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

SUMMARY RECORD OF THE ELEVENTH(11th) MEETING OF RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE HELD DURING 24-25TH SEPTEMBER, 2019 FOR ENVIRONMENTAL APPRAISAL OF INDUSTRY-I SECTOR PROJECTS CONSTITUTED UNDER THE PROVISIONS OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA) NOTIFICATION, 2006.

The eleventh meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Industry-1 Sector as per the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-1 Sector Projects was held during 24-25th September, 2019 in the Ministry of Environment, Forest, and Climate Change. The list of participants is annexed.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim. The minutes of 10th meeting held during 22-23rd August, 2019 were confirmed by the EAC and already uploaded on PARIVESH portal. However, the following corrections have been made on the uploaded minutes with respect to item no. 10.2 and 10.4 and 10.10 as below:

Sl.No.	For	Read as
1	**Agenda Item No. 10.2** Recommendation of the committee: Specific conditions (i): Emissions from bag filter should be below 10mg/Nm^3	Emissions from bag filter should be below 20mg/Nm^3
2	**Agenda Item No.10.4** **At para 10.4.6** In the meanwhile, the Ministry prescribed ToRs vide letter dated 06.03.2019 and consolidated proposal for modernization and expansion of the project which involves all the units (3 blast furnaces, coke plant and other facilities) considering recommendation of the EAC (Industry-1) meeting held during 9th -11th January, 2018.	In the meanwhile, the Ministry prescribed ToRs vide letter dated 06.03.2019 and consolidated proposal for modernization and expansion of the project which involves all the units (3 blast furnaces, coke plant and other facilities) considering recommendation of the EAC (Industry-1) meeting held during **9th-11th January, 2019**.
3	**Agenda Item No. 10.10.** **Para 10.10.34:** The Public hearing for the proposed project was held on 4th January 2019, at 11:00 A.M at Ground of High School, Village Khajuri, Tehsil Balodabazar, District Balodabazar-Bhatapara, Chhattisgarh under the chairmanship of Additional Collector (ADM cadre).The issues raised during public hearing are Pollution, Socio economic activities & employment etc.	The Public Hearing of M/s Hindupur Steel & Alloys Pvt Ltd, Plot No.29, APIIC, Gollapuram village, Hindupuram Mandal, Anantapuram District, Andhra Pradesh was conducted near the project site, i.e., at APIIC Office premises, Besides State Bank of India, Growth Centre, Thumakunta village, Hindupuram (M), Anantapuram District, Andhra Pradesh on 17.05.2018 at 11.00 AM under Chairmanship of the District Revenue Officer & Addl.District Magistrate, Anantapuram District.

24th September, 2019

11.1 Expansion of Ferro Alloys plant (40,500 to 78,700 TPA) by additional SAFs(3 x 12.5 MVA) and to produce various ferro-alloys (i.e., Fe Moly, Fe Titanium, Fe Vanadium, Fe Boron, McFeMn, LcFeMn, Fe Niobium, Cored wire, FeSiZr) of **M/s. Oswal Smelters (P) Ltd.,** located at Gollapuram, Hindupur Mandal, Ananthapur District, **Andhra Pradesh** - [Online Proposal No. IA/AP/IND/95777/2018, File No. J-11011/643/2008-IA-II(I)] – **Environment Clearance** regarding**.**

11.1.1 M/s Oswal Smelters (P) Ltd has made online application vide proposal no. IA/AP/IND/95777/2018 dated 14th August, 2019 in the prescribed Form -2 along with copies of EIA/EMP report and other documents seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

11.1.2 The project proposal of M/s Oswal Smelters (P) Ltd., was initially received in the Ministry on 28th March 2018 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 28th meeting held during March 12th to 14th, 2018andrecommended for prescribing ToRs to the project for undertaking detailed EIA study for obtaining EC. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 28th March 2018vide Lr. No. F. No. J-11011/643/2008- IA-11(1).

Details submitted by the project proponent

11.1.3 M/s Oswal Smelters (P) Ltd proposed to set up a new 3x12.5 MVA Submerged Arc Furnace (SAF) for production of Fe moly, Fe Titanium, Fe Vanadium, Fe Boron, McFeMn, LcFeMn, Fe Niobium, Cored Wire, FeSiZr within the existing plant premises located at village and tehsil Gollapuram, Ananthapuram District, Andhra Pradesh State. The existing project was accorded EC vide Lr.No J-11011/643/2008-IA II (I) dated 13.05.2010. The existing and proposed production details are as given below:

Sl. No.	Particular	Existing (TPA)	Proposed (TPA)	Total (TPA)
1	Ferro Manganese or	18500	43200	61700
2	SilicoManganeseor	14000	36000	50000
3	Ferro Silicon	8000	25200	33200
	By Thermic Process			
4	Fe Moly	-	1200	1200
5	Fe Titanium	-	1200	1200
6	Fe Vanadium	-	1200	1200
7	Fe Boron	-	1200	1200
8	McFeMn	-	3000	3000
9	LcFeMn	-	3000	3000
10	Fe Neobium	-	1200	1200
11	Cored Wire	-	4000	4000
12	FeSiZr	-	1000	1000

(Note: The maximum production will not be exceed quantity78,700TPA)

11.1.4 The Status of compliance of earlier EC was obtained from Regional Office, Bangalore vide Lr.No.EP/12.1/2010-11/9/AP/1136 dated 19.07.2018. There are no non-compliances reported by Regional officer.

11.1.5 The total land required for the project is 14.45 ha. The entire land is Government Land. No forestland is involved. The entire land has been acquired for the project. There is no River passes through the project area. It has been reported that no water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

11.1.6 The topography of the area is flat and reported to lies between 13°44'6.80"N to 13°44'22.12"NLatitude and 77°30'54.28"E to 77°31'15.48"E Longitude in Survey of India topo sheet No. 57G/9, at an elevation of 636m AMSL.

11.1.7 The ground water table reported torangesbetween30 to 60m below the land surface during the post-monsoon season and 40 to 90m below the land surface during the pre-monsoon season. The area designated as critically exploited area.

11.1.8 No National park /Wild life sanctuary/ tiger reserve/etc. are reported to be located within the study area of the project. The area also does not report to form corridor for Schedule-I fauna. Presence of Schedule-I fauna in the study area is not reported.

11.1.9 The targeted production capacity of the proposed plant as mentioned above are Ferro Manganese – 61700TPA, Silico Manganese – 50000TPA, Ferro Silicon – 33200TPA. The ore for the plant would be procured from open market. The ore transportation will be done through Road.

11.1.10 The water requirement of the project is estimated as 254 KLD, out of which 200KLD of fresh water requirement will be obtained from the Andhra Pradesh Industrial Infrastructure Corporation Ltd. (APIIC) and the remaining requirement of 54KLD will be met from the ground water. The permission for drawl of ground water was obtained from Ground water department Govt. of AP vide Lr. No.368/FR/T1/2008 date 20.08.2008.

11.1.11 The power requirement of the project is estimated as 49.5MVA which will be met from the Eastern Power Distribution Company of Andhra Pradesh Limited.

11.1.12 Baseline Environmental Studies were conducted during Summer Season i.e., from March to May, 2018. Ambient air quality monitoring has been carried out at 8 locations during March to May and the data submitted indicated: PM_{10} (56.4 µg/m^3 to 70.8 µg/m^3), $PM_{2.5}$ (23.6 µg/m^3 to 31.6 µg/m^3), SO_2 (14.3 µg/m^3 to 18.9 µg/m^3) and NOx (18.4 µg/m^3 to 23.9 µg/m^3). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 23.9 µg/m^3 with respect to the PM_{10} 70.8 µg/m^3 with respect to the NO_x 4.87 µg/m^3.

11.1.13 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.05 to 7.85, Total Hardness: 134.77 to 190.0 mg/l, Chlorides: 70.48 to 165.12 mg/l, Fluoride: 0.15 to 0.34 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 2 locations. pH: 7.75 to 7.62; DO: 5.7 to 5.8mg/l and BOD: 4.1mg/l. COD from 8 to16 mg/l.

11.1.14 Noise levels are in the range of 51.4 to 64.6dB (A) for day time and 41.0 to 52.8

dB(A) for nighttime.

11.1.15 No/R&R is involved.

11.1.16 It has been reported that maximum169.24 TPA of waste will be generated in the process. Details of slag management are given in below table. Bag filter dust of 12 TPD shall be reused in the process.

