{ m}^3/\text{day}$. 2.5 KLD will be used for Domestic purposes, 2.0 KLD will be used in cooling process.

10.0 The existing power requirement of the unit is 2500 KW. After expansion, the power requirement will be 3000 KW. This demand will be met by sourcing the power from Punjab State Power Corporation Limited from nearby station.

11.0 Baseline Environmental Studies were conducted during post monsoon season i.e. from November 2016 to January 2017. Ambient air quality monitoring has been carried out at 8 locations during November 2016 to January 2017. and the data submitted indicated: PM_{10} (77.6µg/m³ to 102.1µg/m³), PM2.5 (24.7 to 40.7 µg/m³), SO2 (4.8 to 8.9 µg/m³) and NOx (20.4.

to $31.74\mu g/m^3$). The results of the modelling study indicate that the maximum increase of GLC for the proposed project is 1.20, 0.10, 0.10 $\mu g/m^3$ for PM₁₀, NOx, SO₂ respectively.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.19.to 7.29., Total Hardness: 198 to 298 mg/l, Chlorides: 17 to 35. mg/l, Fluoride: ND. Heavy metals are within the limits. Surface water sample was analysed from 1 locations. pH: 7.23 DO: 6.2 mg/l and BOD: 3.8 mg/l. COD : 19.6.mg/l.

13.0 Noise levels are in the range of 50.2 to dB(A) for daytime and 37.2 to 56.8 dB(A) for night-time.

14.0 No R&R is involved.

15.0 The Municipal solid wastes are collected by municipal solid waste collection facility. Industrial wastes are segregated and managed properly. The hazardous wastes generated from the plant will be provided to Treatment Storage and Disposal Facility (TSDF) Dera Bassi Punjab.

16.0 It has been reported that the Consent to Operate from the Punjab Pollution Control Board obtained vide Lr. No. 733 dated 8/2/2013 and is valid up to 30/06/2018.

17.0 The Public hearing of the project was held on 28th March 2017 under the chairmanship of ADC, Development for production of Sponge Iron of capacity 54,000TPA. The issues raised during public hearing *inter alia* include impact of the project on environment; repair of road; and damaging of crops. An amount of 9 Lakhs for five years (3% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues.

18.0 The capital cost of the project is Rs 3 Crores and the capital cost for environmental protection measures is proposed as Rs. 30 Lakhs. The manpower requirement after expansion will be 40. The detailed CSR plan has been provided in the EMP in its page No. 154.

19.0 Greenbelt will be developed in 0.29 Ha which is about 33% of the total acquired area with 550 plants. Presently 200 plants already planted and another 350 saplings will be planted.

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

21.0 The project proponent has given detailed presentation along with EIA Consultant M/s Chandigarh Pollution Testing Laboratory, Mohali, Punjab.

22.0 After detailed deliberations, the committee observed that signed copy of the proceedings of public hearing is not available either in the EIA/EMP and also not available with the Project Proponent; EIA Coordinator was not present before the committee during the presentation; Slag disposal system was not envisaged; plant lay out not presented properly; etc. Therefore, the committee desired following information for further consideration of the proposal:

i. Signed copy of Public Hearing proceedings shall be submitted

- ii. Revised plant lay out clearly demarcating the green belt, plant facilities, internal roads, evacuation route in case of the emergency, etc. The plan shall also have indicated with reference to the geographical features such as road, water body etc.
- iii. Action plan for slag and other solid waste disposal shall be submitted.
- iv. The schematic diagram and process description of proposed tunnel kiln technology shall be submitted.
- v. Ground water permission for the additional water requirement shall be obtained.
- vi. Material balance shall be submitted
- 23.0 Therefore, the proposal is deferred for submission of above information.

22.16. Expansion from 18000 TPA to 80000 TPA located at Village Bharthari, Tehsil Chinour, District Gwalior, Madhya Pradesh by M/s Om Smelters & Rollers Private Limited [Online proposal No. IA/MP/IND/67485/2017; MoEF&CC File No. IA-J-11011/422/2017-IA-II(I)] – Terms of Reference for Expansion Proposal.

1.0 The proponent has made online application vide proposal no. **IA/MP/IND/67485/2017** dated **17th August 2017** 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 Sl. No. 3(a) Metallurgical industries (ferrous & nonferrous) under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level.

2.0 **M/s Om Smelters & Rollers Private Limited** is operating Plant since October 2015 with installed capacity of 18,000 MTPA to produce TMT Bars, MS Billets/Ingots, MS Angle Channel, Rolling Product, Missroll & cutting at Khasra No. 251, 274/2, 274/3, 283, 284, 285, 287/1, at Village Bharthari, Tehsil Chinor, Distt. Gwalior in Madhya Pradesh. The existing plant is operating with Consent to Operate from Madhya Pradesh State Pollution Control Board vide Lr. No. 11164 and validity of CTO is up to 30/09/2019.

3.0 Now, M/s Om Smelters & Rollers Private Limited, in view of available infrastructure and increasing marketing demand and to sustain in market, the company is proposed to increase the capacity of plant up to 80,000 MTPA for manufacturing of MS Billets, TMR Iron Bars by installing 2 more Induction furnaces of 12 ton based on indigenous technology. The proposed capacity for different products for new site area as below:

S.	Unit	Product Existing	Existing	Product Proposed	Proposed Capacity
No.			Capacity		
1	Rolling	TMT Bars, MS	18000 TPA	TMT Bars, MS	80000 TPA
	Mill, IF	Billets / Ingots,		Billets / Ingots,	
		MS Angle		MS Angle	
		Channel,		Channel, Rolling	
		Rolling Product,		Product, Missroll	
		Missroll &		& cuttin	
		cutting			

4.0 The project site is bounded by latitudes from $25^{0}59'25.28$ to $25^{0}59'31.59"$ N and longitude from $78^{0}15'0.55"$ to $78^{0}15'10.13"$ E. The land area acquired for the proposed plant is 5.706 Ha. The entire 5.706 ha project area is private land. No forestland is involved. The entire land has been acquired for the project. Of the total area 1.88 Ha (33%) land will be used for green belt development.

5.0 No national park / wildlife sanctuary / biosphere reserve / tiger reserve / elephant reserve etc. are reported in the core and buffer zone of the project. The area also does not report to from corridor for Schedule-I fauna.

6.0 Total project cost is approx 15.0 Crore rupees. Proposed employment generation from proposed project will be 150 direct employment and 50 indirect employment.

7.0 The electricity load of 9900 KVA will be procured from Madhya Pradesh Vidyut Vitran Company Limited. The project has also proposed to install 500 KVA DG Set.

8.0 Proposed raw material and fuel requirement for project are Sponge Iron / MS Scrap and electricity. Requirement would be fulfilled by local market as well as Fuel consumption will be mainly from Madhya Pradesh Vidyut Vitran Company.

S.	Raw	Qty (Existing)	Qty	Source	Mode	of
No.	Material		(Proposed)		transportation	
1	MS	20000 TPA	88000 TPA	Indigenously	By road	
	Scrap			Available	-	
	/Sponge					
	Iron					
2	Ferro	180 TPA	600 TPA	Indigenously	By road	
	Alloys			Available		
3	Fluxes	180 TPA	600 TPA	Indigenously	By road	
				Available		

9.0 Water consumption for the proposed project will be 100 KLD and waste water generation will be 8 KLD from Domestic usage. Domestic waste water will be treated in STP and no industrial waste will be water generated.

S.	Type of Solid	Qty (Existing)	Qty	Disposal method
No.	Waste		(Proposed)	
1	Iron Slag	2000 TPA	10000 TPA	A unit of iron recovery from slag has been installed and the recovered iron shall be used with scrap to charge in induction furnace. The remaining part shall be used for civil work & bricks manufacturing.
2	Mill scales (Rolling Mills)	1000 TPA	5000 TPA	Will be reused in IF

10.0 The solid waste management will be as follows:
11.0 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

12.0 The project proponent along with the EIA Consultant M/s Creative Enviro Services, Bhopal, Madya Pradesh presented details the proposal.

- 13.0 After detailed deliberations, the committee observed following:
 - i. Title of the proposal is not clear.
 - ii. Details for which the expansion sought was not clear and did not show the facilities proposed properly.
- iii. Plant lay out presented was only a schematic diagram and cannot be treated as a plan.
- iv. There are several deficiencies in the Form-I and pre-feasibility report.
- v. The consultant present before the committee is unable to explain regarding the proposal. More over the person present before the committee and accreditation certificate shown to the committee are of different persons.

14.0 Therefore, the proposal is rejected and advised to submit application afresh in Form-1 along with pre-feasibility report with complete details of the project.

22.17. Expansion of Cement Plant (Clinker: 0.66 to 3.00 MTPA; Cement: 0.95 to 2.50 MTPA) and Installation of WHRB (15 MW) at Gudipadu Village, Yadiki Mandal, Anantapur District, Andhra Pradesh by M/s Sagar Cements (R) Limited (Formerly BMM Cements Limited) [Online Proposal No. IA/AP/IND/67502/2017;MoEF&CC File No. IA-J-11011/421/2017-IA-II(I)] – Terms of Reference for Expansion Proposal.

1.0 The proponent has made online application vide proposal no. **IA/AP/IND/67502/2017** dated 17th August 2017 along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

2.0 M/s. Sagar Cements (R) Limited (SCRL) formerly known as BMM Cements Limited (BMM) is operating a Cement Plant with a Clinker production capacity of 0.66 Million Tonnes Per Annum (MTPA) at Gudipadu Village, Yadiki Mandal, Anantapur District, Andhra Pradesh. SCRL acquired the units of BMM, and all the assets were transferred to SCRL, through Registrar of Companies (ROC).

3.0 SCRL, now, proposed to increase clinker production capacity from 0.66 to 3.00 MTPA and cement production from 0.95 to 2.5 MTPA by enhancing the Unit-I production capacity from 0.66 to 1.00 MTPA and by installing a 2.0 MTPA new unit i.e., Unit-II. Also it is proposed to install a waste Heat recovery power plant of 15 MW. The capacity of the cement plant before and after expansion is given below:

Cement Plant	Present approved capacity in MTPA			Capacity after proposed enhancement MTPA		hancement in
	Clinker	Cement	Power	Clinker	Cement	Power
			(MW)			(MW)
Unit –I	0.66	0.95	25	1.0	1.00	25 + 15 MW
Unit –II	-	-		2.0	1.50	WHRB
Total	0.66	0.95	25	3.0	2.50	40

4.0 SCRL received Environmental Clearance in the name of BMM Cements Limited, vide MoEF letter no. J-11015/231/2012IA-II(M), dt. 12.12.2014 for Mines and Order No. SEIAA/ANT-10/2008, Dt. 26.02.2010 for Cement Plant. Consent to Operate was accorded by Andhra Pradesh State Pollution Control Board vide lr. no. APPCB/KNL/KNL/17731/HO/CFO/2016 dated 24th March 2016 with validity of CFO up to 20th April 2020.

5.0 The existing plant is located in 80 Ha and new line is proposed in the existing plant area. Of the total area 26.2 Ha (33%) of land is earmarked for green belt development.

6.0 There is no national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc., are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

7.0 Total project cost of expansion is Rs 500 Crores. Proposed expansion will generate 50 people as additional employment.

8.0 With increase of clinker production capacity, the limestone requirement increases from 1.0 to 4.5 MTPA which will be met from met from Captive mining lease located at 3.0 km from cement plant. The Mineral transportation is by closed conveyor.

9.0 The peak power consumption in the SCRL Cement plant complex including mine is 12 MW. Total power requirement for the SCRL cement plant complex is met from Captive Power Plant. Additional power required is about 25 MW and it will be sourced from Captive Power Plant and WHRB.

	Present Requirement in MTPA	Requirement after Expansion in MTPA	Source
Limestone	1.04	4.5	Captive mine
Laterite	0.04	0.16	Vizag or Rajamundry Warangal
Bauxite	0.04	0.16	Belgaum area, Karnataka
Iron ore	0.025	0.10	Captive mine
Gypsum	0.03	0.11	EID Pary India Ltd., Chennai & Coramandel Fertilizers Ltd., Vizag.

10.0 Requirement of raw material as follows:

Coal	Cement Plant	0.122	0.553	SCCL or WCL or Mahanandi	
Cour	CPP	0.156	0.156		
Slag requirement for PSC		0.05	0.19	Ramagundam Thermal Power Plant, Muddanoor, Kadapa dist.	
Ash requirement for PPC		0.099	0.375	SJK Steel, Tadipatri & Jindal Steel, Bellary	

11.0 The present water requirement of the plant is $3200 \text{ m}^3/\text{day}$ (Cement Plant and Power Plant) and is sourced from Borewell within the plant site. Additional Water requirement for the proposal is $500 \text{ m}^3/\text{day}$. The source of water is Borewell.

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

13.0 The project proponent along with EIA Consultant M/s BS Envirotech, Hyderabad presented the details of the project.

14.0 After detailed 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 <u>Annexure I read with additional ToRs at Annexure-2.</u>

- i. Public Hearing to be conducted by the concerned State Pollution Control Board.
- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and Enterprise Social Commitment (ESC) related issues. The social impact assessment study so carried out should form part of EIA and EMP report.
- iv. Greenbelt shall be carried in 3.8 Ha in addition to the existing plantation
- v. The PP shall explore the possibility of efforts to reduce the GHG emissions.
- vi. Filer bag house shall be designed for 150% of the air flow rate. The filter bag shall be PTFE dipped PPS type.
- vii. The details of belt conveyor from the captive mine to the cement plant and its impact shall be addressed in the EIA/EMP.
- 22.18. Expansion of Cement Plant (Clinker: 2.00 to 4.00 MTPA; Cement: 2.35 to 3.50 MTPA By Installation of New Line) and Power Generation (from 7 MW to 55 MW by Installation of 2x18 MW Coal based Power Plant and 12 MW WHRB) at Mattapalli village, Mattampally Mandal, Suryapet District, Telangana State M/s Sagar Cements

Limited [Online Proposal No. IA/TG/IND/67426/2017; MoEF&CC File No. J-11011/379/2006-IA II(I)] – Terms of Reference for Expansion Proposal.

1.0 The proponent has made online application vide proposal no. **IA/TG/IND/67426/2017** dated 14th August 2017 along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

2.0 M/s. Sagar Cements Limited (SCL) is operating a Cement Plant with a Clinker production capacity of 2.0 Million Tonnes Per Annum (MTPA) at Mattampally Village & Mandal, Suryapet District., Telangana State.

3.0 M/s SCL now proposes to increase clinker production capacity from 2.0 to 4.0 MTPA and cement production from 2.35 to 3.5 MTPA by installing a new unit. Along with the expansion of cement plant, is proposed to install 2x18 MW capacity Coal based Thermal Power Plant and a 12 MW waste heat recovery power plant utilizing the hot gases from the existing and proposed process units i.e. Kilns and Coolers. The capacity of the cement plant before and after expansion is given below;

Cement	Present ap	proved capacit	y as per	Capacit	y after propo	osed enhancement
Plant	MoE	F&CC (MTPA	A)	(MTPA)		
	Clinker	Cement	Power	Clinker	Cement	Power(MW)
			(MW)			
Line – I	0.50	0.30	7.0	0.50	0.30	55 MW
Line – II	1.50	2.05		1.50	2.05	• 36 MW
Line – III	-	-		2.00	1.15	(2X18MW)
Total	2.00	2.35		4.00	3.50	Coal based
						power plant
						• 12 MW Waste
						Heat Recovery
						Power Plant

4.0 The existing project was accorded environmental clearance vide Lr. no. J-11011/379/2006-IA II (I) dated 2-4-2007 and its amendment in EC from MOEF & CC was obtained on 30-8-2013. Consent to Operate was accorded by Telangana State Pollution Control Board vide Lr. no. TSPCB/RCP/NLG/CFO/HO/2017/3408 dated 14th March 2017 with validity of CFO is up to 31st January 2022.