Sl.No.	Particular	Existing (TPD)	Proposed (TPD)	Total (TPD)	Management
1	Ferro Manganese Slag	19.6	45.85	65.45	Used for manufacturing of Silico Manganese
2	Silico Manganese Slag	19.125	49.05	68.175	Sold to Brick Manufactures and filling the low lying areas
3	Ferro Silicon Slag	1.936	6.08	8.016	Used for cast iron Foundries/Steel rolling mills.
4	Fe Moly Slag	-	1.44	1.44	Used as aggregates/sold to brick manufactures
5	Fe Titanium Slag	-	1.44	1.44	Used as aggregates/sold to brick manufactures/Cement Industry
6	Fe Vanadium Slag	-	1.44	1.44	Used as aggregates/sold to brick manufactures/Cement Industry
7	Fe Boron Slag	-	1.44	1.44	Used as aggregates/sold to brick manufactures/Cement Industry
8	McFeMn Slag	-	3.6	3.6	Used for H.C.Ferro manganese alloys manufacturer.
9	LcFeMn Slag	-	3.6	3.6	Used for M.C.Ferro manganese alloys manufacturer.
10	Fe Neobium Slag	-	1.44	1.44	Used as aggregates/sold to brick manufactures/Cement Industry
11	Cored Wire	-	0	0	No slag Generated.
12	FeSiZr Slag	-	1.2	1.2	Used as aggregates/sold to brick manufactures/Cement Industry

11.1.17 It has been reported that the Consent to Establish/Consent to Operate from the Andhra Pradesh State Pollution Control Board / Pollution Control Committee

obtained vide Lr. NoAPPCB/KNL/ATP/142/CFO/HO/2016 dated 26.04.2016 and consent is valid up to31.12.2020

11.1.18 The Public Hearing of the project was held on 31.10.2018 at APIIC office premises, beside State Bank of India, Growth center under the chairmanship of Sri. S. Dilli Rao, IAS for setting up of (3X12.5 MVA) Sub-merged Arc furnace to produce 78,700TPA of ferro alloys i.e, Fe moly, Fe Titanium, Fe Vanadium, FeBoran, in the existing plant at Gollapuram(V), Hindupur(M), Anantapur District, Andhra Pradesh.

11.1.19 An amount of 60Lakhs (1.09%of Project cost) has been earmarked for Corporate Environmental Responsibility based on public hearing issues.

11.1.20 The capital cost of the project is Rs 55 Cr and the capital cost for environmental protection measures is proposed as Rs 7.05 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 40.75Lakhs. The employment generation from the proposed project /expansion is 300.

11.1.21 Greenbelt will be developed in 5.22 Ha which is about 33% of the total acquired area. A100m wide greenbelt, consisting of at least 3tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 1500 trees per hectare. Total no. of 6292 saplings will be planted and nurtured in 5.22 Hectares in one year.

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

Observations of the Committee

11.1.23 There are two process involved in manufacturing of ferro alloys, i.e., through submerged arc furnace and thermic process.

11.1.24 The slag generated in the process is toxic in nature and it cannot be used in the brick manufacturing. After grinding, it can be reused in the process to the extent possible and unusable part shall be disposed of in accordance with the SPCB norms.

Recommendations of the Committee

11.1.25 After detailed deliberations, the committee recommended the proposal for Environmental Clearance with the following specific conditions along with sector specific general conditions:

i. Local employment shall be in accordance with the prevailing State Government norms.

ii. Provision for drinking water and health checkup facility to the local villagers shall be made available as per the commitments made during the public hearing.

iii. Green belt development shall be carried out in a total area of 17 acres (12+5) in and around the project site.

iv. Rain water harvesting shall be carried out in and outside the project site more than the 100% water drawl for the project.

v. CER activities shall be completed in two years.

vi. Particulate emission from the stacks shall be limited to less than 30 mg/Nm^3.

vii. 100% utilization of slag shall be adopted. Un-utilized slag if any, shall be disposed of to the TSDF and no slag is allowed to be dumped at the plant site.

11.2 Proposed expansion of paper production from 300 TPD to 600 TPD along with CPP of 14 MW by **M/s. Satia Industries Limited** located at Village Rupana, District **Muktsar, Punjab** [Online Proposal No. IA/PB/IND/61921/2015, File No. J-11011/196/2014-IAII(I)] – **Environment Clearance** - regarding.

11.2.1 M/s. Satia Industries Ltd has made online application vide proposal no. IA/PB/IND/61921/2015 dated 9th September 2019 in prescribed Form-2 along with copies of EIA/EMP report and other documents 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) Pulp and Paper Industry under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

Details submitted by the project proponent

11.2.2 The Proposal of M/s Satia Industries Limited located in Village: Rupana, District: Sri Muktsar Sahib, State: Punjab was initially received in the Ministry on 28th December 2018 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 4**th** meeting held on 20th February 2019 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 vide Lr. No. IA-J-11011/196/2014-IA.II(I) dated 16th April 2019.

11.2.3 The existing project was accorded environmental clearance vide lr.no. J-11011/196/2014-IA-II (I) dated 29th May, 2018. The expansion of M/s Satia Industries Ltd is proposed in the existing plant premises. The proposed expansion is as below:

Sl. No	Product	Capacity			Remarks
		Existing	Proposed	Total	
1.	Writing and Printing Paper (TPD)	300	300	600	**Expansion**
2.	Co-generation Captive Power Plant (MW)	30	14	44	

11.2.4 The Status of compliance of earlier EC was obtained from Regional Office, Chandigarh vide Lr. No. 5-309/2011-RO(NZ)/123-125, dated 05/08/2019. There are non compliances reported by Regional officer.

11.2.5 The total land required for the project is 18.4341 ha, out of which 3.8568 ha. is an agricultural land. No /Forestland involved. The entire land has been acquired for the project. It has been reported that Arniwala canal water body exists around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

11.2.6 The topography of the area is flat terrain and reported to lies between 30°25'20.77"N to 30°25'07.20"N Latitude and 74°31'02.53"E to 74°31'19.67"E Longitude in Survey of India toposheet No.H43I6/H43I7 and H43I10/H43I11, at an elevation of 31.4 m AMSL. The ground water table reported to ranges between 0.06-7.78 m below the land surface during the post-monsoon season and 0.67-7.43

m below the land surface during the pre-monsoon season. There will be no ground water extraction.

11.2.7 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 for corridor for Schedule-I fauna.

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

S. No.	Type	Source	Quantity, TPD			Disposal
			Existing	Proposed	Total	
1.	ETP Sludge	ETP	10.00	7.00	**17.00**	Disposed to local cardboard manufacturers.
2.	Lime Sludge	Causticizing	173.00	54.35	**227.35**	Calcination in Cement Plants
3.	Fly Ash	Boiler House	63.75	51.25	**115.00**	For brick manufacturing & filling of the low lying areas

11.2.9 The targeted production capacity of the writing & printing paper is 600 TPD and Power generation through CPP is 44 MW. The Raw material for the plant would be procured from local area. The raw material transportation will be done through Road.

S.No	Name of Raw Materials	Existing (TPD)	Proposed (TPD)	Total (TPD)
1.	Imp. Waste Paper	0.000	35.300	35.300
2	Imp. Wood Pulp	0.000	32.600	32.600
3	Paper Additives	7.579	4.421	12.000
4	Soap Stone	65.650	52.350	118.000
5	Wheat Straw, Sarkanda, Bagasse	533.000	105.000	638.000
6	Wood Chips	150.000	205.600	355.600
7	Caustic	130.450	52.350	182.800
8	Liquid Oxygen	6.120	3.56	9.680
9	Chlorine Dioxide	3.400	4.600	8.000
10	Oxy Bleach Booster	000	4.400	4.40
11	Lime	95.200	32.200	127.400
	Total	991.4	528.8	1520.3

11.2.10 The fuel is biomass and black liquor. The details are as below:

S. No.	Fuel	Quantity, TPD			Source
		Existing	Proposed	Total	
1.	Rice Husk	500	400	900	Local Suppliers

2.	Black Liquor	400	300	700	In-House

11.2.11 The water requirement of the project is estimated as 32,235 m^3/day, Out of which 21,115 m^3/day of fresh water requirement will be obtained from the Arniwala Canal and the remaining requirement of 11,120 m^3/day will be met from the Recycling Process. The permission for drawl of surface water has been obtained vide Lr. No. 2018/Canals (7)10712 and 5637/57-R date 07/09/2018.

11.2.12 The power requirement of the project is estimated as 32 MW, which will be met from the in-house CPP.

11.2.13 Baseline Environmental Studies were conducted during winter season i.e., from 1st December 2018 to 28th February 2019. Ambient air quality monitoring has been carried out at 8 locations during 1st December 2018 to 28th February 2019 and the data submitted indicated: PM10 (62.5 μg/$m^3$to 88.6 μg/m^3); PM2.5 (32.8 to 48.3 μg/m^3); SO_2 (9.6 to 16.7 μg/m^3) and NOx (14.2 to 21.5 μg/m^3). The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 0.46 μg/m^3 with respect to the PM10; 0.010 μg/m^3 with respect to SO_2; 0.27 μg/m^3 with respect to the NOx.

11.2.14 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.04 to 7.94; Total Hardness: 112 to 1200 mg/l; Chlorides: 40 to 875 mg/l; Fluoride: 0.4 to 0.7 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 3 locations. pH: 7.23 to 7.75 ; DO: 4.9 to 5.1 mg/l ; BOD: <4 to 6 mg/l; COD from 10 to 16 mg/l.

11.2.15 Noise levels are in the range of 49.8 to 77.4 dB (A) for daytime and 42.8 to 72.1 dB (A) for nighttime.

11.2.16 No R&R is involved as the expansion shall be in the existing premises.

11.2.17 It has been reported that a total of 359.35 TPD of waste will be generated due to the project, out of which 115.0 TPD fly ash will be used in brick manufacturing & filling of the low lying areas, 227.35 TPD lime sludge will be used in calcination in cement plants. 17 TPD of ETP sludge will be disposed to local cardboard manufacturers.

11.2.18 It has been envisaged that an area of 6.0826 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.

11.2.19 It has been reported that the Consent to Establish/Consent to Operate from the Punjab State Pollution Control Board obtained vide No. CTOA/Fresh/MKS/2018/7687794 and CTOW/Fresh/MKS/2018/7687650 dated 09/07/2018 which is valid up to 31/03/2023.

11.2.20 The Public hearing of the project was held on 04/07/2019 at the main gate of the industry located in the revenue estate of village Rupana under the chairmanship of Dr. Richa Sharma (IAS), Additional Deputy Commissioner for enhancement of production capacity of writing & printing paper from 300 to 600 TPD and Co-Gen Power Plant (30 MW to 44 MW), under the category 5(i), "A". The issues raised during public hearing are such as Water Usage, Employment Generation etc. It has been reported that all the queries have been replied. An amount of 4.00 crore (1.00 and 0.75 % of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues.

11.2.21 The capital cost of the project is Rs. 500 Crores and the capital cost for environmental protection measures is proposed as Rs. 20.50 crore. The annual recurring cost towards the environmental protection measures is proposed as Rs. 1.25 crore/annum. The detailed CSR plan has been provided in the EMP in its page No. 210 to 211. The employment generation from the proposed project / expansion is 500.

11.2.22 Greenbelt will be developed in 6.0826 Ha which is about 33% of the total acquired area. A 100 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Additional 4067 saplings will be planted to develop greenbelt in 2.4403 hectares in 5 years.

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

Observations of the Committee

11.2.24 Closure of non-compliances reported by Regional Office, MoEF&CC Chandigarh is pending. Project Proponent informed that the action taken report with respect to non-compliances was submitted to the Regional Office.

11.2.25 CER activities shall be implemented in three years.

Recommendations of the Committee

11.2.26 After detailed deliberations, the committee deferred the proposal in view of pending Closure report to the EC compliance from Regional Office, MoEF&CC.

11.3 Expansion of existing 140 TPD writing & printing paper by installation of 300 TPD hard wood fibre line & 400 TPD duplex board machine, 16 MW co-generation power plant and 700 TDS Conventional Chemical Recovery Plant along with 12 MW power Generation of **M/s.Naini Paper Limited** located at Railway Station Road, Kashipur, Udham Singh Nagar, **Uttarakhand**- [Online Proposal No. IA/UK/IND/23458/2014, File No. J-11011/310/2018-IAII(I)] **– Environment Clearance -** regarding**.**

11.3.1 M/s. Naini Paper Ltd has made online application vide proposal no. IA/UK/IND/23458/2014dated 10thSeptember 2019in prescribed Form-2 along with copies of EIA/EMP report and other documents 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) Pulp and Paper Industry under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

11.3.2 The expansion proposal of M/s Naini Papers Limited located in 7thK.M. Stone, Kashipur Moradabad Road, Tehsil Jaspur, District Udham Singh Nagar, StateUttarakhand was initially received in the Ministry on 1stOctober, 2018 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 1stmeetingheld on 26th November, 2018 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 on11th December, 2018 vide Lr. No. IA-J-11011/310/2018-IA II (I).

11.3.3 Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 10th September, 2019 vide Online Application No. IA/UK/IND/23458/2014.

11.3.4 The project of M/s. Naini Papers Limited located in 7th K.M. Stone, Kashipur Moradabad Road, Tehsil Jaspur, District Udham Singh Nagar, State Uttarakhand is for expansion of existing 140 TPD Writing & Printing Paper by installation of 300 TPD Hard Wood Fibre Line & 400 TPD Duplex Board Machine, 16 MW Co-Generation Power Plant and 700 TDS/day (Total Dry Solids/day of Black Liquor) Conventional Chemical Recovery Plant along with 12 MW Power Generation. The existing project was accorded environmental clearance vide lr.no J-11011/360/2008-IA-II (I) dated 22nd April, 2016.

11.3.5 The Status of compliance of earlier EC was obtained from Regional Office, Dehradun and site visit was conducted on 11thJuly, 2018. Latest Certified EC Compliance Report has also been obtained and site visit was conducted on 30th July, 2019. There are no non-compliances reported by Regional officer. The proposed capacity for different products for site area as below:

Name of Unit	**Existing capacity**	**Proposed additional capacity**	**Total capacity after expansion**	**Products**
Writing and printing grade of paper	140 TPD	-	140 TPD	Writing and printing paper
Hard Wood Fibre line	Nil	300 TPD	300 TPD	Pulp
Duplex Board Machine	Nil	400 TPD	400 TPD	Multi-plyboard
Co-generation Plant	Nil	16 MW	16 MW	Power
*Non-Conventional recovery Plant	330 Tonnes dry solids/day	-	330 Tonnes dry solids/day	Soda ash
Conventional chemical recovery plant with lime kiln	Nil	700 Tonnes Dry solids/day with 12 MW power generation	700 TonnesDry Solids/day with 12 MW power generation	Caustic and steam

11.3.6 The total land required for the project is 16.19 ha which is already an industrial land. No forestland is involved. It has been reported that no water body existing the project area and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

11.3.7 The topography of the area is flat and reported to lie between 29°11'50.72" to 29°12'13.35"N Latitude and 78°53'29.88" to 78°53'49.42"E Longitude in Survey of

India topo sheet No. 53K16 and 53K15, at an elevation of 230 m AMSL. The ground water table reported to range between 0.8 to 17.9 m below the land surface during the post-monsoon season and 1.9 to 19.3 m below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that Kashipur block is categorized as critical zone with stage of groundwater development as 87.09%.

11.3.8 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 for corridor of Schedule-I fauna.

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

S. No.	Agro based	Waste generated	Treatment facility
1.	Raw material preparation (Bagasse/wheat straw) De pithing/wet washing	Waste water	Effluent treatment plant
		Discarded pith/straw waste	Burnt in boiler
2.	Digester with caustic cooking	-	-
3.	Washing and screening	Black liquor	Conventional Chemical recovery process
4.	Bleaching (ODL, CLO2, NaOH, Hypo, H2O2)	Waste water	Effluent Treatment Plant
5.	Stock preparation and addition of purchased pulp	-	-
6.	Paper Machine	Waste water	Effluent Treatment Plant

For Hard wood fibre line and duplex board machine

S. No.	Wood based	Waste generated	Treatment facility
1.	Raw material preparation (wood/wood chips)	Waste water	Effluent treatment plant
		Dust, sand	Burnt in boiler
2.	Digester with caustic cooking	-	-
3.	Washing and screening	Black liquor, sands and debris	Conventional Chemical recovery process,
4.	Bleaching (ODL, CLO2, NaOH, O2, Hypo, H2O2, H2SO4,SO2)	Solids, Waste water	Effluent Treatment Plant
5.	Stock preparation and addition of purchased pulp	-	-
6.	Four wire part with coater and size press in duplex board machine	-	-
7.	Winder and sheeter	Reject	Recycle

11.3.10 The targeted production capacity is 540 TPD (140 TPD existing and 400 TPD proposed), 16 MW co-generation power plant and 700 TDS/day conventional

chemical recovery plant along with 12 MW power generation in existing plant. The raw material and fuel requirement is as given below.