5.0 The existing plant is located in 61 Ha. An additional area of 25 Ha which is own land of SCL will be utilized for expansion. The land is free from habitation. No R&R is involved. No forestland involved. Of the total area 29.0 Ha (33%) of land will be used for green belt development.

6.0 There is no national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc., are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

7.0 Total project cost is approx. Rs 850 Crores. The total manpower at the existing plant is 650. Additional manpower required for proposed expansion is 250.

8.0 With increase of clinker production capacity, the limestone requirement increases from 3.30 to 6.0 MTPA which is met from Captive mining lease located adjacent to the cement plant. The mineral transportation is done through Road.

9.0 The peak power consumption in the SCL Cement plant complex is 25 MW. An additional power of 30 MW is required for the proposed expansion project. Total power requirement for the SCL cement plant complex is met from Grid/Captive Power Plant.

Sl.	Material		Requirement	Requirement	Source
No.	0.		before	after	
			expansion in	expansion in	
			MTPA	MTPA	
1	Limestone		3.30	6.0	Captive Limestone Mines
2	Gypsum		0.15	0.175	EID, Parry, Coramandal
					Fertilizers, Vizag.
3	Fly ash		0.20	1.35	SCL Captive Power plant and
					VTPS, KTPS, NTPC and ITC.
4	Coal(Pet Cement		0.3	0.6	Singareni Collieries Company Ltd
	Coke) Plant			(0.3)	and Imported Coal
5	Laterite		0.06	0.12	Rajahmundry
6	Iron Ore		0.06	0.12	Bellary

10.0 Raw material requirement is as follows;

11.0	Requirement of fuel f	for the proposed for 2 X 18 MW Coal based thermal power p	plant is
Indian	Coal / Imported Coal.	The maximum consumption of fuel is given below:	

Fuel	GCV of Fuel Kcal/kg	Fuel required	Fuel required
Considered		per day ton	per annum TPA
Indian coal / Imported Coal	4000	608	0.20

12.0 The present water consumption for the plant is 1300 m³/day and additional water requirement for proposed expansion is 1000 m³/day and will be met from the existing Mine Pit and Borewell. Waste water generated is only from domestic activities at cement plant and residential colony. A full-fledged sewage treatment plant (STP) is in operation designed for a maximum load of 200 m³/day. Treated domestic wastewater is 100% reused for greenbelt development within SCL cement plant complex.

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

14.0 The project proponent along with EIA Consultant M/s BS Envirotech, Hyderabad presented the details of the project.

15.0 After detailed 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 <u>Annexure I read with additional ToRs at Annexure-2.</u>

- i. Public Hearing to be conducted by the concerned State Pollution Control Board.
- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and Enterprise Social commitment (ESC) related issues. The social impact assessment study so carried out should form part of EIA and EMP report.
- iv. Greenbelt shall be carried in 8.5 Ha in addition to the existing plantation
- v. The PP shall explore the possibility of efforts to reduce the GHG emissions.
- vi. Filer bag house shall be designed for 150% of the air flow rate. The filter bag shall be PTFE dipped PPS type.
- vii. The details of belt conveyor from the captive mine to the cement plant and its impact shall be addressed in the EIA/EMP

22.19. Expansion of Integrated Steel Plant at Village Hathneura Near Champa Dist Janjgir, Chhattisgarh by M/s Prakash Industries Limited [Online proposal No. IA/CG/IND/22006/2010; MoEF&CC File No. J-11011/522/2008-IA II (I)] - Validity extension of Environmental Clearance – Consideration based on EDS Reply.

1.0 The proponent has made online application vide proposal no. IA/CG/IND/22006/2010 dated **11th August 2017** seeking extension of validity of Environmental Clearance granted on 3rd November 2010.

2.0 M/s Prakash Industries Limited has obtained Environmental Clearance vide no. F. No. J-11011/522 /2008 – IA.II(I) dated 3rdNovember 2010 for following plant configuration:

S.No.	Unit	Existing	Expansion	Total production
		Capacity	Capacity for	capacities after the
			which EC has	expansion
			been accorded on	
			03-11-2010	
1.	Sponge Iron Plant	0.7 MTPA	1.3 MTPA	2.0 MTPA
2.	Ingots / Billets / Blooms	1.0 MTPA	1.0 MTPA	2.0 MTPA
3.	TMT / Wire rod mill	Nil	0.6 MTPA	0.6 MTPA
4.	Blast Furnace	Nil	1.0 MTPA	1.0 MTPA
			(4 x 350 M ³)	(4 x 350 M ³)
5.	Ferro Alloys	1,15,000 TPA	Nil	1,15,000 TPA
		(9 x 7.5 MVA)		(9 x 7.5 MVA)
6.	Sinter Plant	Nil	1.45 MTPA	1.45 MTPA

S.No.	Unit	Existing	Expansion	Total production
		Capacity	Capacity for	capacities after the
			which EC has	expansion
			been accorded on	
			03-11-2010	
7.	Oxygen Plant	Nil	800 TPD	800 TPD
8.	Captive Power Plant	124.5 MW	183 MW	307.5 MW
	WHRB Power Plant	37 MW	63 MW	100 MW
	FBC Power Plant	87.5 MW	100 MW	187 MW
	BF Gas based power	Nil	20 MW	20 MW
	plant			

3.0 It was reported the status of implementation of the project is as follows:

Sl.	Unit	Expansion	Status of Implementation of
No.		Capacity for which	Expansion proposal
		EC has been	
		accorded on 03-11-	
		2010	
1.	Sponge Iron Plant	1.3 MTPA	• 0.3 MTPA is in operation
			• 1.0 MTPA is yet to implemented
2.	Ingots / Billets /	1.0 MTPA	• Yet to be implemented
	Blooms		_
3.	TMT / Wire rod mill	0.6 MTPA	• Yet to be implemented
4.	Blast Furnace	1.0 MTPA	• Yet to be implemented
		$(4 \text{ x } 350 \text{ M}^3)$	
5.	Sinter Plant	1.45 MTPA	• Yet to be implemented
6.	Oxygen Plant	800 TPD	• Yet to be implemented
7.	Captive Power Plant	183 MW	
	WHRB Power Plant	63 MW	• 10 MW is in operation
			• 53 MW is yet to implemented
	FBC Power Plant	100 MW	• 75 MW is in operation
			• 25 MW is yet to implemented
	BF Gas based power	20 MW	• Yet to be implemented
	plant		I.

4.0 It was informed that after obtaining the Environmental Clearance, part of the facilities has been implemented. Balance plant could not complete due to severe recession in steel sector (sluggish market condition). Now, with the improvement in market condition, the company is will likely to implement the remaining unimplemented portion for which EC has been accorded by 3rd November 2020.

5.0 After detailed deliberations the committee recommended for extension of validity of Environmental Clearance for further period of 3 years i.e. up to 2^{nd} November 2020.

22.20. Proposed expansion of ferro Alloy Plant with addition of 2X16.5 MVA SAF by M/s T.S Alloys Limited at Village Ananthapur; Tehasil Athagarh; District Cuttack; Odisha [Online proposal No. IA/OR/IND/26031/2010; MoEF&CC File No. J-11011/43/2011-IA.II(I)] –Modification of EC for reduced production

1.0 The proponent has made online application vide proposal no. IA/OR/IND/26031/2010 dated **17th August 2017** seeking amendment in Environmental Clearance granted on 22nd June 2015.

2.0 M/s TS Alloys Ltd. (Formerly Rawmet Ferrous Industries Ltd.) is operating Feroo Alloy Plant since 2007 at village Anantapur under Athagarh block, district Cuttack of Odisha.Presently it is operating with 2 nos. of Submerged Electric Arc Furnace of 16.5 MVA each with a total production capacity of 59,400 TPA Ferro Chrome & Briquetting plant having 1,00,000 TPA net Briquette production capacity within the existing premises of 83.50 Acres.

3.0 M/s TS Alloys Limited obtained EC vide File No. J-11011/43/2011-IA II (I) dated 22nd June 2015 for 4x16.5 MVA SAF with projected production quantity of 120000 TPA Ferro-Chrome / Ferro-Manganese / Silico –Manganese.

4.0 Due to the steel market situation in the world and company financial constraints, M/s TS Alloy Limited could not go for the proposed expansion project to add 2x16.5 MVA SAF as approved in the EC. Further the Company's Board took a decision to drop the growth project in view of the uncertainty in both supply of raw material and market demand.

5.0 Existing plant setup is confined within as area of 83.5 Acres of Industrial land.

6.0 Therefore, the Project proponent is requested to amend the EC for original production levels only.

7.0 After detailed deliberations, the committee recommended for modification of EC as requested.

22.21. Proposed expansion of cement plant by addition of Clinker: 2.50 MTPA, Cement: 3.00 MTPA and Captive Power Plant: 35 MW of M/s Durga Cement Works (a unit of Andhra Cements Ltd.) located at Village Durgapuram, Mandal Dachepalli, District Guntur, Andhra Pradesh [Online proposal no. IA/AP/IND/67521/2014; MoEFCC File No. J-11011/719/2007-IA.II(I)]- Extension of Validity of ToR regarding.

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons of absence by the applicant

22.22. Establishment of 1 x 350 TPD DRI Kiln (1,05,000 TPA of Sponge Iron); 4 x 15 T Induction Furnaces (1,80,000 TPA of MS Billets); 1 x 500 TPD of Rolling Mill (1,80,000 TPA of Structural Steel / Rolled product), Power Plant (10 MW of WHRB & 10 MW FBC); and 1 x 9 MVA Submerged Electric Arc Furnaces (Si-Mn – 14,400 TPA OR Fe-Mn – 14,400 TPA or Fe-Si – 7,000 TPA) in the premises of existing 10

MW Biomass based Power Plant Village: Khajuri, Tehsil: Baloda Bazaar, District: Baloda Bazaar, Chhattisgarh by M/s Animesh Ispat Private Limited [Online Proposal No. IA/CG/IND/67581/2017; MoEF&CC File No. IA-J-11011/420/2017-IA-II(I)] – Terms of Reference for expansion.

1.0 The proponent has made online application vide proposal no**IA/CG/IND/67581/2017** dated **21**st**August 2017** 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 Sl. No. 3(a) Metallurgical industries (ferrous & nonferrous) under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level.

2.0 **M/s. Animesh Ispat Pvt. Ltd.** proposed to establish of 1 x 350 TPD DRI Kiln to manufacture 1,05,000 TPA of Sponge Iron, 4 x 15 T Induction Furnaces to manufacture 1,80,000 TPA of MS Billets, 1 x 500 TPD of Rolling Mill to manufacture 1,80,000 TPA of Structural Steel / Rolled product, 10 MW of WHRB based Power Plant, 10 MW FBC based Power Plant & 1 x 9 MVA Submerged Electric Arc Furnaces to manufacture Si-Mn – 14,400 TPA OR Fe-Mn – 14,400 TPA OR Fe-Si – 7,000 TPA by Forward Integration in the existing 10 MW Biomass based power plant in the existing plant premises. It is proposed to manufacture the above products based on the following technology

- Production of Sponge Iron through DRI route
- Production of MS Billets through Induction Furnace with concast
- Production of Structural steel & Rolled products through Rolling Mill
- Production of Ferro Alloys through Submerged Electric Arc Furnace route
- Power generation through Waste Heat Recovery Boiler & FBC boiler

3.0 Existing plant of 10 MW Biomass based power plant has obtained Consent To Establishment (CTE) vide letter no. 2956/TS/CECB/2006 Raipur dated 16/06/2006 from Chhattisgarh Environment Conservation Board prior to EIA notification 14th September 2006. Hence, Environment Clearance is not applicable for existing plant. Consent to Operate is accorded by Chhattisgarh Environment Conservation Board vide letter no. 4755/TS/CECB/2016 Naya Raipur and is valid up to 30-12-2017.

4.0 The proposed unit will be located at Khajuri Village, Baloda Bazaar Tehsil &District, Chhattisgarh. The project site Coordinates of the project site are 21°44'52.86"N 82°10'31.29"E.The entire project area will fall in the Survey of India Topo sheet no. 64 K/2. Khasra Numbers of total land are 574, 575, 577, 578, 579, 580, 581, 582, 583 & 583/2.

5.0 Existing plant is located in an area of 24.6 acres of land and proposed expansion will be taken up in the existing plant premises only. Of the total area, 8.1 Ac. (33%) land is being used for greenbelt developed. No Forest land involved.

6.0 Sonbarsa RF (SW), Mohtara RF (S), Latwa RF (SW) exists within 10 Km. radius of the plant site. No National Park/ Sanctuary/Biosphere reserve/tiger reserve are reported to be located

in the core and buffer zone of the project. Shivnath river (2.5 Kms.), Jamuniya Nallah (1.1 Kms.) & Khorsi Nallah (7.0 Kms) are present within 10 Kms. Radius of the plant site.

7.0 Total project cost for proposed expansion is approx. **Rs. 160.0 Crores**. Proposed employment generation from proposed expansion project will be **100 nos.** direct employment and **200 nos.** indirect employment.

8.0 The targeted production capacity of the total plant is **0.175 million TPA**. The ore for the plant would be procured from Barbil, Odisha OR NMDC, Chhattisgarh. The ore transportation will be done through by rail & road (through covered trucks). The proposed capacity for different products are as below:

S No	Unit	Existing	Proposed emonsion	A fton ormansian
3. 1NO.	Unit	Capacity	Proposed expansion	After expansion
1	DDI Kilna		1 x 350 TPD	1 x 350 TPD
1.	DKI KIIIIS		(1,05,000 TPA)	(1,05,000 TPA)
2	Induction		4 x 15 T	4 x 15 T
۷.	Furnaces		(1,80,000 TPA)	(1,80,000 TPA)
2	Dolling Mill		1 x 500 TPD	1 x 500 TPD
5.	Konnig Mini		(1,75,000 TPA)	(1,75,000 TPA)
4.	Power Plant WHRB		10 MW	10 MW
5.	Power Plant FBC		10 MW	10 MW
6.	Ferro Alloys Plant (1 x 9MVA)		Silicon Manganese (SiMn) – 14,400 TPA OR Ferro Manganese (FeMn) – 14,400 TPA OR Ferro Silicon (FeSi) – 7,000 TPA	Silicon Manganese (SiMn) – 14,400 TPA OR Ferro Manganese (FeMn) – 14,400 TPA OR Ferro Silicon (FeSi) – 7,000 TPA
7.	Biomass based Power Plant	10 MW		10 MW

9.0 Power requirement for the existing plant is being met from Captive Power plant. Power required for proposed expansion will be 29.0 MW and will be met partly from proposed 10 MW WHRB, 10 MW FBC based power plant and existing 10 MW Biomass based power plant.

10.0	Proposed raw material for expansion project are Iron Ore, Dolomite, Manganese ore, Pet
coke,	Electrode Paste Scrap, Ferro Alloys. Requirement would be fulfilled by external purchase
/in ho	buse. Fuel Consumption will be mainly Coal & Furnace Oil.