Raw material requirement:

S. No.	Particulars	Requirement			Source	Mode of Transport	Distance	Storage Facility	Storage capacity
		Existing	Additional	Total after Expansion					
1.	Bagasse/ Wheat Straw (OD de-pithed/dusted) (TPD)	253.7	-	253.7	Local Farmers / Suppliers	By Trucks	100 km	Open yard	5 acres
2.	Imp. Soft wood pulp (TPD)	4.7	-	4.7	Imported from USA, Netherlands, Australia	By trucks from ports	From Mumbai	Covered sheds	2000 ton
3.	Soap stone powder (TPD)	22.4	-	22.4	Rajasthan	By trucks	600 km	Covered shed	100 ton
4.	Wood /woodchips (Yield 45%) (BDMT)	-	717	717	Local Suppliers	By trucks	Within 200 kms	Yard	0.5 Hectare
5.	Coating Chemical (MT)	-	40	40	Vendor	By trucks	Within 500 km	Covered shed	500 MT
4.	Purchased Pulp (MT)	-	34	34	Import	By sea & Trucks	From Mumbai	Shed	6000 MT
5.	Caustic Lye (MT)or Makeup salt	37 -	10 or 16	47 or 16	Vendor	By trucks	200 km	Tanks	450 MT
6.	ClO2 (Chlorine di-oxide) (MT)	-	5.4	5.4	Self-generation	-	-	Vessel	10 tonne
7.	Oxygen gas (MT)	3	5.5	8.5	Self-generation/ Liquid O2 from market	By Trucks	-	Vessel	10 tonne
8.	Hydrogen Peroxide (MT)	1	1.5	2.5	Vendor	By Trucks	200 km	Tank	28 MT
9.	Sulphuric acid (MT)	-	2.1	2.1	Vendor	By Tankers	100 km	Tank	30MT
10.	SO_2 (MT)	-	0.5	0.5	Vendor	By Tonner	200 km	Cylinder	10 MT

Fuel requirement

Fuel	Fuel Requirement (TPD)			Source	Distance	Storage Facility
	Existing	Additional	After Expansion			
Rice husk (70%) & pith (30%)	317	740	1057	Local Suppliers	100 km	Covered shed
or						
Coal (Indian) (100%)	-	650	650	Suppliers	500-600 km	Covered shed
Or						
Coal (Imported) (100%)	--	335	335	Import	-	Covered shed

11.3.11 The total fresh water requirement of the project is estimated as 7540 m^3 /day which will be obtained from ground water. The permission for drawl of 7595 m^3 /day groundwater has been obtained from CGWA videLr. No. 21-4(28)/UR/CGWA/2009-294 dated 9th February, 2017.

11.3.12 The total power requirement of the project is estimated as 30.72 MW which will be obtained from 16 MW Co-generation power plant, 12 MW Turbine to be installed at New Conventional Chemical Recovery Plant, Existing 1.4 MW Co-Generation Power Plant and 1.32 MW from Grid.

11.3.13 Baseline Environmental Studies were conducted during Post Monsoon season i.e. from 1stOctober, 2018 to 31stDecember, 2018. Ambient air quality monitoring has been carried out at 8 locations during October to December, 2018and the data submitted indicated: PM_{10} (54.8 µg/$m^3$to 87.4 µg/m^3), $PM_{2.5}$ (32.2 to 56.1 µg/m^3), SO2 (5.2 to 19.5 µg/m^3) and NOx (11.4 to 32.6 µg/m^3). The results of the modelling study indicate that the maximum increase of GLC for the proposed project is 0.93µg/m^3 with respect to the PM_{10}, 0.61 µg/m^3 with respect to the $PM_{2.5}$, 2.03µg/m^3 with respect to the SO_2 and 2.19µg/m^3 with respect to the NOx.

11.3.14 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.43 to 8.04, Total Hardness: 128 to 212 mg/l, Chlorides: 6.85 to 25.87 mg/l, Fluoride: 0.09 to 1.06 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 7 locations. pH: 7.07 to 7.63; DO: 2.9 to 5.4 mg/l and BOD: 7.9 to 12.8 mg/l.; COD from 32 to 44 mg/l.

11.3.15 Noise levels are in the range of 53.6 to 67.6 LeqdB(A) for daytime and 43.5 to 60.2 Leq dB(A) for Night time.

11.3.16 Expansion is proposed within the existing plant premises. Therefore, R & R is not involved.

11.3.17 It has been reported that 28 TPD ETP sludge, 122 TPD fly ash, 17.5 TPD inorganic salts from ZLD Plant (RO and LTE technology) and 4900 Litres/annum used oil will be generated after expansion. ETP sludge will be used in board manufacturing, Fly ash is used as manure for soil amelioration or given to brick manufacturers, Inorganic

salts given to approved vendors for land filling and used oil is being/will be given to authorized vendors. It has been envisaged that existing greenbelt has been developed in an area of 3.2 Ha (8 Acres) i.e., 33 % of the total plant area. Additional greenbelt will be developed in an area of 2.2 Ha (5.5 Acres). Thus, total area developed as greenbelt during and after expansion will be 5.5 Ha (13.5 Acres) to attenuate the noise levels and trap the dust generated due to the project development activities.

11.3.18 It has been reported that the Consent to Operate from the Uttarakhand Environment Protection and Pollution Control Board (UEPPCB)has been obtained vide Lr. No UEPPCB/HO/Con/N-6/2018/494 dated 19th June, 2018 and consent is valid up to31stMarch, 2023.

11.3.19 The Public hearing of the project was held on 28thJune, 2019 at 11:00 am at plant site under the chairmanship of Mr. Jay Bharat Singh (Municipal Commissioner, Nagar Nigam, District Udham Singh Nagar) for expansion of existing 140 TPD Writing & Printing Paper by installation of 300 TPD Hard Wood Fibre Line & 400 TPD Duplex Board Machine, 16 MW Co-Generation Power Plant and 700 TDS/day Conventional Chemical Recovery Plant along with 12 MW Power Generation. The issues raised during public hearing are air and water pollution, employment, plantation of trees, white smoke from chimney and parking provisions. An amount of Rs. 5.425 Crores as per Office Memorandum dated 1st May, 2018 has been earmarked for CER activities based on public hearing issues.

11.3.20 The capital cost of the project is Rs 785 Cr and the capital cost for environmental protection measures is proposed as Rs 180 Cr. The annual recurring cost towards the environmental protection measures is proposed asRs. 21 Cr/annum. The total direct employment after expansion is 700 persons during operation phase.

11.3.21 Existing greenbelt has already been developed in an area of 3.2 ha. Additional greenbelt will be developed in an area of 2.2 Ha. Thus, total greenbelt development after expansion will be 5.5 Ha of the total existing and acquired area of 16.19 Ha. A 5-10 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been/will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 1500 trees per hectare. Additional no. of 3300 saplings will be planted and nurtured in 2.2 hectares in 3 years. The Company will take up additional greenbelt development in nearby schools & villages by approx. 10,000 saplings plantation.

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

Observations of the Committee

11.3.23 The plant is designed with Zero Liquid Discharge through RO for recycling of waste water into the process.

Recommendations of the Committee

11.3.24 After detailed deliberations, the committee recommended the proposal for Environmental Clearance with the following specific conditions along with sector specific general conditions:

i. Provision for solar energy shall be made as much as possible.
ii. Rain water harvesting shall be carried out in and outside the project site more than the 100% water drawl for the project.
iii. Expansion project activity shall commence only after the permission from CGWA renewal permission.
iv. Green belt shall be developed in an area of 5.5 ha in a time bound manner within two years.
v. RO rejects shall be disposed of in TSDF.
vi. CER activities shall be completed in two years

11.4 Proposed production of MS Billets/Alloys Billets – 6,00,000 TPA TMT Bars/MS Structural Steel/Gutter/Angles/Channels – 6,00,000 TPA Ferro alloys unit with 1 x 5 MVA Submerged Electric Arc Furnace – Ferro Manganese – 12,800 TPA or Silico Manganese – 9,500 TPA ha., of **M/s SRJ Petty Steel Pvt Ltd** located at Gut No. 59 to 63, Village-Deregaon, Adjacent to MIDC Phase II, Taluka and District Jalna, **Maharashtra** [Online Proposal No. IA/MH/IND/113719/2019, File No. IA-J-11011/276/2019-IA-II(I)]**– Prescribing of Terms of Reference (ToR)-**regarding.

11.4.1 The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 07thAugust 2019 vide Online Proposal No.IA/MH/IND/113719/2019 in prescribed form -1, pre-feasibility report and other documents. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

11.4.2 **M/s. SRJ Peety Steel Pvt. Ltd.** Is proposing steel plant at Gat no. 59 to63 Village Daregaon, Adjacent to MIDC Phase II, Taluka-Jalna, District – Jalna, Maharashtra. The company is proposing to install new Induction furnaces. The Proposed Production of MS Billets /Alloys Billets -6,00,000 TPA, TMT Bars/MS Structural Steel/Gutter/Angles/Channels- 6,00,000 TPA and Ferro Manganese 12,800 TPA /Silico Manganese 9,500 TPA.

11.4.3 The proposed unit will be located atGat no. 59 to 63 Village Daregaon, Adjacent to MIDC Phase II, Taluka-Jalna, District – Jalna, Maharashtra.

11.4.4 The land area acquired for the proposed plant is 11.14ha. 100% land is Un-irrigated land. No /forestland involved. The entire land has been acquired for the project. Of the total area 3.8ha (34.19%) land will be used for green belt development.

Sr. No.	Particulars	Area (m^2)	Area (%)
1	Plant Area	43289.5	38.85
2	Green Belt Area	38088.8	34.19
3	Parking Area	14846.8	13.32
4	Open Area	4251.9	3.81
5	Road Area	10922	9.83

	Total	**111399**	**100**

11.4.5 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.

11.4.6 Total project cost is approx.60.0Crore rupees. Proposed employment generation from proposed project will be 900 direct employment and 500 indirect employment.

11.4.7 The targeted production capacity of the MS Billets/Alloys Billets – 6,00,000 TPA, TMT Bars/MS Structural Steel/Gutter/Angles/Channels– 6,00,000 TPA, Ferro alloys unit with 1 x 5 MVA Submerged Electric Arc Furnace – Ferro Manganese – 12,800 TPA or Silico Manganese – 9,500 TPA. The ore for the plant will be procured from open market. transportation will be done through road The proposed capacity for different products for new site area as below:

Production Capacity	
IMS Billets/Alloys Billets	6,00,000 TPA
TMT Bars/MS Structural Steel/Gutter/Angles/Channels	6,00,000 TPA
Ferro Alloys	Ferro Manganese – 12,800 TPA or Silica Manganese – 9,500 TPA

11.4.8 The electricity load of 25 MW will be procured from Maharashtra State Electricity Board.

11.4.9 Proposed raw material requirement for project are Sponge Iron (40%) Scrap (57%) and Other Minerals (3%) for Billets, Billets for TMT bar and Manganese Ore, Dolomite and Quartz for Ferro Alloys. The requirement would be fulfilled by open market.

11.4.10 Water Consumption for the proposed project will be 215 KLD and waste water generation will be zero. Domestic waste water will be treated STP and Treated wastewater will be used for Greenbelt Development.

Item	**Total Water Requirement(KLD)**
Cooling Purpose	180
Domestic Purpose	20
Dust Suppression	15
Total	**215**

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

11.4.12 Environmental Consultant Name: Sri Sai Manasa Nature Tech. Pvt. Ltd., Hyderabad. (In Association with M/s ECO Chem and Sales Pvt. Ltd. Surat), Certificate no.: NABET/EIA/1720/RA0111, valid till 05.08.2020

Recommendations of the Committee

11.4.13 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 **Annexure I read with additional ToRs at Annexure-2**:

i. No Ferro chrome will be manufactured.

ii. No ground water abstraction is permitted
iii. 100% waste utilization
iv. Rainwater harvesting more than 100% utilization of water
v. Emission shall be less than 30mg/m^3

11.5 Expansion of MS Billet from 2,37,600 MTPA to 5,74,200 MTPA, TMT bars from 2,00,000 MTPA to 4,20,000 MTPA, MS structures from 37,600 MTPA to 1,80,000 MTPA and wire rod of 4,20,000 MTPA of **M/s. Galwalia Ispat Udyog Private Limited** located at village Narain Nagar Industrial Estate, Bazpur Road, Tehsil Kashipur, **District Udham Singh Nagar, Uttarakhand** [Online Proposal No. IA/UK/IND/112895/2019, File No. IA-J-11011/277/2019-IA-II(I)] **– Prescribing of Terms of Reference (ToR) – regarding.**

11.5.1 M/s Galwalia Ispat Udyog Private Limited (GIUPL)has made online an application to the Ministry on 13th September, 2019 vide Proposal No.IA/UK/IND/112895/2019in prescribed Form -1, pre-feasibility report and other documents to propose Terms of Reference for undertaking detailed EIA study for proposed expansion of the project mentioned in the subject. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

11.5.2 M/s GalwaliaIspat Udyog Private Limited (GIUPL), Narain Nagar Industrial Estate, Bazpur Road, Kashipur, District Udham Singh Nagar, Uttarakhand proposes to install expansion of existing manufacturing unit for Expansion of MS Billet from 2,37,600 MTPA to 5,74,200 MTPA, TMT Bars from 2,00,000 MTPA to 4,20,000 MTPA, MS Structure from 37,600 MTPA to 1,80,000 MTPA and Wire Rod 4,20,000 MTPA. It is proposed to set up the plant for nontoxic secondary metallurgical processing based on natural gas as fuel under the cleaner technology.

11.5.3 The existing project was accorded environmental clearance vide lr.no. The Environmental Clearance was not applicable at the time of establishment of plant dated 25.04.2006. Consent to Operate was accorded by Uttarakhand Environment Protection and Pollution Control Board vide lr. No UEPPCB/ HO/C/G-17/2018/1556 dated 04.12.2018, validity of CTO is up to 31.03.2019.

11.5.4 The proposed unit will be located at Plot No 27, 28, 48, 49, Village: Narain Nagar Industrial Area Nainital Road, Taluka: Kashipur District: Udham Singh Nagar., State: Uttarakhand.

11.5.5 The land area acquired for the proposed plant is 13.40 Ha. No forest land is involved. The entire land has been acquired for the project.

11.5.6 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.

11.5.7 Total project cost is approx. 45.71 Crore rupees. Proposed employment generation from proposed project will be 153 direct employments.

11.5.8 The targeted production capacity of the unit is MS Billet 5,74,200 MTPA, TMT Bars 4,20,000 MTPA, MS Structure 1,80,000 MTPA and Wire Rod 4,20,000 MTPA. The ore for the plant would be procured from (linkages…Scrap and sponge Iron from Open Market, MS Billets/Ingots from Open Market/ Own Manufacturing). The ore transportation will be done through Road (Rail/Road/Conveyor/Slurry Pipeline). The proposed capacity for different products for new site area as below:

Product Name	Section	Existing Capacity (MTPA)	Proposed Capacity (MTPA)	Total Capacity (MTPA)
Billet	Melting	2,37,600	3,36,600	5,74,200
TMT Bars	Rolling	2,00,000	2,20,000	4,20,000
MS Structure	Rolling	37,600	1,42,400	1,80,000
Wire Rod	Rolling	-	4,20,000	4,20,000

11.5.9 The electricity load of 70 MW (41.5 MW existing and 28.5 MW Proposed) will be procured from Uttarakhand Power Corporation Limited. Company has also proposed to install 2 No.s of 500 KVA and 1 No. of 1010 KVA DG Set.

11.5.10 Proposed raw material and fuel requirement for project are as given below:

For making of Melting Division

S.No.	Raw Materials	Ratio	Quantity (MT/annum)			Source of Supply
			Existing	Additional	Total	
1	Sponge Iron	50	1,32,000	1,87,000	3,19,000	Open Market
2	Iron Scrap	50	1,32,000	1,87,000	3,19,000	Open Market
Total		100	2,64,000	3,74,000	6,38,000	

For making of Rolling Division

S. No.	Raw Materials	Quantity (MT/annum)			Source of Supply
		Existing	Additional	Total	
1.	MS Billets/Ingots	2,37,600	**7,82,400**	**10,20,000**	Open Market/ Own Manufacturing

11.5.11 The requirement would be fulfilled by Uttarakhand Power Corporation Limited as well as open market / own manufacturing. Fuel consumption will be mainly from electric furnace.

11.5.12 Water Consumption for the proposed project will be 635 KLD and waste water generation will be CT & Softener Plant Bleed which shall be reused in the green belt development & Dust Suppression respectively. Domestic waste water will be treated in to proposed STP and industrial waste water generated will be treated Not applicable and STP treated water will be reused for green belt.

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

11.5.14 Name of EIA Consultant – Enviro Infra Solutions Pvt. Ltd. (S. No.:46 in QCI list as on September, 2019)

Recommendations of the Committee

11.5.15 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 **Annexure I read with additional ToRs at Annexure-2**:

i. No coal firing in reheating furnace. As agreed, CNG shall be used in reheating furnace.
ii. No ground water abstraction is permitted
iii. 100% waste utilization
iv. Rainwater harvesting more than 100% utilization of water
v. Emission shall be less than 30mg/Nm3

11.6 Expansion Integrated Steel Complex of **M/s Maruti Ispat& Energy Pvt. Ltd.,** located at Sy No. 158, part of 159, 160,163-168 and 171 at Madhavaram and 13-19 located at Rassamarri Village, Mandal-Mantralayam, **District Kurnool, Andhra Pradesh** [Online Proposal No. IA/AP/IND/116767/2019, File No. J-11011/1149/2007-IAII(I)] **— Prescribing of Terms of Reference (ToR) –** regarding**.**

11.6.1 M/s Maruti Ispat& Energy Pvt. Ltd has made an application has made online an application to the Ministry on 3rd September, 2019 vide Proposal No. IA/AP/IND/116767/2019in prescribed Form -1, pre-feasibility report and other documents to propose Teroms of Reference for undertaking detailed EIA study for proposed expansion of the project mentioned in the subject. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

11.6.2 M/s. Maruti Ispat and Energy Pvt. Ltd.is planning to install integrated steel plant at sy. No. 158,159, 160, 163-168 & 171, Village- Madhavaram and Rassamarri, Mandal-Mantralyam, District- Kurnool, Andhra Pradesh. The company has obtained Environmental Clearance for the existing units vide F.No. J-11011/1149/2007-IA II (I) dated 02.01.2009 for integrated steel complex at Sy. No. 158,159, 160, 163-168 & 171, village Madhavaram and 13-19 of village Rassamarri. Company has also taken EC extension on 16.12.2016. But till date company has installed only 2 x 100 TPD sponge iron plant and 8 MW WHRB Plant. As the validity of Environment for 10 years lapse, management planned to file the application for Terms of reference as per the guidelines of EIA notification 2006.