Raw Material		Quantity (TPA)	Sources	Mode of Transport	
For DRI Kilns (Sponge Iron) – 1,05,000 TPA					
Iron Ore		1,68,000	Barbil, Orissa	By rail & road	
			NMDC, Chhattisgarh	(through covered trucks)	
Coal	Indian	1 26 000	SECL Chhattisgarh /	By rail & road	
Indian		1,20,000	MCL Orissa	(through covered trucks)	

Raw Materi	al	Quantity (TPA)	Sources	Mode of Transport
	Imported	94,500	Indonesia / South Africa / Australia	Through sea route, rail route & by road
Dolomite		5,250	Local area	By road (through covered trucks)
For Steel M	elting Shop (M	<u> IS Billets) – 1,80,</u>	000 TPA	[
			Own generation	
Sponge Iron		1,50,000	& Purchased from outsite	By road (through covered trucks)
Scrap		64,000	Own generation	
Ferro alloys		2,700	Local Area	By road (through covered trucks)
		0 0 1		
For Rolling	Mill (TMT b	ars & Structural	Steel) – 1,75,000 TPA	
Steel billets		1,90,000	Own generation &	
			Purchased from	By road
			outside	(through covered trucks)
Furnace Oil		8,750 KL	Local area	By road
For FBC Bo	oiler [Power G	eneration 10 MV	[]	
Dolochar		15,750	In plant generation	through covered conveyors
Coal	Indian	40,000	SECL Chhattisgarh / MCL Orissa	By rail & road (through covered trucks)
	Imported	14,000	Indonesia / South Africa / Australia	Through sea route / rail route / by road
For Ferro S	ilicon unit (Fo	or 1 x 9 mVA)		
S.No.	Raw Material	Quantity (TPA)	Source	Mode of Transport
1	Quartz	8,450	Chhattisgarh / Andhra Pradesh	By Rail & Road (covered trucks)
2	Pet coke	2,800	Chhattisgarh / Bihar	By Rail & Road (covered trucks)
3	MS Scrap	175	Raipur	By Road (covered trucks)
4 Electrode		420	Maharashtra / West Bengal	By Rail & Road
For Ferro N	Ianganese uni	t (For 1 x 9 mVA)	
S.No.	Raw Material	Quantity (TPA)	Source	Mode of Transport
1	Manganese Ore	26,650	MOIL / OMC	By Rail & Road (covered trucks)

Raw Material		Quantity (TPA)	Sources	Mode of Transport
2	Pet coke	15,350	Chhattisgarh / Bihar	By Rail & Road (covered trucks)
3	MS Scrap	1030	Raipur	By Road (covered trucks)
4	Electrode Paste	3000	Maharashtra / West Bengal	By Road (covered trucks)
For Silico M	langanese uni	t (For 1 x 9 mVA)	
1	Manganese Ore	15,850	MOIL / OMC	By Rail & Road (covered trucks)
2	Mn. Slag	9,000	In house generation	
3	Quartz	3,900	Chhattisgarh / Andhra Pradesh	By Rail & Road (covered trucks)
4	Pet coke	1,600	Chhattisgarh / Bihar	By Rail & Road (covered trucks)

11.0 Water consumption for the proposed expansion project will be 640 KLD and same will be sourced from Kesla anicut (Mahanadi River) and waste water generation from the proposed expansion project will be 108 KLD (100 KLD from Power generation process & 8 KLD from Domestic). Domestic waste water will be treated Septic tank followed by sub-surface dispersion trench and there will be no wastewater generation from the DRI, SMS, Rolling Mill & Ferro Alloys processes, as closed-circuit cooling system will be provided. Boiler blowdown & DM plant regeneration wastewater will be treated in Neutralization tanks and will be mixed in a Central Monitoring Basin (CMB). The treated effluent from CMB will be reused for dust suppression, ash conditioning and for greenbelt development.

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

13.0 The PP has made detailed presentation on the proposal along with EIA Consultant M/s Pioneer Enviro Laboratories and Consultants Private Limited.

14.0 After detailed 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 <u>Annexure I read with additional ToRs at Annexure-2.</u>

- i. Public Hearing to be conducted by the concerned State Pollution Control Board.
- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and Enterprise Social Commitment (ESC) related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

- iv. Cumulative impact assessment shall be carried by considering the existing biomass power plant.
- v. Hydrogeological study shall be carried and submitted along with EIA/EMP.
- vi. The project proponent shall plan for supplementing their energy requirement with solar energy to the maximum possible. A detailed plan for the same shall be submitted.
- vii. The project proponent shall plan for ZLD.

22.23. Expansion of Aluminium Smelter production capacity from 5.75 LTPA to 10.85 LTPA at Korba, Chhattisgarh by M/s Bharat Aluminium Co. Ltd. (BALCO) [Online proposal No. IA/CG/IND/67553/2017; MoEF&CC File No. J-11011/123/2007-IA-II(I)] – Terms of reference for expansion proposal.

1.0 The proponent has made online application vide proposal no. **IA/CG/IND/67553/2017** dated **20th August 2017** along with the application in prescribed format (Form-I), copy of prefeasibility 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 Sl. No. 3(a) Metallurgical industries (ferrous & nonferrous) under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level.

2.0 **M/s. Bharat Aluminium Company Limited (BALCO)** was established in 1965 at Korba, Chhattisgarh, as a Government of India undertaking with integrated smelter capacity of 1,00,000 TPA and alumina refinery capacity of 2,00,000 TPA and started operation in 1973 at BALCO Complex, village: Risda, Taluka: Korba, district: Korba, state: Chhattisgarh. The present total capacity of BALCO is 575,000 TPA aluminium smelter. The details of earlier project expansions and environmental clearance are as follows:

Sl.	EC Details	CTE Details	CTO Validity	Remarks
Ι	Smelter Plant			
1	F. No. J-11011/123/2007- IA-II (I) dated 16 th September 2008 for Smelter Capacity Expansion from 3.5 LTPA to 9.0 LTPA	Ltr. No. 1385/TS/CECB/ 2009 dated 06.06.2009	113/TS/CECB/2017 dated 06.04.2017 valid up to 20.02.2018 for 3.25 LTPA Smelter	Expansion done from 3.5 LTPA to 5.75 LTPA
II	Power Plants			
1	F. No. J-13011/3/2003-IA-II (T) dated 23 th June 2004 for 675 MW Coal Based Captive Power Plant	Ltr. No. 3359/CECB/200 4 dated 26.08.2004	1967/TS/CECB/2017 dated 13.07.2017 valid up to 31.05.2018 for 4x135 MW Power Plant	-
2	F. No. J-13011/3/2003-IA-II (T) dated 14 th August 2007	Ltr. No. 5303/TS/CECB/	1971/TS/CECB/2017 dated 13.07.2017 valid	-

	for	1200	MW	Coal	Based	2007	dated	up	to	10.07.2018	for
	TPF	•				25.09.	2007	4x3	00 N	AW Power Pl	ant

The power requirements are being met from the existing thermal power plants of total 2010 MW (4 x 67.5 MW + 4 x 135 MW + 4 x 300 MW) capacity.

3.0 Now, **M/s. Bharat Aluminium Company Limited (BALCO)** is presently contemplating to undertake brown field expansion of the smelter by installing 5.10 LTPA (5,10,000 TPA) by employing 500 KA cell technology. It is proposed that the said smelter shall be constructed at the designated area, earlier proposed for 3.25 LTPA aluminium smelter. The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each	Production Capacity
		Unit	
Potline-1	1	2.50 LTPA	2.50 LTPA
Potline-2	1	3.25 LTPA	3.25 LTPA
Proposed expansion	1	5.10 LTPA	5.10 LTPA
Total	3	10.85 LTPA	10.85 LTPA

4.0 The proposed unit will be located at existing BALCO Complex, village: Risda, taluka: Korba, district: Korba, state: Chhattisgarh. The project area is bounded by latitudes from 22°23'24.5"N to 22°23'49.73"N Longitudes 18°43'32.4"N to 18°44'09.5"N covered in Survey of India Toposheet No. 64 J/11 and J/15.The land in the plant site is plain with gentle slopes with a general elevation of about 250 m to 300 m above MSL

5.0 The existing BALCO integrated Aluminium smelter complex area is 383.63 ha (948 acres), land required for the proposed smelter expansion is about 39.66 ha (98 acres) and is part of 948 acres of integrated Aluminium Complex. As the expansion will be brought out in the existing premises, there will not be any additional land acquisition for this expansion. The break-up of land for the entire BALCO complex is given below:

Sl. No.	Land description	A	Area	
		Acres	ha	
Α	Integrated Aluminium smelter complex	948	383.63	
1	Proposed smelter (old plant / Brownfield area)	98	39.66	
2	Existing smelters, power plant & ancillary plant	585	236.73	
3	Old Alumina plant	85	34.40	
4	Road & open space	55	22.26	
5	Green belt inside plant boundary	125	50.58	
В	Ash pond (outside plant complex)	375	151.75	
С	Township land (outside plant complex)	650	263.04	
D	Balance land (outside the plant complex boundary)	745	301.49	
	Grand Total $(A + B + C + D)$	2,718	1099.91	

The greenbelt / green cover in township, ash dyke and other areas is 161.87 ha (400 acres).

6.0 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported in the core and buffer zone of the project.

7.0 Total estimated project cost is Rs.7,927.04 Crores. Proposed employment generation from proposed project will be 1050 persons (direct employment and indirect employment).

8.0 The targeted production capacity of the Aluminium after expansion is 10.85 LTPA (1.085 million TPA). Under normal conditions, the main raw material alumina and coke transportation will be done through rail except during any emergencies/break-downs. The other raw materials will be transported through rail or road.

9.0 The electricity load of proposed expansion project 850 MW will be procured from existing power plants. Details of power plant capacities available with Balco are as given below:

Sl. No	Power Plant	Capacity (MW)	Total Capacity (MW)	Net output after Aux Consumption (MW)
1	TPP - 1	4 x 67.5	270	240
2	TPP - 2	4 x 135	540	486
3	TPP - 3	4 x 300	1200	1100
Total			2010	1826

Sl. No.	Description	Quantity	Source	Mode of Transport
1	Alumina	9,89,000 TPA	Local / Import	Rail
2	Calcined Petroleum Coke	2,04,000 TPA	Vizag / Korba	Rail
3	Coal Tar Pitch	39,500 TPA	Vizag / Korba	Road
4	Aluminium Fluoride	7,650 TPA	Import	Road
5	Heavy Diesel Oil (HDO)	40,000 KLPA	Local depots	Road

10.0 Proposed raw material and fuel requirement and fuel consumption details:

11.0 Water consumption for the proposed project will be $2,400 \text{ m}^3/\text{day}$ (100 m³/hr). Out of this, the fresh water requirement is 1400 m³/day and balance quantity of 1000 m³/day will be utilized from treated wastewater from effluent treatment plant. The quantity of make-up water requirement shall be catered from our existing water allocation.

12.0 The major categories of solid waste expected during aluminium smelter operation is from Spent Pot Lining (SPL) and impregnation from electrolysis unit, coke fines (burnt) and refractories from bake oven, sundry waste from plant, ladle cleaning refractories, cast house refractory's, effluent treatment plant sludge and domestic solid waste etc. In pots, solid waste is generated in the form of butts. Butts are cleared from the various waste material attached to it and utilized in anode plant. The waste material from the butts is reused in bath preparation in pot. The major solid waste generated in the smelter plant is Spent Pot Lining in reduction plant, used oil from various units and dross from cast house. Quantitative estimation of solid waste generation from the above units is presented in following table:

Name of the	Brief	Current rate	Generation	Current disposal	Potential
Residue /	Composition	of	rate post	strategy	Values
Waste	[of major	generation	current	(Disposal on	(for reuse,
	chemical	per annum	expansion (if	land, in SLF,	recovery

	(metal etc.)		any)-	sold to	of metal,
	constituents in		Altogether	registered	etc.)
	%]		_	recyclers, etc.)	
Spent Pot	Carbon,	12,000 T	22,000 T	Co Processing/	Nil
Lining	Ammonia,			SLF/	
_	Sodium			Detoxification	
	Fluoride				
Used	Hydro Carbon	300 KL	500 KL	Authorized	Nil
oil/Spent oil	-			recyclers	
ETP Sludge	Oil, Soil	17 T	30 T	SLF - Anode	Nil
_				Butt Carbon	
				1,00,000T	
				2,00,000T	
				8,000T Internal	
Dross	Aluminium	10,000 T	20,000 T	20,000 T	0.7 Lac/T

13.0 There is no court case or violation under EIA Notification to the project or related activity.

14.0 After detailed 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 <u>Annexure I read with additional ToRs at Annexure-2.</u>

- i. Public Hearing to be conducted by the concerned State Pollution Control Board.
- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and Enterprise Social Commitment (ESC) related issues. The social impact assessment study so carried out should form part of EIA and EMP report.
- iv. Certificate compliance of earlier EC from the Regional office of MoEF&CC shall be submitted along with EIA/EMP
- v. Consolidated EIA/EMP shall be prepared detailing all the existing smelter facilities under different environmental clearances in order to facilitate grant of single consolidated environmental clearance for the smelters.
- vi. The PP shall submit action plan for 100% utilization of fly ash.
- vii. The project proponent shall explore the possibility of establishment of cement plant for effective utilization of the fly ash and slag.
- viii. The PP shall submit the details of the solar power plant proposed on the ash pond area in the EIA/EMP.

- ix. The project proponent shall plan for supplementing their energy requirement with solar energy to the maximum possible. A detailed plan for the same shall be submitted.
- x. Management and disposal of hazardous waste as per the Hazardous and Other Waste Management Rules, 2016 shall be addressed in the EIA/EMP
- xi. Detailed specification of Air Pollution Control equipment shall be provided in the EIA/EMP. Post project monitoring shall be clearly specified along with number of stations, location, frequency of monitoring, parameters to be monitored, fund provision, etc.
- 22.24. Establishment of Integrated Steel Plant [DRI Kilns (2,31,000 TPA); Steel Melting Shop (2,47,000 TPA); Rolling Mill (2,47,500 TPA); Power Generation – 40 MW (16 MW WHRB and 24 MW FBC)] at Plot No. AL-2, Sector 23, GIDA Industrial Area, Village Sahbazganj & Domharmafi, Tehsil Sahjanwa, District Gorakhpur, Uttar Pradesh by M/s Ankur Udyog Limited (Steel Division) [Online proposal No. IA/UP/IND/67549/2017; MoEF&CC File No. IA-J-11011/416/2017-IA-II(I)] – Terms of Reference

1.0 The proponent has made online application vide proposal noIA/UP/IND/67549/2017 dated **19th August 2017** 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 Sl. No. 3(a) Metallurgical industries (ferrous & nonferrous) under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level.