S.no	Unit	Plant Configuration	Production Capacity	work Status till Existing EC validity
1	Palletization Plant (Pellets)	1 x 3000 TPD	9,00,000 TPA	About 5% Work Completed
2	Sintering Plant (Sinter)	1 x 2000 TPD	6,00,000 TPA	About 5% Work Completed
3	Sponge Iron Kilns (Sponge Iron)	6 x 100 TPD	1,80,000 TPA	**4 x 100 TPD – is in Operation** Remaining 2 x 100 TPD to be Implemented

4	Mini Blast Furnace (Hot Metal/Pig Iron)		1 x 380 m^3	2,40,000 TPA	About 10% Work Completed
5	Induction Furnace (Billets from CCM)		2 x 40 TPH	2,40,000 TPA	About 15% Work Completed
6	Billets Casting Machine/ Continuous Casting Machine		1 x 1000 TPD	3,00,000 TPA	About 10% Work Completed
7	Rolling Mill		1 x 1000 TPD	3,00,000 TPA	About 5% Work Completed
8	Power Generation	Through WHRB	6 x 10 TPH	20 MW	8 MW WHRB – is in Operation
		Through FBC	2 x 100 TPH	2 x 18 MW	About 5% Work Completed
9	Ladle Furnace		1 x 40 TPH	---	About 5% Work Completed
10	Oxygen Plant		---	97,92,000 SM^3/Annum	About 5% Work Completed

11.6.3 The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 20thSeptember2019 vide Online Proposal No.IA/AP/IND/116767/2019.

11.6.4 The proposed unit will be located at sy. No. 158,159, 160, 163-168 & 171, Village-Madhavaram and Rassamarri, Mandal- Mantralyam, District- Kurnool, Andhra Pradesh.

11.6.5 The land area acquired for the proposed plant is 78.33ha. 100% land is Un-irrigated land. No /forestland involved. The entire land has been acquired for the project. Of the total area 26.0ha (33.19%) land will be used for green belt development.

Sr. No.	Particulars	Area (ha)	Area (%)
1	Built-up Area	29.75	37.98
2	Green Belt Area	26.0	33.19
3	Parking Area	8.13	10.37
4	Road Area	7.38	9.42
5	Open Area	7.07	9.04
	Total	**78.33**	**100**

11.6.6 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.

11.6.7 Total project cost is approx.700Crore rupees. Proposed employment generation from proposed project will be 450 direct employment and 300indirect employment.

11.6.8 The ore for the plant will be procured from open market. The electricity load of 56 MW will be procured from Captive Power Plant and Andhra Pradesh State Electricity Board.

11.6.9 Proposed raw material requirement for project are iron ore, Dolomite and coal. The requirement would be fulfilled by open market.

11.6.10 Water Consumption for the proposed project will be 1650 KLD and waste water generation will be zero. Domestic waste water will be treated STP and Treated wastewater will be used for Greenbelt Development.

Input	Quantity (KLD)	Output	Quantity (KLD)
Makeup Water for cooling	969	Cooling tower blow down	235
		Losses	734
Boiler Feed Makeup	681	Blow down	158
		Losses	523
Total	**1650**		**1650**

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

11.6.12 Environmental Consultant Name: Sri Sai Manasa Nature Tech. Pvt. Ltd., Hyderabad. (in Association with Eco Chem Sales and Services, Surat), Certificate no.: NABET/EIA/1720/RA0111. valid till 05.08.2020

Recommendations of the Committee

11.6.13 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 **Annexure I read with additional ToRs at Annexure-2**:

i. No ground water abstraction is permitted
ii. 100% waste utilization
iii. Rainwater harvesting more than 100% utilization of water
iv. Emission shall be less than 30mg/Nm^3
v. Compliance report from Regional Office

11.7 Clinker Grinding Capacity (1.0 MTPA to 2.3 MTPA) and D.G. Set Capacity (6.42 MW to 12 MW) of **M/s.UltraTech Cement Ltd. (Unit: Arakkonam Cement Works)** located at Arakkonam Cement Works, Village: Chitteri, Taluka: Arakkonam, **District: Vellore, Tamil Nadu** [Online Proposal No. IA/TN/IND/99711/2012, File No. SEAC/TN/F. No. 371/2010] **– Extension of validity of Environmental Clearance –** regarding.

11.7.1 M/s. UltraTech Cement Limited (Unit: Arakkonam Cement Works) has made online application vide proposal no. IA/TN/IND/99711/2012 dated 12/03/2019 along with updated Form I and sought for validity extension of the environmental clearance accorded by the Ministry vide letter no. SEAC/TN/F. No. 371/2010 dated 19/03/2012.

Details submitted by the project proponent

11.7.2 The existing plant was established in the year 2000 with the production capacity of 1.0 MTPA. The total land available is 44.37 ha out of which 42% which is equivalent to 18.74 ha has been brought under green belt development.

11.7.3 Ministry of Environment, Forest and Climate Change (MoEF&CC) has accorded Environmental Clearance to M/s. UltraTech Cement Ltd. (Unit: Arakkonam Cement Works) for expansion of clinker grinding capacity from 1.0 MTPA to 2.3 MTPA and D.G. set capacity from 6.42 MW to 12 MW at Arakkonam Cement Works, Chitteri Village, Taluka Arakkonam, District Vellore, Tamil Nadu vide letter no. SEAC/TN/F. No. 371/2010 dated 19/03/2012 under the provisions of the EIA Notification, 2006. The project activity is listed at S. No. 3(b) Cement Plants under Category "B" of the schedule of the EIA Notification, 2006. Due to the absence of a duly constituted SEIAA/SEAC, the proposal was appraised by the EAC and granted Environmental Clearance by the Ministry.

11.7.4 The proposed expansion project has not been implemented yet. It was informed that proposed project could not be implemented within the validity period of the EC due to the following:

i. Company was involved in acquiring around 28 MT cement plant from Jai Prakash Associate Ltd. and Binani since last six years. During this period the company has not invested in the brownfield expansion.

ii. As the market condition in South was not raised as expected is one of the reason for not implementing the project.

iii. Company has taken various steps during the period to reduce energy consumption through process optimization by increasing the productivity.

iv. Company has also carried out various optimization studies by plant supplier FLS and as per the report by process optimization immediately, PP can increase the production from 1.0 to 1.5 MTPA.

v. Remaining 0.8 MT capacity by installation of Pre Grinder within three years' time.

11.7.5 It was submitted that proposed expansion will be implemented in two phases i.e., Phase I - 1.0 to 1.50 MTPA and Phase II - 1.5 to 2.3 MTPA. The time frame for implementation of Phase I and Phase II would be 9 months and 36 months respectively as per the schedule submitted.

Details of earlier submission and EDS raised

11.7.6 The online application for EC validity extension was originally submitted on 12/03/2019. Subsequently, EDS was raised by the Ministry stating that project activity falls under category B of schedule 3(b) of EIA Notification, 2006 and the project proponent was requested to approach the SEIAA/SEAC, Tamil Nadu.

11.7.7 In response to this, PP informed vide letter dated 24/04/2019 stating that the proposal may be considered by the Ministry as the State lacks in the project references and records and due to this the proposal was not accepted in SEIAA, Tamil Nadu. Thereafter, again EDS was issued by the Ministry on 18/05/2019, to submit the letter of SEIAA regarding non-acceptance of EC validity extension proposal.

11.7.8 Again in response, PP vide letter dated 20/05/2019 reiterated to consider the proposal in the Ministry as the existing EC was granted by the Ministry. Further, EDS was issued by the Ministry on 18/06/2019 stating that project activity falls under category B of schedule 3(b) of EIA Notification, 2006 and the project proponent was requested to approach the SEIAA/SEAC, Tamil Nadu.

11.7.9 Further again, PP vide letter dated 2/08/2019 repeatedly requested to consider the proposal in the Ministry as the existing EC was granted by the Ministry.

Observations of the Committee

11.7.10 The Committee noted that the EC was accorded by the Ministry due to the absence of a duly constituted SEIAA/SEAC at Tamil Nadu during that time and request for EC validity extension has been submitted to the Ministry within the validity period. The proposed expansion will be implemented in two phases i.e., Phase I - 1.0 to 1.50 MTPA and Phase II – 1.5 to 2.3 MTPA. The time frame for implementation of Phase I and Phase II would be 9 months and 36 months respectively.

11.7.11 The Committee noted that Ministry has already raised three time EDS to the project proponent stating that project activity falls under category B of schedule 3(b) of EIA Notification, 2006 and the project proponent was requested to approach the SEIAA/SEAC, Tamil Nadu. However, the project proponent repeatedly requested to consider the proposal in the Ministry itself as the existing EC was granted by the Ministry. The Committee also noted that SEIAA/SEAC for the State of Tamil Nadu has been constituted by the Ministry vide S.O. No. 5651(E) dated 24/12/2018 and is in existence presently.

Recommendations of the Committee

11.7.12 In view of the forgoing and after detailed deliberations, the Committee asked the Ministry to transfer the proposal cited above of M/s. UltraTech Cement Ltd. (Unit: Arakkonam Cement Works) along with the relevant records if any, to SEIAA/SEAC – Tamil Nadu for taking appropriate view in the matter.

11.8 Expansion of Existing Cement Plant, Installation of Line IV, expansion of CTPP by **M/s. UltraTech Cement Limited** located at Villages Damodarpura and Khor, Tehsil Jawad, District: Neemuch, **in Madhya Pradesh** [Online Proposal No. IA/MP/IND/112759/2019, File No. J-11011/616/2010-IA.II(I)] **– Extension of validity of Environmental Clearance –** regarding**.**

11.8.1 M/s. UltraTech Cement Limited has made an application has made online an application to the Ministry vide Proposal No. IA/MP/IND/112759/2019in prescribed Form -6, pre-feasibility report and other documents to propose Terms of Reference

for extension of validity of Environmental Clearance of the project mentioned in the subject. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

11.8.2 M/s. UltraTech Cement Limited (Unit: Vikram Cement Works) had obtained Environmental Clearance from MoEFCC, New Delhi, for expansion of existing Cement Plant by installation of Line-IV [Clinker (3.59 to 6.2 MTPA), Cement (4.0 to 10.33 MTPA)], expansion of CTPP (46 to 112 MW) &Installation of Waste Heat Recovery Boiler (10 MW) at Villages Damodarpura and Khor, Tehsil - Jawad, District - Neemuch, Madhya Pradesh *vide* letter no. J-11011/616/2010-IA-II (I) dated 13thAugust, 2012; further amended on 13th March, 2013 &1oth Sep., 2014.

11.8.3 Status of Implementation of Earlier EC: The Proposed Expansion has not been implemented yet.

11.8.4 There is no physical or financial activity has taken place for the commencement of the Proposed Expansion Project.

11.8.5 Schedule of Completion of Project – Project will be implemented within 3 years.

Observations of the Committee

11.8.6 Expansion of the existing clinker and cement plant were completed (3.59 to 4.0 MTPA clinker and 4.0 to 6.67 MTPA). Installation of unit of cement plant is yet to be started.

Recommendations of the Committee

11.8.7 After detailed deliberations, the committee recommended for extension of validity of Environmental Clearance for period of three years, i.e., up to 12.08.2022.

11.9 Calcined petroleum coke plant of 4,60,000 TPA capacity along with process waste heat recovery based power plant of 25 MW at Sy.No. 335, 323(P) 334(P) and 336(P) by **M/s. Sanvira Industries Limited** located at Chatametta Village, LalamkoduruPanchayat, Via Atchutapuram, Rambilli Mandal, **Visakhapatnam, Andhra Pradesh** [Online Proposal No. IA/AP/IND/117597/2019, File No. J-11011/500/2011-IA. II(I)] **– Extension of validity of Environmental Clearance –** regarding**.**

11.9.1 **M/s. Sanvira Industries Limited** has made an application has made online an application to the Ministry vide Proposal No. IA/AP/IND/117597/2019 on 11th September 2019 in prescribed Form -6, pre-feasibility report and other documents for extension of validity of Environmental Clearance of the project mentioned in the subject. The proposed project activity is listed at Sl. No. 4(b) Coke oven plants under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

11.9.2 EC was granted to the plant vide letter No. J-11011/500/2011-IA-II (I) dated 24.12.2012 for Proposed 460000 TPA Greenfield Calcined Petroleum Coke (CPC) Plant with 25 MW Power Generation Based On Process Heat Recovery by M/s Sanvira Industries Limited at Chatametta Village, Rambilli Mandal, Visakhapatnam District, Andhra Pradesh.

11.9.3 Out of 4,60,000 TPA of the Calcined Coke, Sanvira has already put into operation 3,30,000TPA of Calcined Coke with two units. Power Plant of 2x8MW was already implemented and on stream and the balance 9MW is under implementation with balance1,30,000 TPA Calcination unit.

11.9.4 The progress of the work and schedule of completion is given below.

Sl. No	Particulars	*Percentage of work completed*	Time required for completion
1	Calcined Petroleum Coke 3.3 LTPA & 2 X 8 MW WHRB based Power Plant	Electrical: 100% Works Completed	Completed
		Mechanical: 100%% Works Completed	
		Engineering – 100% Works Completed	
		Planning &Procurement 100% Works Completed	
		Civil: 100% Works Completed	
2	Calcined Petroleum Coke 1.3 LTPA and 9 MW WHRB based Power Plant	Electrical: **5%** Works Completed	Under Progress, scheduled for completion by December,2021
		Mechanical: **5%%** Works Completed	
		Engineering – **100%** Works Completed	
		Planning & Procurement **10%** Works Completed	
		Civil: **75%** Works Completed	

Recommendations of the Committee

11.9.5 After detailed deliberations, the committee recommended for extension of validity of Environmental Clearance of the project for period of three years, i.e., upto 23.12.2022.

25th September, 2019

11.10 Ferro Alloy Plant (2x9 MVA sub-merged arc furnace) for manufacturing of Ferro Manganese/Silico Manganese/Ferro Silicon of 30,000 TPA capacity and 15 MW bio mass based Captive Power Plant **by M/s. R.R. Energy Limited** located at P.O. Garhumaria, NH-49, Jharsuguda Road, Raigarh, Chhattisgarh [Online Proposal No. **IA/CG/IND/115048/2019**, File No. J-11011/552/2008-IA-II(I)] **– Environment Clearance for change in product mix under para 7(ii) of EIA Notification, 2006-regarding.**

11.10.1 M/s. R.R. Energy Limited has made an online application vide proposal no. IA/CG/IND/115048/2019 dated 20/08/2019 along with Form – 2 seeking environmental clearance for change in product mix under para 7(ii) of EIA Notification, 2006 in the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details submitted by the project proponent

11.10.2 M/s. R.R. Energy Limited has obtained Environment Clearance from MoEF&CC vide File No. J-11011/552/2008-IA.II.(I) dated 2/08/2010 for expansion of project by installation of Ferro Alloy Plant (30,000 TPA) with 3 x 3.6 MVA Submerged Arc Furnace and Captive Power Plant 40 MW (25 MW coal based + 15 MW biomass based) located at P.O. Garhumaria, NH-49, Jharsuguda Road, Raigarh, Chhattisgarh. Later on, amendment in Environment Clearance was obtained from MoEF&CC vide letter dated 7/02/2012 for change in configuration from 3 X 3.6 MVA Submerged Arc Furnace to 2 x 9 MVA Submerged Arc Furnace.

11.10.3 The present status of implementation of the project is given as below:

S.No.	Facility as per the EC dated 2/8/2010	Capacity	Present status	Remarks
i.	Ferro Alloy Plant (2 x9 MVA Submerged Arc Furnace for manufacturing of Ferro Manganese/Silico Manganese/Ferro Silicon)	30,000 TPA	Implemented and under operation	--
ii.	Biomass power plant	15 MW		--
iii.	Fly ash bricks plant	19,800 TPA		--
iv.	Captive Power Plant (Coal based)	25 MW	Not implemented	Dropped
v.	Semi-finished steel	6x16 T (Induction furnace with CCM 100000 TPA)	Not implemented	Dropped

11.10.4 Consent To Establish and Consent To Operate has been obtained from CECB on 13/09/2012 and 05/07/2013 respectively. Present CTO renewal is valid up to 30/06/2021.

11.10.5 Compliance status of EC compliance: Regional Office of MOEF&CC, Nagpur has issued Certified compliance report on earlier EC conditions vide dated 23/09/2019. There were certain observations/partial compliances in the certified compliance report with respect to design of company website and housekeeping for which undertaking have been submitted by the project proponent to comply in a time bound manner.

11.10.6 The present proposal is for manufacturing of Ferro-Chrome (Fe-Cr) in the existing 2 x 9 MVA SAF along with Fe-SI, Fe-Mn& Si-Mn without any modification to the existing SAF within existing capacity 30,000 TPA.