2.0 M/s. **Ankur Udyog Ltd. (Steel Division)** proposed to establish a Greenfield project comprising of DRI Kilns (2,31,000 TPA), Steel Melting Shop (2,47,000 TPA), Rolling Mill (2,47,500 TPA), Power Generation – 40 MW (16 MW through Waste Heat Recovery Boiler (WHRB) and 24 MW through Fluidized bed combustion (FBC) Boiler). It is proposed to manufacture the above products based on the following technology

- Manufacturing of Sponge Iron through DRI kilns
- Manufacturing of MS Billets through IF along with concast
- Manufacturing of MS Re-Bars & Structural Steel through Rolling Mill
- Power generation through WHRB & FBC Boiler

3.0 The proposed plant is Greenfield project. CTE will be obtained after getting Environment Clearance from MoEF&CC. Consent to Operate will be obtained after getting CTE from UPPCB, Uttar Pradesh. The proposed capacity for different products for new site area as below:

S.No.	Units	Plant Configuration (Production Capacity)
1.	DRI Kilns (Sponge Iron)	2 x 350 TPD (2,31,000 TPA)
2.	Induction Furnace with Concast (MS Billets)	3 x 25 T (2,47,500 TPA)
3.	Rolling Mill	1 x 750 TPD
	(MS Re-Bars (TMT) and structural steel)	(2,47,500 TPA)

4.	Power Plant	WHRB - 2 x 40TPH	16 MW	
	(Electricity) (40 MW)	FBC - 1 x 110TPH	24 MW	

4.0 The project site is bounded by latitudes from 26°45'14.37"N - 26°45'45.68"N and longitude from 83°12'6.95"E - 83°12'27.53"E. The entire project area will fall in the Survey of India topo sheet no. G44L5. The proposed unit will be located at Plot No. AL-2, Sector 23, GIDA Industrial Area, Village Sahbazganj & Domharmafi, Tehsil Sahjanwa, District Gorakhpur, Uttar Pradesh.

5.0 Total land envisaged is 79.0 acres and same is in possession of management. Total land is situated in Gorakhpur Industrial Development Authority (GIDA) Industrial Area. Of the total area, 26.0 acre (33%) land will be used for greenbelt developed. No Forest land involved.

6.0 No Reserve Forest exists within 10 Km. radius of the project site. No National park/Wild life sanctuary/Biosphere reserve/tiger reserve/Elephant reserves are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. Rapti River (3.5 Km) & Aami River (4.2 Km) are present within 10 Km radius of the project site.

7.0 Total project cost for proposed expansion is approx. Rs. 275 Crores. Proposed employment generation from proposed project will be 500 nos. direct employment and 1000 nos. indirect employment.

8.0 The targeted production capacity of the total plant is 0.247 million TPA. The ore for the plant would be procured from Barbil, Odisha OR NMDC, Chhattisgarh. The ore transportation will be done through by rail & road (through covered trucks).

9.0 The total power requirement for the proposed project will be 45 MW, this will be met mainly with captive power plant of 40 MW (i.e. 16 MW WHRB and 24 MW FBC based power plant), A load of ~5 MW is proposed to be procured from the state grid i.e. Purvanchal Vidyut Vitran Nigam Limited (PuVVNL).

10.0	Propo	sed raw 1	material and fu	iel requ	iren	nent for p	rop	osed proje	ect are Iron C	re, Dolo	mite,
Scrap,	Ferro	Alloys,	Requirement	would	be	fulfilled	by	external	purchase /in	house.	Fuel
Consu	nption	will be r	mainly Coal &	Furnac	e O	il:					

Raw Mater	ial	Quantity	Source	Mode of Transport
		(TPA)		
For DRI Ki	Ins (Sponge Iron)) - 2,31,000 TP A	4	
Iron Ore		1,84,800	Orrisa	By Rail
Pellet		1,84,800	Orrisa	By Rail
	Indian Coal	2,52,000	Jharkhand	By Rail
Coal	Imported Coal	1,89,000	Indonesia / South Africa / Australia	Through sea route & Rail
Dolomite		11,550	Local Area	By road (through covered trucks)
For Steel M	lelting Shop (MS	Billets) – 2,47,5	00 TPA	
Sponge Iron		2,31,000	Own generation	

MS Scrap / Pig Iron		55,000	Local Area	By road (through covered trucks)
Ferro alloys		3,700	Local Area	By road (through covered trucks)
For Rolling	Mill (TMT bars	& Structural S	teel) – 2,47,500 TPA	(infough covered trucks)
			Own generation	
Steel billets		2,65,000	Purchased from outside	By road (through covered trucks)
Furnace Oil		13,000	HPCL/IOCL	By road
			depots	(through tankers)
For FBC Bo	oiler - Power Gen	eration 24 MW	7	
Dolochar		35,000	Own generation	
	Indian Coal	1,00,000	Jharkhand	By rail
Coal	Imported Coal	36,000	Indonesia / South Africa / Australia	Through sea route & Rail
Rice Husk		40,000	Local Market	By road (through covered trucks)

Note: Railway siding is proposed in the present proposal.

11.0 Water consumption for the proposed project will be 1800 KLD and waste water generation from the proposed project will be 393 KLD (385 KLD from Power plant & 8 KLD from Domestic). Domestic waste water will be treated Septic tank followed by sub-surface dispersion trench and there will be no wastewater generation from the DRI, SMS & Rolling Mill processes, as closed-circuit cooling system will be provided. Boiler blowdown & DM plant regeneration wastewater will be treated in Neutralization tanks and will be mixed with CT Blowdown in a Central Monitoring Basin (CMB). The treated effluent from CMB will be reused for dust suppression, ash conditioning and for greenbelt development.

S1.	Type of Solid	Qty in TPA	Disposal method
No.	Waste		
1	Ash from DRI	340	Will be given to Cement Plants & Brick manufacturers.
2	Dolochar	305	Will be used in FBC power plant as fuel.
3	Kiln Accretion	10	Will be used in road construction & given to
	Slag		brick manufacturer.
4	Wet scrapper	47	Will be used in road construction & given to
	sludge		brick manufacturer.
5	SMS Slag	100	Slag from SMS will be crushed and iron will be recovered & then remaining non - magnetic material being inert by nature will be used as sub base material in road construction/brick manufacturing
6	Mill scales from Rolling Mill	50	Will be reused in the SMS

12.0 The solid waste management will be as follows:

7	Ash from Power Plant (with Indian	180	Ash generated is being given to Cement Plants / Brick Manufacturers
	Coal)		

13.0 The proponent has mentioned that there is one court case is pending in Hon'ble High Court of Allahabad vide W.P. (C) 1110 of 2011. The Orders / Directions of the Hon'ble Court as "It will be open for the respondent no. 5 (The applicant M/s Ankur Udyog Limited is the Respondent no. 5 in the above Writ petition) to complete the work of making boundary wall. However, they will not further change the nature of the suit land".

14.0 After detailed deliberation, the committee observed that the proposal is green filed project and the land for the proposed project is under dispute. Court case is also pending in Hon'ble High Court of Allahabad vide W.P. (C) 1110 of 2011 and passed the orders mentioning that the PP will not further change the nature of the suit land. Therefore, the committee opined that, when the land proposed for the project is under sub-judice, the ToR cannot be recommended. Therefore, the proposal is rejected and advised to make application after settlement of land dispute.

22.25. Expansion of Sponge Iron Plant (6,00,000 TPA to 13,20,000); Ferro Alloy Plant (72,000 TPA to 1,44,000); Fe-Cr Briquette (40 TPH); Steel (9,00,000 TPA); Slag crushing (20 TPH); HRM (5,50,000 TPA); CRM (3,00,000 TPA); Lime dolomite (200 TPD); Oxygen (200 TPD); CPP (45 MW to 159 MW WHRB) by M/s Rashmi Cement Ltd, located at Village Jitusole (J.L No 702 & 703. Jitusole Junglokhas J.L. No. 731 and Baghmudi J.L No. 928), District Paschim Medinipur, West Bengal [Online proposal No. IA/WB/IND/67535/2017; MoEF&CC File No. J-11011/604/2008-IA-II(I)] – Terms of reference for expansion proposal.

1.0 The proponent has made online application vide proposal no. **IA/WB/IND/67535/2017** dated **19th August 2017** along with the application in prescribed format (Form-I), copy of prefeasibility 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 SI. No. S1. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central Level.

2.0 **M/s Rashmi Cement Limited** proposed for expansion of existing manufacturing unit for Sponge Iron Plant with Ferro Alloy Plant and Power Plant. It is proposed to set up the plant for 9, 00,000 TPA Integrated Steel Plant along with 114 MW Captive Power Plant located at Village Jitusole (J.L No 702 & 703. Jitusole Junglokhas J.L. No. 731 and Baghmudi J.L No. 928), District Paschim Medinipur, West Bengal.

3.0 The existing project was accorded environmental clearance vide File No. J-11011/604/2008.IA.II(I) dated 12.02.2009 and obtained validity extension up to 11th Febrauary 2019 and also amendment in EC (inclusion of ferrochrome with ferro alloy within EC approved capacity) vide File No-J-11011/604/2008.IA.II(I) dated 07.07.2017. Consent to Operate was accorded by West Bengal State Pollution Control Board vide Co No-102823 issued vide memo

Plant	Existing	Proposed (TPA)		Total Capacity
	(TPA)	Phase –I*	Phase-II*	
DRI (Sponge	3,00,000	1,20,000	1,80,000	6,00,000
Plant)	(10 x 100	(4 x 100 TPD)	(2 x 350 TPD)	
	TPD)			
Submerged Arc		36,000	36,000	72,000
Furnace (SEAF)		(3X 9 MVA)	(3X 9 MVA)	(Ferro Alloy FeMn,
				SiMn, FeSi & FeCr)
Power	25 MW			25 MW

No-5683-hl-co-5/10/0399 dated 14-12-2016 validity of CTO is up to 31-Dec-2021.The detail about EC obtained vide File No- J-11011/604/2008.IA.II(I) dated 12.02.2009 & 07.07.2017 is as

*Note- As per EIA clause 7 (ii) (b) already submitted the letter to MoEF, SPCB for change in configuration of the plant from the environmental clearance conditions during execution of the project and going for 1 x 600 TPD + 1 x 100 TPD DRI KILN instead of going for remaining 4 x 100 TPD +1 x 350 TPD DRI Kiln keeping production within EC stated permission.

4.0 The proposed unit will be located at Mouza – Jitusole (J.L No.-702 & 703), Junglekhas (J.L. No. 731) and Baghmundi (J.L. No.928), at Village: Jitusole, P.O – Garhsalboni, P.S – Jhargram, District: Paschim Mednipur, State: West Bengal.

5.0 The earlier EC of M/s Rashmi Cement Limited was awarded on 48.6 hectare land. No forestland is involved. The complete 48.6 hectare land is in possession by M/s Rashmi Cement Limited. The existing operational plant is located on 17.4 hectare of land and proposed expansion will take place within the RCL premises for which 12.2 hectare of land will be needed within the 48.6 hectare of land. Out of 48.6 hectare already 16.02 hectare (33%) of land is earmarked for green belt development. No additional land is required for the proposed expansion project.

6.0 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

7.0 Total project cost is approx 790 Crores rupees. Proposed employment generation from proposed project will be 1200 direct employment and 2500 indirect employment.

8.0 The targeted production capacity of the proposed proposal is 9, 00,000 TPA Integrated Steel Plant & 114 MW CPP. The Iron ore for the plant would be procured from Barbil-Joda, Orissa (from our current mines owner like, Rungata Mines, Sirajuddin Mines & TP Sahoo Mines), and Coal would be procured from E-Auction or Imported. The ore transportation will be done through Rail/ Road. The proposed capacity for different products for new site area as below:

Sr.	Plant	Existing	(TPA)	Pro	posed	Total
No		No. of unit	Production	No. of	Productio	Production
			Capacity	unit	n	Capacity
					Capacity	
1	Sponge Iron	11 x 100 + 1 x	6,00,000	4 x 600	7,20,000	13,20,000
	Plant	$350 + 1 \times 600$		TPD	TPA	TPA
		TPD				

2	Ferro Alloy Plant (Fe-Mn, Si- Mn, Fe-Si & Fe-Cr)	6 x 9 MVA	72,000	6 x 9 MVA	72,000 TPA	1,44,000 TPA
3	Fe-Cr Briquette Manufacturing plant			1 x 40 ton/hr	40 ton/hr	40 ton/hr
4	Steel Making Facilities			10 X 20 T EIF with LRF/AO D & CCM	9,00,000 TPA	9,00,000 TPA
5	Slag Crushing unit			1 x 20 ton/hr	20 ton/hr	20 ton/hr
6	Hot Rolling Mill				5,50,000 TPA	5,50,000 TPA
7	Cold Rolling Mill/ Wire drawing with Pickling Line & Continuous Galvanizing Line				3,00,000 TPA	3,00,000 TPA
8	Lime Dolomite Plant			01	200 TPD	200 TPD
9	Oxygen Plant			01	200 TPD	200 TPD
10	Captive Power Plant	WHRB Based	45 MW	64 MW WHRB Based + 50 MW CFBC (Coal & Dolochar Mix based)	114 MW	

9.0 The electricity load of 219 MW for proposed expansion project will be procured from proposed 114 MW Captive Power Plant and the remaining 105 MW will be drawn from WDSEDCL/Open Access. Company has also proposed to install 10 Number DG Set of 7200 KVA. At the time of Construction phase power requirement will be met from current operational Captive power plant of Rashmi Cement limited.

10.0 Proposed raw material and fuel requirement for proposed expansion project are Iron Ore, Bentonite, Coaking Coal, Dolomite, Quartzite, Lime, Magnesium Ore, Chromium Ore, etc. Requirement would be fulfilled by:

Sr. No.	Name of the Raw Materials	Source
1	Iron ore lump	Barbil-Joda, Orissa (From our current mines owner like, Rungata Mines, Sirajuddin Mines & TP Sahoo Mines)
2	Iron ore fines	Applied for captive iron ore mines
3	Non-coking coal	From our current source, or Through E-Auction or
4	Coking coal	From our current source: Purchased from BCCL, Dhanbad
5	Dolomite	From our current source: Birmitrapur, Orissa /
6	Limestone	From our current source: Birmitrapur, Orissa /
7	Manganese ore	From our current source: Captive mines in Balaghat,
8	Quartzite	From our current source: Belpahar Orissa / / Bilaspur,

Fuel consumption will be mainly **Electricity & Diesel (If required).**

11.0 Water Consumption for the proposed expansion project will be 9576 KLD and waste water generation will be 126 KLD. Rashmi Cement Limited has water withdrawal permission for 2060 KLD from SWID and application for withdrawing additional required water will/is made to SWID, West Bengal. 30 KLD Domestic waste water will be treated in Septic Tank followed by Soak Pit and 96 KLD industrial waste water generated will be treated and reused in the process and for green belt development and dust depression after treatment.

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

13.0 After detailed deliberation, the committee observed that the company has not engaged any EIA consultant as required under the clause 13 of EIA Notification. The committee opined that EIA Coordinator shall present before the committee for understanding the environmental sensitivity of the project location, environmental issues of the proposal so as to address in the EIA/EMP. The committee also advised to present the senior officials who can take the decisions from the company during the appraisal.

- 14.0 Therefore the proposal was deferred.
- 22.26. Setting up for manufacturing of Clinker (5,40,000 TPA), Portland Slag Cement (9,37,500 TPA), Portland Pozzolana Cement (1,80,000 TPA) and Captive Power plant (20 MW) with captive railway siding at Village Hansda, District Saraikela Kharsawan in Jharkhand by M/s Shree Cement [Online Proposal No. IA/JH/IND/6147/2010 MoEF File No. J-11011/692/2008-IA.II(I)] Extension of validity of Environmental Clearance

1.0 The proponent has made online application vide proposal no. **IA/JH/IND/6147/2010**, dated **17th June 2017** along with the application in prescribed format (Form-I), copy of earlier EC, report on the status of the project, etc. for seeking extension of validity of environmental clearance granted vide J-11011/692/2008-IA.II(I) on 30th August 2010 under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category "A" EIA Notification 2006.

2.0 Environmental Clearance for the was granted for setting up for manufacturing of Clinker (5,40,000 TPA), Portland Slag Cement (9,37,500 TPA), Portland Pozzolana Cement (1,80,000 TPA) and Captive Power plant (20 MW) with captive railway siding at Village Hansda, District Saraikela Kharsawan in Jharkhand to M/s Jupiter Cement Industries which is unit of M/s SKJ Coke Industries Limited.

3.0 It was informed that M/s Shree Cement limited has taken over the plant of M/s SKJ Coke Industries Limited and M/s Sri Ganesh Cement Private Limited on 24th June 2016. Application for transfer of EC has been made to the ministry on 4th August 2016 and the same is under process.

4.0 The project could not complete within the period of validity of the EC, therefore, the PP requested to extend the validity of the environmental clearance granted on 30th August 2010 for further period of three years.

5.0 The proposal was considered in the 20^{th} meeting of Expert Appraisal Committee [EAC (Industry-I)] held during the 10^{th} to 12^{th} July 2017. After detailed deliberations the committee came to the opinion that it would be appropriate to consider the requested extension of validity of EC only after the final decision on the proposal of name change is taken by the ministry because, as of now, the present EC is not in the name of the applicant (M/s Shree Cement).

6.0 The EC was transferred from M/s Jupiter Cement Industries to M/s Shree Cement Limited vide F. No. J-11011/692/2008-IA.II (I), dated 31st July 2017.

7.0 The project proponent presented implantation schedule and agreed to complete the 40% of the plantation target during this year and 60% during the next year with native species. The plantation developed during the current year inter ala include the plantation along the boundary.

8.0 After detailed deliberations, the committee recommended for extension of validity of the environmental clearance for further period of 3 years i.e. up to 29th August 2020.

22.27. Proposed expansion of existing integrated cement plant capacity, Clinker from 11.2 to 15.0 Million TPA, Cement 8.8 to 13.2 Million TPA, WHRS from 65 to 80 MW, CPP 180 MW, Synthetic Gypsum 1560 TPD & DG Sets from 1000 to 2000 KVA, located near Village Ras, Pali, Rajasthan by Shree Cement Limited [Online Proposal No. IA/RJ/IND/26617/2015; MoEF&CC File No. J-11011/343/2012-IA.II(I)] – Environmental Clearance – Further Consideration based on ADS.

1.0 **M/s Shree Cement Ltd** has made application for expansion of existing cement plant vide online proposal No. **IA/RJ/IND/26617/2015** dated **1**st **July 2016** along with copies of EIA/EMP reports seeking Environmental Clearance under the provisions of EIA Notification 2006 for the project motioned in the subject. The ToRs for the proposal were prescribed by the MoEF&CC vide letter No. J-11011/343/2012-IA-II(I) dated 10th February 2016 for the preparation of EIA/EMP report. The proposed project activity is listed at S.No.3(b) in Cement Plant Category 'A' of Schedule of EIA Notification 2006 and appraised at Central level.

2.0 The Public Hearing for the proposed expansion project was held on 20th April 2016 under the Chairmanship of District of District Magistrate, Pali, Rajasthan.

3.0 The proposal was considered in the 9th meeting of Expert Appraisal Committee [EAC(Industry-I)] held during 27th -29th July 2016. The status of the compliance of the earlier EC submitted by RO Lucknow was also discussed during the meeting. After detailed deliberations, the Committee recommended the project for Environmental Clearance and stipulated Specific Conditions along with other environmental conditions while considering for accord of environmental clearance.

4.0 While processing the proposal in the Ministry for Environmental Clearance, it is observed that the proposal for capacity enhancement of WHRB is from 68 to 90 MW. Whereas, in the earlier Environmental Clearance dated 10th September 2015, capacity enhancement for WHRB was accorded from 45 MW to 66 MW. The expansion of WHRB capacity should be continued from earlier capacity 66 MW.

5.0 The Ministry sought clarification on the capacity of WHRB vide letter dated 01.11.2016. The PP replied to the clarification vide letter dated 11.11.2016. It is mentioned that since there is scope for more heat recovery to generate power up to 68 MW, PP obtained the consent from Rajasthan Pollution Control Board for 68 MW.

6.0 It is observed that the Consent to Operate dated 27th November 2014 issued by Rajasthan SPCB is for 68 MW of WHRB. It confirms that the expansion was done prior to the EC dated 10th September 2015 for expansion of clinker from 10.4 MTPA to 11.2 MTPA.

7.0 In view of gross misinterpretation and suppression of facts, a show cause notice was issued for keeping abeyance of earlier Environmental Clearance vide letter dated 8th March 2017 and restricted the operation of WHRB to 66 MW. The Ministry also decided to conduct a site visit by Regional Office, Lucknow and requested RO vide letter dated 25th June 2017.

8.0 In the meanwhile, the PP represented that the capacity of WHRB was increased in between 2012 and 2014 after obtaining Consent from Rajasthan SPCB in the light of MoEF&CC Notification 1st December 2019 and 25th June 2014 and assured to all forth coming changes, if any, would also be communicated to the Ministry appropriately as per the prevalent law.

9.0 Accordingly, site inspection was made by RO, Lucknow and submitted the report vide dated 19th August 2017. It is mentioned that due to higher heat recovery and proposed changes of tapping point towards higher temperature zone in cooler of kiln which will result in increase in inlet temperature from 400 °C to 600 °C approx. from cooler, in turn, it will increase the steam generation from 245 TPH to 309 TPH along with increase in steam temperature which will generate 68 MW with the same clinker capacity. The PP submitted that the capacity of the WHRB plant was increased in between 2012 and 2014 after obtaining Consent to Operate from the Rajasthan SPCB and also stated that the capacity of WHRB was increased based on the notifications issued by MoEF&CC dated 01.12.2009, 25.06.2014 and OM dated 11th November 2009. Finally, reports of the PP revealed that the production capacity was not increased from April 2013 to March 2017 of Clinker, Cement, WHRB and Captive Power Plant.

10.0 The Thermal Power Plants using waste heat boilers without any auxiliary fuel are exempt from EC vide its Notification S.O 1599 (E) dated 25th June 2014. But the PP did not mention in the proposal which raised the queries while processing the file. Though the PP is operating the plant as per the prevailing law, the configuration of WHRB plant mentioned in the application was mismatching.

11.0 In the light of above, the proposal was placed before the Expert Appraisal Committee for opinion the proposal. The Project proponent has mentioned that during the detailed engineering, due to higher heat recovery and proposed changes of tapping point towards higher temperature zone in cooler of kiln which will result in increase in inlet temperature from 400 $^{\circ}$ C to 600 $^{\circ}$ C approx. from cooler, in turn, it will increase the steam generation from 245 TPH to 309 TPH along with increase in steam temperature which will generate 68 MW with the same clinker capacity.

12.0 After detailed deliberations, the committee opined that since the WHRB is eco-friendly measure and the TPP using waste heat boilers (WHRB) without any auxiliary fuel are exempt from EC vide its Notification S.O 1599 (E) dated 25th June 2014, the proposed expansion of Cement plant is recommended for issue of Environmental Clearance.

22.28. Expansion of Integrated Steel Plant from 0.60 MTPA to 0.70 MTPA Steel of M/s Rungta Mines Limited located at Village Kamanda, District Sundergarh, Odisha [Online proposal No. IA/OR/IND/53279/2016; MoEF&CC File No. J-11011/434/2009-IA-II(I)] – Environmental Clearance based on ToR.

1.0 The proponent has made online application vide proposal no. **IA/OR/IND/53279/2016**dated 16th August 2017along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & nonferrous) under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level.

2.0 The Kamanda Steel Plant of M/s Rungta Mines Limited located in Village Kamanda, District Sundergarh, Odisha, was initially received in the Ministry on 20.05.2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006 for expansion. The project was appraised by the Expert Appraisal Committee (Industry-1) [EAC(I)] during its meeting held during 30th May 2016 to 1st June 2016 and prescribed ToRs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project vide letter no. J-11011/434/2009-IA.II(I) dated 03.08.2016.

3.0 Subsequently, the Company has made minor changes in its proposal and has proposed to install additional Pelletisation plant within plant premises as well as enhance the capacity of sinter plant; SMS; Billets Bloom/ slab caster; Flat/ round/ wire rod/ structural/ others and power plant (WHRB+ AFBC). Therefore, revised Form-I along with Pre-Feasibility Report was submitted for amendment in ToR on 15.11.2016. The project was appraised by the Expert Appraisal Committee (Industry-1) [EAC(I)] during its meeting held during 22nd December to 23rd December 2016. The amendment of TOR was issued vide letter no. J-11011/434/2009-IA.II(I) dated 01st March 2017.

4.0 The project of M/s Rungta Mines Limited (Kamanda Steel Plant) located in Village Kamanda, District Sundergarh, Odisha is for expansion of the existing Steel Plant from 0.6 to 0.75 million tonnes per annum (MTPA). Environmental Clearance for existing 0.2 MTPA Project (Phase-I) was accorded vide MOEF's letter no. J- 11011/304/2007-IA.II(I) on 12.12.2008. Thereafter expansion from 0.2 to 0.6 MTPA (Phase-II) was accorded vide letter no. J-11011/434/2009-IA.II(I) dated 02.02.2015. The status of compliance of earlier environmental compliance was obtained from Regional Office Bhubaneswar vide letter no. 101-522/EPE /2121 dated 10.08.2017. The present sanctioned capacity and additional proposed capacity for different products are as follows:

Sl.	Facility	Present capacity	TOR obtained for additional capacity	
No.		as per EC dated	(TPA) Dated 01.03.2017	
		02.02.2015	Additional Capacity	Total Capacity
		(TPA)		
	$PHASE \rightarrow$	PHASE-I+II	PHASE-III	PHASE-I+II+III
(a)	(b)	(c)	(d)	(e) = (c) + (d)
1	Beneficiation Plant	1,100,000	1,00,000	1,200,000
2	Pellet Plant-1	600,000	0	600,000
	Pellet plant-2	Nil	2X1,200,000 +	2,640,000
			10% upgradation	
			(240,000)	
	Sub Total	600,000	2,640,000	3,240,000
3	Coal Washery	924,000	0	924,000
4	DRI Plant			
	6X100 TPD	180,000	77,400	257,400
	1X300 TPD	90,000	38,700	128,700
	3X350 TPD	315,000	100,800	415,800
	2X500TPD	330,000	66,000	396,000
	Sub total	915,000	282,900	1,197,900
5	Sinter Plant	240,000	Capacity enhanced	532,224
		(24 sq.m.)	of existing 1X24	2x24 sqm
			sq.m. by 26,112 +	
			Additional 1 X24	
			sq.m. of 266,112	
6	Mini Blast Furnace			
	2X262 CUM	382,520	75,980	458,500
	1X260 CUM	227,500	0	227,500
	Sub-total	610,020	49,780	686,000
7	Coke Oven (2	140,000	0	140,000
	batteries of 70,000			
	TPA)			
8	SMS			
	4X15T IF	200,000	31,000	231,000
	2x15T LRF			
	9 X15T IF	430,000	89,750	519,750
	5x15T LRF			
	Sub total	630,000	120,750	750,750

Sl.	Facility	Present capacity	TOR obtained for additional capaci	
INO.		as per EC dated	(IPA) Dated	01.03.2017
		(12.02.2015)	Additional Capacity	Total Capacity
	DUASE			
	$\frac{\Gamma\PiASE}{(h)}$			$P\Pi ASE-I+II+III$
(a)	(D)	(C)	(d)	(e) = (c) + (d)
9	Billet/ Slad/ Bloom			
	Caster	200.000	26.280	226.280
	0.20 MTPA	200,000	20,380	220,380
	0.42 MTPA	420,000	keplaced by two	keplaced by two
		NT:1	Delow:	Delow:
	0.20 MTPA	N11	226,380	226,380
	0.22 MIPA	N11	282,975	282,975
10	Sub total	620,000		/35,/35
10	Flat/ Round/ Wire			
	Rod/ Structural Mill/			
	others	4.10.000	017.005	217.025
	Mill - I	4,10,000	217,325	217,325
	Mill-2	(no split	217,325	217,325
	Mill -3	Specified)	271,656	271,656
	Sub total	4,10,000	706,306	706,306
11	Ferro Alloy Plant (1x9	0		
	MVA + 1x18 MVA)			
	Ferro Manganese OR	-	9 MVA= 18,000	54,000
			18 MVA=36,000	
	Silico Manganese OR	-	9 MVA= 14,400	43,200
			18 MVA=28,800	
	Ferro Chrome OR	-	9 MVA= 14,400	43,200
			18 MVA=28,800	
	Ferro Silicon	-	9 MVA= 6,400	19,200
			18 MVA=12,800	
	Briquette Plant for	-	88,320	88,320
	ferro chrome			
	Briquette Plant for	-	111,360	111,360
	ferro manganese			
12	Captive Power Plant	142 MW	56 MW	198 MW
	WHRB	66 MW	21 MW	87 MW
	AFBC / CFBC	76 MW	35 MW	111 MW

5.0 The total land required for the expansion project is 381.74 acres (154.489 ha), out of which 297.42 acres (120.36 ha) is Private land and 84.32 acres (34.12 ha) is Govt Land. No forestland is involved. The entire land has not been acquired for the project. 111.08 acres (44.95 ha) private land has been directly purchased and 186.34 acres private land (75.41 Ha) acquired through IDCO. 61.52 acres (24.9 ha) Government land has been acquired through IDCO and balance 22.80 acres government land is under process. It has been reported that natural water body exist around the project. The first and second order seasonal streams will be integrated into the storm water drainage

of the plant to ensure free flow of water from the hills in west of plant to Karo Nala in east side of plant.

6.0 The topography of the area is flat and reported to lie between 21°54'54''to 21°55'58''N Latitude and 85°13'03''to 85°13'53''E Longitude in Survey of India Topo Sheet No. 73G/1 & 5.The average ground elevation of the project area is 556 m above MSL. The depth to water level in the district ranges from 2.35 to 10.44 m below ground level during pre-monsoon period and from 1.08 to 7.89 m below ground level during post monsoon period. The annual fluctuation of water table around 2 m. No ground water will be extracted for industrial use. Further, the stage of groundwater development is reported to be 5.6% in study area and thereby this is designated as "safe area".

7.0 No wildlife sanctuary is located within distance of 10 km from the site. No national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. are reported in the core and buffer zone of the project. The Schedule-I species such as Indian monitor lizard, Indian Krait, Sloth Bear, Indian Python are found in the area. Site specific wildlife conservation plan has been prepared and presented before PCCF (WL) on 24.08.2017 which is under process.