11.10.7 The existing unit details and the proposed change in product mix is given as below:

S.No.	Facility as per the EC dated 2/8/2010	Capacity as per the EC dated 2/8/2010	Proposed change in product mix	Remarks
i.	Ferro Alloy Plant (2 x 9 MVA Submerged Arc Furnace for manufacturing of Ferro Manganese/Silico Manganese/Ferro Silicon)	30,000 TPA	Manufacturing of Fe-Cr in the existing 2 x 9 MVA SAF I in addition to the Fe-Si, Fe-Mn& Si-Mn within existing capacity 30,000 TPA.	No change in production capacity
ii.	Biomass power plant	15 MW	Nil	Nil
iii.	Fly ash bricks plant	19,800 TPA	Nil	Nil

11.10.8 Ferro-alloys are produced by reducing metals from their oxides contained in ores by using a suitable reduction under conditions created to ensure a high recovery of the valuable elements from the starting materials. Such reduction reactions are characterized by stability of an oxide at high temperatures. The stability of all oxides will become more stable with increasing temperature. An element which forms a stronger oxide can under appropriate conditions be used as reductant for a less strong oxide. The reaction will proceed successfully if the difference of oxygen involved with a small difference, favorable conditions should be formed to make the reaction proceed. The presence of iron or iron oxides can facilitate some reduction processes. Iron dissolves the reduced element, forms a compound with it, and thus lowers the melting point of an iron element alloy is lower than that of the pure element, e.g. in Ferro-manganese production, and therefore the reaction of reduction of the element can proceed at a lower temperature.

11.10.9 Proposed resources requirement (Land/water) vis-à-vis with granted Environmental Clearance.

Resource requirement	**Due to production of Fe-Mn, Fe-Si & Si-Mn**	**Due to Ferro Chrome Production**	**Remarks**
Water requirement	247 m^3/Day	247 m^3/Day	No increase in water Consumption
Land requirement	21.072 ha	21.072 ha	No change

11.10.10 The raw materials requirement for existing and proposed change in product mix is furnished as below:

Items	**Si-Mn**	**Fe-Mn**	**Fe-Cr**
Mn Ore	48,900 TPA	68,100 TPA	--
Coke	11,700 TPA	11,100 TPA	10,500 TPA
Fe-Mn slag	18,900 TPA	--	--
Quartz	6,000 TPA	9,00 TPA	6,00 TPA
Bag filter dust	4,500 TPA	4,800 TPA	3,900 TPA
Chrome Ore	--	--	59,100 TPA
Lime	--	--	9,00 TPA

11.10.11 Pollution load quantification (Air/Water/Solid & hazardous waste/traffic) vis-à-vis with granted Environmental Clearance.

Environmental Parameter	**Due to production of Fe-Mn, Fe-Si & Si-Mn**	**Due to Ferro Chrome Production**	**Remarks**
Wastewater	Closed circuit cooling system is adopted. Hence no wastewater discharge.	Closed circuit cooling system will be adopted. Hence no waste water discharge.	**ZLD will be followed even after the present proposal.**
Solid waste disposal	Slag produced from Ferro Manganese production is utilizing in Silico Manganese production. Slag produced from Silico Manganese production is utilized in road construction/landfill.	Ferro chrome slag of 26,100 TPA will be generated & will be further processed in Jigging plant for Chrome recovery. TCLP test will be conducted for the remaining material. If chrome content is within the permissible level it will be utilized as landfill/ as base material in	No solid waste disposal issue w.r.t solid waste disposal.

Environmental Parameter	Due to production of Fe-Mn, Fe-Si & Si-Mn	Due to Ferro Chrome Production	Remarks
		road laying or else it will be sent to the nearest TSDF facility. Disposal of slag will be in accordance with the permissible norms.	
Particulate Emission load	5.04 Kg/hr	5.04 Kg/hr	No increase in particulate emission

11.10.12 It was submitted that in the instant proposal no additional land; additional water; increase in air emissions load; effluent discharge outside the plant. Zero liquid effluent discharge will be maintained.

11.10.13 Request to consider under clause7 (ii) of the EIA Notification, 2006 due to the following:

i. Present proposal is only change of product mix by using the existing Submerged Arc Furnaces.
ii. Public Hearing has been carried out on 7/02/2010 as per the provisions of EIA Notification 2006 and its subsequent amendments.
iii. No additional land is envisaged.
iv. No additional water is envisaged.
v. No additional wastewater. ZLD will be continued after manufacturing of Fe-Cr also.
vi. No increase in air emission load.
vii. Jigging plant for metal recovery from slag and briquetting plant of 10 TPH capacity for chrome bearing dust shall be installed.
viii. All the dust generated during Fe-Cr manufacturing will be briquetted and recycled back into the process.

11.10.14 It is inferred from the above that following are the maximum quantum of each product can be produced in the plant. Total production of Fe-Cr as given below can be produced in lieu of 'Fe-Si, Si-Mn and Fe-Mn'.

S.No.	Name of the product	Capacity
	Ferro Silicon (Fe-Si)	30,000 TPA
	Silico Manganese (Si-Mn)	
	Ferro Manganese (Fe-Mn)	
[OR]		
	Ferro Chrome (Fe-Cr)	30,000 TPA

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

11.10.16 Name of the Consultant: M/s. Grass Roots Research & Creation India (P) Ltd (Sl. No. 77 in the List of Accredited Consultant Organizations (Alphabetically) Rev. 80, September, 2019).

Observations and recommendations of the Committee:

11.10.17 In view of the aforesaid and after detailed deliberations, the Committee recommended for grant of Environmental Clearance for change in product-mix for manufacturing of Ferro Chrome (Fe-Cr) in the existing 2 x 9 MVA SAFs in addition to Fe-Si, Fe-Mn& Si-Mn within existing capacity 30,000 TPA under para 7(ii) of the EIA Notification, 2006 subject to following additional conditions:

i. Project proponent confirmed that facilities mentioned in the EC dated 2/8/2010 namely 25 MW CPP, 6x16 T Induction Furnace with CCM of 1,00,000 TPA capacity has not been established at the site and stands dropped.

ii. Jigging plant for metal recovery from slag and briquetting plant of 10 TPH capacity for chrome bearing dust shall be installed.

iii. All the dust generated during Fe-Cr manufacturing will be briquetted and recycled back into the process.

iv. Vacuum cleaner shall be purchased for minimizing the dust pollution within a time frame of three months.

v. Zero Liquid discharge would be adopted.

vi. Company website shall be developed in a time frame of three months.

vii. Rain water harvesting and recharge of groundwater shall be carried out to the extent of 200% of the annual water consumption.

11.11 Proposed Green-field Project-3.85 MTPA throughput Iron Ore Beneficiation Plant and 2.0 MTPA Pellet Plant of **M/s. Orissa Sponge Iron & Steel Limited** located at Palaspanga, **District- Keonjhar district, Odisha.** [Online Proposal No.IA/OR/IND/113418/2019, File No. IA-J-11011/275/2019-IA-II(I)] **– Prescribing of Terms of Reference (ToR)** – regarding.

11.11.1 M/s. Orissa Sponge Iron & Steel Limited has made application vide online proposal no. IA/OR/IND/113418/2019 dated 16/08/2019 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 & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

11.11.2 M/s. Orissa Sponge Iron & Steel Limited proposes to install a new Greenfield project-3.85 MTPA throughput Iron Ore Beneficiation Plant and 2.0 MTPA Pellet Plant based on Straight Grate technology.

11.11.3 The proposed unit will be located at Palaspanga, District: Keonjhar, State: Odisha. The site co-ordinates are 21°47'20.97"N, 85°34'27.64"E; 21°47'20.97"N,85°34'11.09"E;21°47'53.39"N, 85°34'17.17"E; 21°48'03.08N, 85°34'37.06"E;21°48'05.08"N; 85°34'21.76"E.

11.11.4 The land area is already acquired through IDCO and is an Industrial Land. The proposed plant is at 64.18 ha of land out of which no/forestland involved. The entire

land has been acquired for the project. Of the total area 21.18 ha (33%) land will be used for green belt development.

11.11.5 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.

11.11.6 Total project cost is 500 Crore rupees. Proposed employment generation from proposed project will be 350 nos. direct employment and 200 indirect employments.

11.11.7 The targeted production capacity of the Iron Ore Beneficiation Plant and Pellet Plant is 2.5 MTPA & 2.0 MTPA respectively.

11.11.8 The raw material requirement, source and mode of transportation is given as below:

Sr. No.	Proposed Facility	Raw material	Quantity	Source	Distance /Mode of Transportation
1.	Beneficiation Plant (2.5 MTPA)	Iron Ore Fines	3.85 MTPA	Nearby Iron Ore Mines	By Road Up to 120 Km
2.	Pellet Plant (2.0 MTPA)	Coke Breeze	37,500 Tons/year	Local Market	By Road 150 km
		Bentonite	12,500 Tons/year	Rajasthan	By Road
		Limestone	12,500 Tons/year	Rourkela	By Road 200 KM
		FO/LDO	25000 KL/year	Nearest Oil depot	By Road 15 Km
	PG Plant (5 x 15000 Nm3/hr)	Coal	237600 Tons/year	