8.0 The process of manufacturing will be steel through the Pelletisation /DRI as well as blast furnace route. There will be installation of Beneficiation plant (0.12 MTPA), Pelletisation Plant (3.24 MTPA), Coal Washery (0.92 MTPA), DRI plant (1.2 MTPA), Sinter plant (0.53 MTPA), Mini Blast furnace (0.69 MTPA), coke oven plant (0.14 MTPA), SMS (0.75 MTPA), Billet /slab/bloom caster (0.74 MTPA), Flat/ Round/ Wire Rod/ Structural Mill/ others (0.71 MTPA with revised configuration), Ferro alloy plant with Ferro Manganese production (54,000 TPA) or Silico Manganese production (43,200 TPA) or Ferro Chrome production (43,200 TPA) or Ferro Silicon production (19200 TPA), Captive Power Plant 198 MW (87 MW WHRB + 111 MW AFBC/CFBC based), Briquette plant for Ferro chrome (88,320 TPA) and Briquette Plant for ferro manganese (111,360 TPA). The major raw materials to be used for existing as well as expansion phase will be 5.75 million TPA iron ore, 1.17 million TPA coal. Of the various solid wastes generated in the plant, 100% recycling/ reusing will be done for sponge iron plant dust, char, sinter plant dust, blast furnace slag, blast furnace sludge & flue dust, SMS slag & flue dust, rolling mill rejects & mill scales and coke oven dust. Ash will be generated from captive power plant which will be disposed as per Fly Ash Notification.

9.0 The targeted production capacity of the crude steel from SMS is 0.75 million TPA. The iron ore for the plant would be procured from own mines located in Odisha/ Jharkhand. Limestone, quartzite, dolomite will be purchased from Raurkela and manganese ore will be sourced from own mines located in Odisha. The ore transportation will be done through rail followed by road.

10.0 The make-up water requirement for the expansion project is estimated to be 2385 m³/hr, all of which is fresh water and will be obtained from Karo river. The State Government has permitted withdrawal of 2,85,035 m³/month from river Karo. M/s Rungta Mines Limited has made an agreement on 22.11.2016 with Sundargarh Irrigation Division. Additional water requirement will be met from the same source, the application for 27672 cum/day and 19797 cum/day has been submitted to Principal Secretary, Water Resources Department, Government of Odisha.

11.0 The power requirement for the expansion project is estimated to be around 176.3 MW, all of which will be available from the captive power plant comprising of WHRB (87 MW) and AFBC/CFBC (111 MW).

12.0 Base line environmental monitoring has been carried from October to December 2016. Ambient Air Quality monitoring was carried out at 8 locations and the data submitted indicated that average PM_{10} level was found to range from 40.3 to 77.3 µg/m³, $PM_{2.5}$ was found to vary from 22.0 to 47.1 µg/m³, SO_2 from 6.5 to 17.0 µg/m³, NO_2 from 10.4 to 23.0 to µg/m³ and CO from 125 to 875 µg/m³. The results of the air quality prediction modelling study indicate that the maximum increase of GLC with respect to present 0.2 MTPA steel plant for PM_{10} , $PM_{2.5}$, SO_2 and NO_2 will be to the extent of 4.80 µg/m³, 2.78 µg/m³, 17.5 µg/m³ and 5.28µg/m³ respectively.

13.0 Ground water quality has been monitored in 8 locations in the study area and results indicate pH in range of 6.7 - 7.4, total hardness between 48 - 300 mg/l, Chloride between 4 - 27 mg/l, Fluoride between 0.02 - 0.407 mg/l and Heavy metal are well within the limits. Surface water samples have been monitored in 8 locations in the study area. pH was in range of 6.8 - 8.3, DO between 6.8 - 7.7 mg/l, BOD between 10 - 20 mg/l and COD between 20 - 47 mg/l

14.0 Noise level are in the range of 50.47 to 58.39 dB(A) for day time and 40.67 to 53.49 dB(A) for night time.

15.0 It has been reported that there are no people in the core zone of the project. No R&R plan involved. Land losers will be given preference in employment.

16.0 It has been reported that a total char 2,15,622 TPA will be generated due to the existing and expansion phase of the project. Total char will be used in power generation. 301058 TPA fly ash will be generated and will be utilized in brick manufacturing unit and NHAI/ State Highway construction project. 1,86,009 TPA BF Slag will be utilized in cement manufacturing. It has been envisaged that green belt/ afforestation will be developed in about 33% of the expansion area to attenuate the noise levels and trap the dust generated due to the project development activities.

17.0 It has been reported that for existing 0.2 MTPA plant the Consent to Operate from the Odisha State Pollution Control Board has been obtained vide letter no 3328/IND/con-4628 dated 09.03.2017 and is valid up to 31.03.2018

18.0 The Public hearing of the project was held on 19.07.2017 for expansion of integrated steel plant from 0.60 to 0.75 million TPA. The main issues raised during public hearing are employment opportunity, provision of health care & drinking water supply, pollution control measures, compensation to the land losers; etc.

19.0 The capital cost of the project is Rs 2825.68 crores and the capital cost for environmental protection measures is proposed as Rs. 33.61 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 5.06 crores per annum. The annual recurring cost towards the environmental protection measures is proposed as Rs. 7.31 Cr. per annum. The details of capital and recurring cost towards environment protection is as follows:

Capital cost (Rs. Lakh)	Recurring (Rs. Lakhs/ Annum)
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Particulars	As per existing EC for 0.6 MTPA	Additional for expansion to 0.75 MTPA	Total	As per existing EC for 0.6 MTPA	Additional for expansion to 0.75 MTPA	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)=(2)+(5)
1. Air Pollution Control	2295.5	603	2898.5	172.76	132.91	305.67
2. Water pollution control	55	45	100	4.22	7.39	11.61
3. Noise pollution control	5	5	10	0.57	1.27	1.84
4. Environmental monitoring & management	202.92*	24	226.92	6.32	13.12	19.44
5. Occupational Health	34.75	45	79.75	7.86	16.58	24.44
6. Green belt (Ha)	20	25.49	45.49	3.87	8.32	12.19
7. Others	In recurring	0	In recurring	97.61	33.71	131.32
Grand Total	2613.17	747.9	3361.07	293.20	213.29	506.49

20.0 The detailed CSR plan has been provided in the EMP in its chapter 8 page 8-9. The total employment generation from the existing and proposed project/ expansion is 2135 person. The Enterprise Social Commitment (ESC) budget earmarked is Rs. 70.5 crores, to be spent concurrent & commensurate to construction of expansion phase. The details of Enterprise Social Commitment (ESC) are as follows:

Sl. No.	Action plan	Budget					
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
1.a	Schools- repair/ renovation, provision of toilets and computer centres within radius of 5 km from plant (Villages Kamanda, Kula, Kusumdihi, Rengalbeda, Kalta, Nuagaon & Kashira)	50	100	100	300	100	650
b.	Schools- construction in Kamanda			200			200
с.	Construction of rooms/ building and provision of lab & other educational material for Science stream in Koira College	30					30

Sl. No.	Action plan	Budget					
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
2	Provision of study and sports material in schools within a radius of 5 km	7	5	5	5	8	30
3	Construction of Health Centre duly equipped with requisite equipments, appointment of Doctor, Pharmacist at Koira	0	250	250	150	0	650
4	Procurement of Ambulance fitted with necessary equipments for emergency Health Care and Refferal Services 1 per year in one panchayat	8	9	10	11	12	50
5	Construction of Village Roads / Culverts in Villages Kamanda, Kula, Kusumdihi, Rengalbeda, Nuagaon, Kalta & Kashira @Rs. 2 crores per village	100	200	300	550	250	1400
6	Construction of Common Meeting / Social congregation place for multi purposes in Villages amanda, Kula, Kusumdihi, Rengalbeda, Nuagaon, Kalta & Kashira @Rs. 1000/ sq. ft for 1000 sq.ft building	20	20	20	20	30	110
7	Construction of common Toilets with treatment plant in Villages Kamanda, Kula, Kusumdihi, Rengalbeda, Nuagaon, Kalta & Kashira @Rs. 35-40 lakhs/ village	45	50	40	70	75	280
8	Supply of Clean Drinking Water (construction of over head tank, borewell, handpump, pipe supply system including to schools) in Villages Kamanda (at Makarghat), Kula, Kusumdihi, Nuagaon, Rengalbeda, Kalta & Kashira	100	115	75	250	349	889
9	Construction of Parks, Village Playground in Villages Kamanda, Kula, Kusumdihi, Rengalbeda, Nuagaon, Kalta & Kashira@Rs. 2-5 lakhs/ village	5	8	10	0	12	35
10	Community Biogas plants with pipeline supply, pressurising system and appliances in households @16.4 lakhs/100 households in Villages Kamanda (1081 persons, year 1), Kula (753, year 2), Kusumdihi (858, year 3), Rengalbeda (628, year 4), Nuagaon (184, year 5), Kalta (2532, year 5) & Kashira (541, year 5)	164	123	140	103	530	1060
11	Construction and commissioning of ITI at Koira	0	0	500	500	0	1000

Sl. No.	Action plan	Budget					
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
12	Bathing ghat (Rs. 10 lakhs/ village for 7 villages)	0	10	40	10	10	70
13	Electrification in village	50	45	50	90	0	235
14	Bus for transportation	0	0	0	0	20	20
15	Road from NH to Kamanda (1.5 km @ Rs 2 cr/km)	150	150	0	0	0	300
16	Maintenance of road from Koira Chowk to Rengalbera (1 km)	10	10	10	10	10	50
	Total	739	1095	1750	2069	1406	7059

21.0 Green belt will be developed in 125.97 acres (50.97 ha) which is about 33% of the total area. A 10-m wide green belt, consisting of at least 3 tiers around boundary will be developed as green belt and green cover as per CPCB/MOEF&CC New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per ha. Till date (Sep 2017), the company has planted about 94,680 trees of Neem, Mango, Sal, Siris, Jamun, Champa, Saguan, Mahua, Peepal etc. and the survival rate is about 90%. The green belt is spread along the plant boundary, area along internal road sides as well as colony.

Year	Area (in acre)	Trees (Nos.)
Past (planted)	79.68	79680
2017-2018 (planted)	15.0	15000
2018-2019 (to be planted)	31.29	31290
Total	125.97	125970

22.0 It was reported that WHRB has been proposed to utilise coke oven flue gas for power generation. However, adoption of dry coke quenching shall be explored by Rungta Mines Limited; as of now for such small size coke plant, dry coke quenching is not feasible.

23.0 All stock piles will have a stable liner to avoid leaching of materials to ground water. The run off and leachates from the raw materials stack yard and solid waste disposal yard, respectively shall not be allowed to mix with storm water drainage but led to ETP where from they will be released after treatment.

24.0 Rain water harvesting structure of size 148 m x $47m \times 3.5 m$ and 26 m x 10 m x 2.8m have been constructed and a settling pit of size 37x13.2.5m has been constructed in NE direction of the plant to collect rain water of the entire catchment of the plant.

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

26.0 The project proponent has made detailed presentation along with Min Mec Consultancy Private Limited, New Delhi. Min Mec is preparing and presenting reports as per the High Court of Delhi orders in LPA 110/2014 and CM No.2175/2014 (stay) and W.P.(C) 3665/2016.

27.0 After detailed deliberations, the committee recommended for grant of environmental clearance with following specific conditions along with any other conditions prescribed by the ministry:

- i. Expansion operation shall be carried only after obtaining permission from the concerned authority for the additional water required for expansion proposal.
- ii. The PP shall submit action plan for 100% utilization of the fly ash generated from the plant within 3 months from the date of EC. No dumping of fly ash is allowed in the premises.
- iii. The PP shall obtain site specific wildlife conservation from the Chief Wild Life Warden and implemented in consultation with local Forest department
- iv. An amount of Rs. 70.5 crores earmarked for the Enterprise Social Commitment (ESC) shall be utilized for capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.
- v. The Filer bag house designed for 150% of the air flow rate. The filter bag shall be PTFE dipped PPS type.
- vi. The PP shall adhere to the standards notified by the ministry dated 7.9.2015 for the Captive power plant.
- vii. Waste water from the coke oven plant shall not be used for quenching.
- viii. Emergency Response Plan (ERP) based on Hazard Identification and Risk Assessment (HIRA) shall be prepared and submitted with 3 months form the date of issue of EC and same shall be implemented strictly.
- ix. The PP shall take water conservation measures.
- x. Plantation shall be carried covering stipulated area of 33% of total project within the 6 months from the date of issue of EC.
- xi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) shall be implemented.
- 22.29. Expansion of Integrated Steel Plant from 0.5 MTPA to 0.7 MTPA by M/s Rungta Mines Limited located at Village Chaliyama in Saraikela Ditrict Kharswan of Jharkhand. [Online Proposal No. IA/JH/IND/56904/2016; MoEF&CC File No. J-11011/305/2012-IA-II(I)] – Environmental Clearance – Further Consideration based on ADS

1.0 The proponent has made online application vide proposal no. **IA/JH/IND/56904/2016**, dated 25th May 2017 along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and is appraised at the Central Level.

2.0 The proposal for expansion of Integrated Steel Plant from 0.5 MTPA to 0.7 MTPA by **M/s Rungta Mines Limited** located at Village Chaliyama in SaraikelaDitrictKharswan of Jharkhand was initially received in the Ministry on 30th June 2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The proposal was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 9th meeting held on 27th to 29th July 2016 and recommended for grant of prescribing ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry had prescribed ToRs to the project on 18th October 2016 vide File No. J-11011/305/2012-IA-II(I).

3.0 M/s Rungta Mines Limited (RML) operating Sponge Iron Unit at Village Chaliyama in Saraikela District Kharswan of Jharkhand since 2007 comprising of 7 Nos. X 100 TPD DRI Kilns with No Objection Certificate (NoC) vide letter no. N-346 dated 25.05.2005 from Jharkhand State Pollution Control Board. Thereafter, RML obtained Environmental Clearance from Ministry vide J-11011/305/2012-IA-II(I) dated 4th November 2008 and further commissioned 2,00,000 TPA Steel Melting Plant and Captive Power Plant of 39 MW capacity. From total capacity of CPP, 14 MW CPP is utilizing the heat energy of the flue gas for steam generation by installing Waste Heat Recovery Boiler (WHRB) for each Kiln replacing the Heat Exchanger and 25 MW coal based AFBC which is under operation. Further, M/s RML was proposed for expansion of Integrated Steel plant from 0.2 MTPA to 0.5 MTPA and obtained prior environmental clearance on 1st April 2016. It was reported that some of the facilities which were envisaged in the EC were under construction and some are yet to start. The status of compliance of earlier environmental compliance was obtained from Regional Office Ranchi vide letter no. 103-498/ROR-2016/1375 dated 24.07.2017.

4.0	Now, i	it is agai	n proposed	d to	expand	the	Integrated	Steel	Plant	from	0.5 M	ГРА	to 0.7
MTPA	in the	existing	premises.	The	details	of the	he existing	plant	prop	osed	expansi	on is	given
below:													

S1.	Plant/ facility	Units	Present	Additional	Total
No.			sanctioned	Proposed	Capacity
			capacity as per	Capacity	
			EC dated		
			01.04.2016		
1	DRI plant	MTPA	0.450	0.17	0.62
2	Mini blast furnace	MTPA	0.383	0.075	0.458
3	Steel melting shop,	MTPA	0.50	0.193	0.693
	IF (15T x 8 nos.)				
	LRF (20T x 1 nos.,30 T X 2				
	no.)				
	EAF (30 T X 1 no.)				
4	Billets/ Slab/ Bloom caster	MTPA	0.30	0.379	0.679
5	Continuous Casting Machine		3x3 strand	1 strand	3X4 strand
6	Rolling Mill (TMT/ Flat/				

S1.	Plant/ facility	Units	Present	Additional	Total
No.			sanctioned	Proposed	Capacity
			capacity as per	Capacity	
			EC dated		
			01.04.2016		
	Round/ Wire Rod/ Structural				
	Mill/ others)				
а	Mill-1	MTPA	0.20	0.02	0.22
b	Mill-2	MTPA	0.30	0	0.22
			(Flat/ Round/	(adding facility	
			Structural)	for TMT/ wire	
				rod/ other)	
c	Mill-3	MTPA	0	0.22	0.22
7	Captive power plant	MW	119	39	158
а	WHR based CPP	MW	32	21	53
b	AFBC/CFBC based CPP	MW	87	18	105
8	Pelletisation Plant	MTPA	2 nos. X 1.2	0.24	2.64
9	Coal Washery	MTPA	1.26	No change	1.26
10	Oxygen Plant (1x30 T)	m ³ /annu	69,30,000	4,20,000	7,350,000
		m			
11	Lime Plant (1X90 T)	m ³ /annu	29,700	1,800	31,500
		m			
12	Vacuum Degassing	Tonnes	30	No change	30
13	Ferro Alloy Plant (9MVA+ 18 MVA)				
а	Ferro Manganese	MTPA	-	9 MVA=0.018	0.054
	OR			18 MVA=	
				0.036	
b	Silico Manganese	MTPA	-	9 MVA =	0.0432
	OR			0.0144	
				18 MVA=	
				0.0288	0.0422
c	Ferro Chrome	MTPA	-	9 MVA =	0.0432
	OR			0.0144	
				18 MVA=	
1				0.0288	0.0102
a	Ferro Silicon	MIPA	-	9 MVA = 0.0064	0.0192
				0.0004	
				18 MVA = 0.0128	
14	Priquette Plant			0.0128	
14	For ferro chrome OP	МТРА		0.080	0.088
	For ferro manganese		-	0.000	0.000
15	Sinter Diant (2X24 ag m)		-	0.112	0.112
13	Coke Oven plant (4 betterios)	MTDA	-	0.332	0.332
10	X 70,000 TPA)	WIIFA	0	0.20	0.20
S1.	Plant/ facility	Units	Present	Additional	Total
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No.			sanctioned	Proposed	Capacity
			capacity as per	Capacity	
			EC dated		
			01.04.2016		
17	Producer Gas Plant	NM3/hr	0	51,000	51,000

5.0 The total land required for the expansion project is 592.16 acres (239.643 ha), out of which 173.33 acres (70.149 ha) is government land and 418.83 acres (169.498 ha) is Private Land. No forestland is involved. The entire land has not been acquired for the project. 294.175 acres (119.05 ha) private land has been purchased. 63.14 acres (25.55 ha) Government land in Chaliyama and Bankasai village has been acquired. Private land of 124.655 acres ((50.447 ha) is under process of purchase and Government land 110.19 acres (44.593 ha) in Chaliyama, Banksai and Kuju village is pending in various Govt. offices. No river passes through the project area. It has been reported that natural water body exist around the project and modification/ diversion in the existing natural drainage pattern at any stage has not been proposed.

6.0 The topography of the area is flat and reported to lie between $22^{\circ}34'17"$ to $22^{\circ}35'49"$ N Latitude and $85^{\circ}53'07"$ to $85^{\circ}54'49"$ E Longitude in Survey of India topo sheet No. 73 F/14 15 73-J/2 &3, at an average ground elevation of 198 m above mean sea level. The ground water table reported during post monsoon season and 6 to 10 m below ground during pre-monsoon season. Further, the stage of groundwater development is reported to be 8.40 % in study area and thereby this is designated as safe area.

7.0 Dalma Wildlife Sanctuary located at a distance of 49 km in NE and Simpli Pal National Park is at 83 km in SSE from the site. No national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. are reported in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. List of flora and Fauna is provided through site Specific Conservation plan prepared and submitted to Divisional Forest Officer, Saraikela – Kharsawan who forwarded it to Conservator of Forest, Jamshedpur vide letter no. 1717 dated 12.07.2017.

8.0 The process of manufacturing will be steel through the pelletisation /DRI –IF-EAF as well as Blast Furnace route. There will be installation of Blast furnace (0.458 MTPA), expansion of sponge iron plant (from 0.45 to 0.62 MTPA), sinter plant (0.532 MTPA), coke oven plant (0.28 MTPA), SMS (0.50 to 0.693 MTPA), Billet caster (0.3 MTPA to 0.679 MTPA), CCM (3x3 strand to 3x4 strand), Rolling mill (0.50 to 0.66 MTPA with revised configuration), WHRB based CPP (32 to 53 MW), AFBC/CFBC based CPP (87 to 105 MW), producer gas (51000 NM3/hr) Oxygen plant (6930000 to 7350000 Nm3/annum), Lime plant (29700 to 31500 m3/annum), Pelletisation Plant (2.64 MTPA), Coal washery (1.26 MTPA), Ferro Alloys Plant (9MVA+ 18 MVA). The major raw materials to be used for existing as well as expansion phase will be 3.35 million TPA iron ore, 1.26 million TPA coal. Of the various solid wastes generated in the plant, 100% recycling/ reusing will be done for sponge iron plant dust, char, sinter plant dust, blast furnace slag, blast furnace sludge & flue dust, SMS slag & flue dust, rolling mill rejects & mill scales and coke oven dust. Ash will be generated from producer gas plant and captive power plant which will be disposed as per Fly Ash Notification.

9.0 The targeted production capacity of the crude steel from SMS is 0.70 million TPA. The iron ore for the plant would be procured from company's own mines located in Odisha/ Jharkhand. Limestone, quartzite, dolomite will be purchased from Raurkela and manganese ore will be sourced from own mines located in Odisha. The ore transportation will be done through rail followed by road.

10.0 The water requirement for the expansion project is estimated to be 1778 m³/hr and sourced from Kharkai River. The permission for drawl of water from Kharkai River for 5000 m³/day from River Kharkai and additional quantity 432 m³/day through an agreement made on 11.05.2016.

11.0 The power requirement for the expansion project is estimated to be around 143 MW and the total requirement including expansion will be met from the captive power plant comprising of WHRB (53 MW) and AFBC/CFBC (105 MW). Balance power will be sold through grid.

12.0 Baseline Eenvironmental studies were conducted during post monsoon season i.e. from October to December 2016. Ambient Air Quality monitoring has been carried out at 8 locations during October to December 2016 and the data submitted indicated: $PM_{10}(40.2 \text{ to } 83.4 \text{ }\mu\text{g/m}^3)$, $PM_{2.5}(22.1 \text{ to } 48.9 \text{ }\mu\text{g/m}^3)$, $SO_2(BDL \text{ to } 20.0 \text{ }\mu\text{g/m}^3)$ and $NO_x(BDL \text{ to } 29.8 \text{ }\mu\text{g/m}^3)$. The results of the modeling study indicated that the maximum increase of GLC for the proposed expansion project is 1.49 $\mu\text{g/m}^3$ with respect to PM10, 0.27 $\mu\text{g/m}^3$ for PM2.5 and 6.6 $\mu\text{g/m}^3$ for SO₂.

13.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.2-7.8;Total hardness: 160 - 464 mg/l; Chloride: 29-116 mg/l;Fluoride: 0.71- 1.86 mg/l; Heavy metal are well within the limits. Surface water samples have been monitored in 8 locations in the study area. pH: 7.4-8.1, DO: 6.8 to8.5 mg/l, BOD: 5-10 mg/l and COD: 10-23 mg/l.

14.0 Noise level are in the range of 50.7 dB(A) to 61.68 dB(A) for day time and 39.88 to 58.68 dB(A) for night time.

15.0 It has been reported that there are no people in the core zone of the project. No R&R is involved. No family is to be rehabilitated. Land losers will be given preference in employment.

16.0 It has been reported that a total of 1.2 million tons of waste will be generated due to the existing and expansion phase of the project, out of which 0.31 million tons will be reused used in sinter plant, 0.11 million tons per annum char shall be used in AFBC based power generation. 0.40 MTPA fly ash will be utilize in cement plant/ Brick manufacturing unit, 0.12 million tons per annum BF Slag will be utilized in cement manufacturing, 0.093 million tones ash will be utilized in low land filling, 0.094 MTPA reject shall be backfilled in mines and balance 0.073 million tons per annum will be land filled. It has been envisaged that an area of 195.41 acres (33%) will be developed as green belt in the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

17.0 It has been reported that the Consent to operate from the Jharkhand State Pollution Control Board has been obtained vide letter No. JSPCB/HO/RNC/CTO-1047382/2017/154 dated 20.02.2017 and consent is valid up to 31.03.2020.

18.0 The Public Hearing of the project was held on 14.06.2017 at the ground of Utkramit Madhya Vidyalya, Village Chaliyama under the Chairmanship of Shri Kunj Bihari Pandey

(Additional District Magistrate, District SaraikelaKharswan) for expansion of integrated steel plant from 0.50 to 0.70 million TPA. The issues raised during public hearing inter alia include employment opportunity; provision of health care & water supply facility; pollution control measures; compensation to the land losers; etc. An amount of 4 crores and recurring expenditure during the Steel production is Rs. 53.55 lakhs/year.

19.0 The capital cost of the project is Rs. 2189.97 Crores and the capital cost for environmental protection measures is proposed as Rs. 35.34 Cr.

20.0 The total employment generation from the existing and proposed project / expansion is 1830.

21.0 Green belt will be developed in 195.41 acres (79.08 ha) which is about 33 % of the total area. A 10-m wide green belt, consisting of at least 3 tiers around boundary will be developed as green belt and green cover as per CPCB/MOEF&CC guidelines. Local and native species will be planted with a density of 2500 trees per ha. Till date, the company has planted about 42,700 trees covering trees, shrubs, herbs etc. in and around the plant area. These are Haldu, Bull Oak, Shisham, Gulmohar, Jasmine, Mango, Karanj, Siris, Jamun, China Rose, etc.

22.0 The proponent has mentioned that there is no court case or litigation pending on the project or related activity.

23.0 The EIA consultant for the present proposal is M/s Min Mec Consultancy Private Limited. It was reported that the M/s Min Mec is preparing and presenting reports as per the High Court of Delhi orders in LPA 110/2014 and CM No.2175/2014 (stay) and W.P.(C) 3665/2016.

24.0 The committee observed several non-compliances in compliance of earlier EC conditions; encircling of Chailama village by proposed expansion; thoroughfare access to river from the Bankasite Village; air pollution; increase in traffic load; fly ash management; in adequate green belt development, etc.

25.0 After detailed deliberations, the committee sought following information for further consideration of the proposal

- i. The PP shall clarify in writing that there is no court case or litigation is pending against the project.
- ii. Certificate of closure of non-compliances of the earlier EC conditions from the Regional office of MoEFCC.
- iii. Site plan design for the proposed expansion should be reviewed and amended considering the likely impacts on the nearby villages, Chaliyama and Banksia villages.
- iv. Standard operating procedures for the Environmental Monitoring and regular calibration of monitoring equipment shall be included in the Environmental Management Plan.
- v. System for reporting of non-compliance of EC conditions to the Board of Directors as a part of Corporate Environmental Policy including periodicity, hierarchical system of

reporting of non-compliance to the board of directors; board resolution for environmental policy of the company.

- vi. Time bound action plan for fly ash utilisation.
- vii. Green belt should be completed within the current planting season. The green belt should have at least three rows trees along the boundaries of the plant.
- viii. PP shall use large capacity trucks (30Tonnes) for transportation of raw material and finished products.
 - ix. PP shall construct a dedicated road from National Highway to the Plant.
 - x. Existing approach road to the Plant premises shall be widened to double of its present width.
- xi. In addition to the existing gate, additional gates shall be provided. Further traffic should be arranged in such a way that the traffic in the village shall be normalised.
- xii. The natural drainage within plant premises should not be disturbed.
- xiii. All the points raised in the Public Hearing by the locals should be considered and addressed appropriately by the project proponent. The PP shall formulate an action plan giving details of activities, financial outlays and time lines for completion of each activity in the form of a project. The PP shall specifically respond to the request of the locals for providing access from Banksia village to the River.
- xiv. Reasons for high fluoride levels in the base line data.
- xv. Detailed plan of action for mitigating the impact of increased traffic density due to proposed expansion.
- xvi. The Environmental Policy with hierarchical system or Administrative order of the company to deal with the environmental issues and 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 shall be submitted within 3 months from the date of EC.

26.0 The project proponent has submitted reply to ADS on 24th August 2017. The reply *inter alia* includes:

- i. Confirmation that there is no litigation / court case pending against the project as on 13.09.2017;
- ii. The project was monitored by MOEF&CC (RO), Ranchi on 14.06.2017 and issued a list of non-compliances vide letter no. RML/CSP/MOEF(RO)/17-18/1397 dated 05.08.2017, immediate action and completed the inadequacies and the compliance of the same is submitted vide our letter no. RML/CSP/MOEF(RO)/17-18/1397 dated 05.08.2017 to Regional Office, MOEF&CC, Ranchi.

- iii. The layout map has been revised including addition of Brick plant within plant boundary; provision of dedicated truck parking within plant boundary; existing Main Gate -1, near Chaliyama village; One additional gate has been proposed from main road near Bankasai village i.e. Gate No. 2; and A third gate i.e. Gate no. 3 is proposed from main road near Kuju Village. These two gates will provide access from the main road.
- iv. Standard operating procedures (SOP) for the Online Monitoring Equipment and their calibration will be included the environment management plan of the unit.
- v. System for reporting of non-compliance of EC conditions to the Board of Directors as a part of Corporate Environmental Policy is there. The non-compliances are being reported to Board of Directors and corrective as well as preventive action are taken.
- vi. Fly ash is being generated from the CPP at present. As on date 3,12,378 tonnes of fly ash is stored within the plant premises due to lack of utilisation. Fly ash utilization plan is as follows:

Source	Quantity, T/ annum	Utilisation in	Quantity (T)	% utilised	Time schedule
1. Existing 0.2 MTPA steel plant (backlog)	312378*	Brick Manufacturing	15000	4.8%	Start : Dec 2017
(to be disposed in 2 years)		NHAI&SH road	297378	95.2%	It has been taken up and pursued with authorities of NHAI, SH and District Administration
Sub Total	312378		312378	100%	
2. Annual production (Existing 0.2 MTPA steel)	134000	Brick plant	15000	11.2%	2. Annual production (Existing 0.2 MTPA steel)
		NHAI/SH road	119000	88.8%	
Total			134000	100%	Total
3. Proposed 0.7 MTPA	404229	Brick plant	15000	3.71%	3. Proposed 0.7 MTPA

steel plant (inclusive of existing)				steel plant (inclusive of existing)
	NHAI/SH road	389220	96.29%	
Total		404229	100%	Total

- vii. Total plant area existing as well as proposed is 592.16 acres. The plantation has to be carried out in 33% of the area (195.41 acres)
- viii. The available capacity most commonly found in that area are between 14 to 18 wheelers which have a capacity of 21 to 27 T. Thus, maximum possible reduction in number of trucks can be 26%.
- ix. Based on the discussion during presentation, the construction of dedicated road from NH to Plant through Banksai Village is agreed to. Road shall be constructed within 12 months at a cost of Rs. 1.57 Crores
- x. Existing approach road to the plant premises will be doubled. The cost for construction of road from NH to Plant gate no. 1 will be Rs. 3 Cr. The width of road will be increased from 9 m to 14-16 m.
- xi. Confirmed that the natural drainage within plant premises shall not be obstructed. The rain water flows from the eastern side of plant to the Kharkai river in west. Along the internal roads of the plant, storm water drains will be provided for direct flow of the rainwater from east side of plant into Kharkhai in west. The roads will have culverts to ensure free flow. The eastern wall will have bottom holes for allowing rain water from higher elevation to pass through the plant.
- xii. All the points raised in the Public Hearing by the locals are addressed with financial time line for completion of each activity. Discussion has been held with the villagers and it has been agreed we will provide access over bridge from Bankasai village to Kharkai River. The village head has suggested to conduct Gram Sabha for official concurrence on the matter, to which the Company has agreed. Any further suggestions forthcoming during Gram Sabha shall be accordingly implemented.

27.0 The project proponent along with EIA consultant made detailed presentation on the reply to ADS. The committee satisfied with the reply made by PP except regarding action plan for utilization of the fly ash and non-compliances pointed out by Regional office of MoEFCC.

28.0 After detailed deliberation the committee, in agreement with the PP, deferred the proposal for submission of the action plan for utilization of the fly ash and closure of non-compliances pointed out by Regional office of MoEFCC.

22.30. Mini Blast Furnace (1 X 65 m³) and Sinter Palnt (1 X 12 m²) of **M/s Purulia Metal Casting Private Limited**, located at Village Bongabari, P.O. Vivekanandanagar, District Purulia,

West Bengal [Online proposal No. IA/WB/IND/65443/2016, MoEF&CC File No. J-11011/236/2016-IA.II(I)] – Further Consideration for Environmental Clearance based on reply to ADS

1.0 The proponent has made online application vide Proposal No. IA/WB/IND/65443/2016 on 15th June 2017 along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) under Category "A" EIA Notification.

2.0 The proposed project Mini Blast Furnace (65 m³) and Sinter Plant (12 m²) of M/s Purulia Metal Casting (P) Ltd. (Pig Iron Division) located in Village: Bongabari, P.O.: Vivekanandanagar, District: Purulia, State: West Bengal was initially received in the Ministry on 29.10.2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 13th meeting held on 23rd to 24th November 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry had prescribed ToRs to the project on 31st January, 2017 vide File No. J-11011/236/2016-IA.II (I).

3.0 The project of M/ Purulia Metal Casting (P) Ltd. (Pig Iron Division) located in Village: Bongabari, P.O.: Vivekanandanagar, District : Purulia, State : West Bengal is for setting up of a new Mini Blast Furnace (65 m³) and Sinter Plant (12 m²) for production of Pig Iron Production 59,310 tonnes per annum (TPA). The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Mini Blast Furnace	1	65 m ³	Molten Metal
			59,310 TPA
Sinter Plant	1	12 m^2	Iron Ore Sinter
			51,000 TPA
		Pig Iron Production	59,310 TPA

4.0 The total land required for the project is 5.0 Acres out of which 4.98 Acres been acquired and is a vacant land. No water body exists within the project site.

5.0 The topography of the area is slightly undulating and reported to lies between Latitude: $23^{\circ}21'1.72''$ N and Longitude: $86^{\circ}22'58.30''$ in Survey of India Topo Sheet No. 73 I/7, at an elevation of 233 m AMSL. The ground water table reported to ranges between 1.0 4 m to 4.03 m below the land surface during the post-monsoon season and 3.20 m to 7.14 m below the land surface during the pre-monsoon season.

6.0 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

7.0 The salient feature of the proposed project: Mini Blast Furnace & Sinter Plant is a material intensive process, employing various plant and equipment. To ensure an efficient and economically favourable operation, it is essential that the layout of the shop provide easy access to all operational areas and unimpeded movement of input materials and manufactured products.

The major production facilities are receiving and storage of essential raw materials, such as iron ore, lime stone, dolomite, coke breeze, fuel oil etc. and miscellaneous supplies. The Sinter Plant comprises of one (1) 12 m^2 Sinter machine, raw material handling system, burden preparation unit, mixer unit, screening & crushing station and transportation of sinter to Mini Blast Furnace. The Mini Blast Furnace consists of manufacturing facility of hot metal comprises of one (1) Mini Blast Furnace of 65 m³ capacity with blast heating system, blowing system, raw material handling system, slag granulation system, ladle preparation system, ladle transportation system, pig casting machine & auxiliary services with plant de-dusting units. This is supported by services and utilities for water and compressed air, electric power, fuel, ancillary facilities ablution block, drainage, roads, sewerage, de-dusting etc.

8.0 The targeted production capacity of the Iron Ore Sinter in Sinter Plant is 51,000 TPA; Molten Metal is 59,310 TPA in Mini Blast Furnace and Pig Iron is 59,310 TPA in Pig Casting Machine. The raw materials for Sinter Plant (Iron ore fines: 34,170 TPA, Mill scale : 6,630 TPA, Limestone : 7,524 TPA & Coke breeze : 3,762 TPA) and Mini Blast Furnace (Iron ore : 49,000 TPA, Coke : 38,550 TPA, Limestone : 6,525 TPA, Dolomite : 6,525 TPA and Quartz : 1,490 TPA) would be procured from different suppliers. The raw materials and finished product transportation will be done through road.

9.0 The water requirement of the project is estimated as 345 KLD (Mini Blast Furnace: 260 KLD; Sinter Plant : 80 KLD : Domestic : 5 KLD). The source of water will be from supply water, borewell & rain water harvesting.

10.0 The power requirement of the project is estimated as 2,050 kVA ; Mini Blast Furnace : 1,500 kVA ; Sinter Plant : 550 kVA. The source of power is Damodar Valley Corporation (DVC). There will be D.G. Sets (Mini Blast Furnace: 2 X 250 kVA ; Sinter Plant : 2 X 250 kVA).

11.0 Baseline Environmental Studies were conducted during Winter season i.e. from December 2016 to February 2017. Ambient air quality monitoring has been carried out at 8 locations during December to February and the data submitted indicated: Particulate matter (PM_{10}) ranges from 52 to 97 µg/m³; Particulate matter ($PM_{2.5}$) ranges from 19 to 51 µg/m³; Sulphur dioxide (SO₂) is 5 to 19 µg/m³; Oxides of Nitrogen (NO_x) are 13 to 38 µg/m³. The results of the modelling study indicate that the maximum increase of Ground Level Concentration (GLC) for the proposed project is 0.78 µg/m³ with respect to the PM_{10} ; and 2.39 µg/m³ with respect to SO₂ and 0.59 µg/m³ with respect to NO_x.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. p^{H} : 6.90 to 7.46; Total Hardness: 181 to 308 mg/L; Chlorides: 46 to 124 mg/L and Sulphate: 18 to 58 mg/L. Heavy metals are within the limits. Surface water samples were analysed from 8 locations. p^{H} : 7.50 to 7.89; DO: 5.0 to 6.2 mg/L; BOD: 4 to 7 mg/L and COD from 15 to 26 mg/L.

13.0 Noise levels are in the range of 55.9 to 76.2 dB(A) for daytime and 40.4 to 65.0 dB(A) for night time.

14.0 It has been reported that there are 2,11,121 people in the core zone of the project. No R&R is involved. It has been envisaged that no families to be rehabilitated.

15.0 The estimated solid waste generated from this proposed plant is Blast Furnace Slag (32,650 TPA) which will be used in cement manufacturing Industries and Dust from Air Pollution Control Systems (1,530 TPA) which will be recycled in the process.

16.0 The Public hearing of the project was held on 25.05.2017 in the premises existing Plant of Purulia Metal Casting (P) Limited located at Barakar Road, Village: Bongabari, P.O. Vivekanandanagar, Dist - Purulia, West Bengal under the Chairmanship of Additional District Magistrate (Development), Purulia, West Bengal for the proposed project of Pig Iron Production of 59,310 TPA by Mini Blast Furnace (65 m³) and Sinter Plant (12 m²). The issues raised during public hearing are employment; pollution; social infrastructure; etc. An amount of 65 Lakhs (2.5% of Project Cost: 25.50 Crores) has been earmarked for Enterprise Social Commitment (ESC) for five years.

17.0 The capital cost of the project is Rs 25.50 Crores and the capital cost for environmental protection measures is proposed as Rs 2.0 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 24.0 Lakhs. The detailed ESC plan has been envisaged in the Chapter 8 of EIA. The employment generation for the proposed project is 60 and additional unskilled labour 80 on contract basis.

18.0 Greenbelt will be developed in 1.65 acres which is about 33 % of the total land area (5.0 acres). 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 1,500 trees/Ha. Total no. of 1,005 saplings will be planted.

19.0 The proponent has mentioned that there is no court case or violation under EIA Notification, 2006 to the project or related activity.

20.0 The proposal was considered in the 20th meeting of Expert Appraisal Committee (Industry-I) [EAC (I)] held during $10^{th} - 12^{th}$ July 2017. After detailed deliberations, the committee desired following information

- i. Revised action plan for compliance of issues raised during the public hearing.
- ii. Revised Entrepreneur Social Commitment plan in the form of project for addressing the issues of public hearing. The fund allocated for ESC shall be used as CAPEX only.
- iii. Revised water balance diagram
- iv. Revised material balance diagram.
- v. Pollution control devises with capacities shall be included in Process flow diagram.
- vi. Plan for segregation of storm water and industrial processed water shall be submitted.
- vii. Blast Furnace Gas utilisation and associated calculations shall be submitted.
- viii. The details of source of water shall be clearly submitted
- ix. Bag house shall be designed for 150% of the rated flow and filter bags shall be PTFT dipped PPS type.
- x. Electrical Load list shall be submitted

- xi. Revised plot plan incorporating drainage (storm water and process, material storage, road, gate, assembly point, parking, plantation, firefighting system and plant)
- xii. SOx and NOx emission estimation for maximum load operations and mitigation measures
- xiii. Hazardous waste disposal protocol and agreement with RAMKY (as proposed by PP)
- xiv. Kitchen waste digester for the canteen waste and organic waste.

21.0 The project proponent has submitted reply to ADS on 19th July 2017. The reply to Ads inter alia include Revised action plan for compliance of issues raised during the public hearing; Revised Entrepreneur Social Commitment plan in the form of project for addressing the issues of public hearing. The fund allocated for ESC shall be used as CAPEX only; Revised water balance diagram; Revised material balance diagram; Pollution control devises with capacities included in Process flow diagram; Plan for segregation of storm water and industrial process water; Blast Furnace Gas utilisation and associated calculations; details of source of water; agreement for providing Bag house of 150% of the rated flow and filter bags shall be PTFE (Poly Tetra Fluoro Ethylene) dipped PPS (Poly Propylene Sulphide) type; Revised plot plan incorporating drainage (storm water and process, material storage, road, gate, assembly point, parking, plantation, firefighting system and plant); Kitchen waste digester for the canteen waste and organic waste; etc.

22.0 After detailed deliberations, the committee satisfied with the reply submitted by the PP. The committee recommended for grant of environmental clearance with following specific conditions along with any other conditions prescribed by the ministry:

- i. The project proponent shall address the public hearing issues by carving out projects and ESC funds shall be utilized for capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.
- ii. The Filer bag house shall be designed for 150% of the air flow rate. The filter bag shall be PTFE dipped PPS type.
- iii. As agreed by PP, Kitchen waste digester for the canteen waste and organic waste shall be provided
- iv. Plantation shall be carried covering stipulated area of 33% of total project. To achieve this target, the PP shall carryout the plantation in 5 m wide strip along the periphery of the plant.
- v. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.
- vi. No process effluent shall be discharged from the project. Cooling tower blowdown will be reutilized for slag granulation and dust suppression.

22.31: Standardization of EC conditions for Integrated Steel Plants and cement plants:

1.0 In order to standardize EC conditions for Integrated Steel Plants and cement plants the proposed specific and general conditions for Integrated Steel Plants and cement plants were placed before the committee. However due to constraint of the time the committee could not review all the conditions. Therefore, the task will be taken up in the next EAC meeting.

<u>ANNEXURE –I</u>

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 (Quantative) 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.
- 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. Enterprise Social Commitment (ESC)
 - i. To address the Public Hearing issues, 2.5% of the total project cost of (Rs.crores), amounting to Rs.crores, shall be earmarked by the project proponent, towards Enterprise Social Commitment (ESC). Distinct ESC projects shall be carved out based on the local public hearing issues. Project estimate shall be prepared based on PWD schedule of rates for each distinct Item and schedule for time bound action plan shall be prepared. These ESC projects as indicated by the project proponent shall be implemented along with the main project. Implementation of such program shall be ensured by constituting a Committee comprising of the project proponent, representatives of village Panchayat & District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office. No free distribution/donations and or free camps shall be included in the above ESC budget
- 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).

The following general points shall be noted:

- 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 summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

ANNEXURE-2

ADDITIONAL TORS FOR INTEGRATED STEEL PLANT

- 1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
- 2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
- 3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
- 4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
- 5. $PM(PM_{10} \text{ and } P_{2.5})$ 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

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. $PM(PM_{10} \text{ and } P_{2.5})$ 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.

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.

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.

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 technoenvironmental 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.

INDUCTION/ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE

- 1. Details of proposed layout clearly demarcating various units within the plant.
- 2. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
- 3. Details on design and manufacturing process for all the units.
- 4. 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.
- 5. Details on requirement of raw materials, its source and storage at the plant.
- 6. 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).
- 7. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
- 8. Details on toxic content (TCLP), composition and end use of chrome slag. Details on the recovery of the Ferro chrome from the slag and its proper disposal.

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).

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- 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

ANNEXURE-3

Air Pollution

Plant /Unit	Pollutant s	Qty generate d	Method used to Control/ and specifications/attac h Separate Sheet to furnish Details	Number of units planned & Capacity	Budge t	Estimated Post Control Qty of Pollutant	
						Per Unit	Per Dav
						Oint	Duy

LIST OF PARTICIPANTS OF EAC (I) IN 22nd MEETING OF EAC (INDUSTRY-I) HELD ON 11th – 13rd September 2017

S. No	Name and Address	Position	Attendance			Signature
			10 th	11 th	12 th	. 0
1	Dr.Chhavi Nath Pandey, IFS(Retired)	Chairman	А	Р	Р	
Memb	ers					
2.	Dr. B.P. Thapliyal, Director Central Pulp and Paper Research Institute	Member	Р	А	A	
3.	Director, Central Leather Research Institute	Member	A	А	A	
4.	Dr.Siddarth Singh, Representative of Indian Meteorological Department	Member	А	А	А	
5.	Representative of Central Ground Water Board	Member	А	А	A	
6.	Dr. G. Bhaskar Raju	Member	Р	Р	Р	
7.	Prof. Naresh Chandra Pant	Member	А	А	A	
8.	Dr. Jagdish Kishwan, IFS(Retired)	Member	Р	Р	Р	
9.	Dr.G.V.Subrahmanyam	Member	Р	Р	Р	
10.	Prof. Arun Pandey	Member	Р	А	Р	
11.	Shri Santosh Raghunath Gondhalekar	Member	А	Р	Р	
12.	Shri Ashok Upadhyay	Member	Р	Р	Р	
13	Mr. R.P. Sharma	Member	Р	Р	Р	
14.	Shri Sharath Kumar Pallerla, Scientist 'F' / Director, MoEF&CC	Member Secretary	Р	Р	Р	
15.	Shri RajasekharRatti, Scientist 'C', MoEF&CC	Dy. Director	Р	Р	Р	
16	Dr S. Misra Central Pulp and Paper Research Institute	Representat ive of CPPRI	Р	A	A	
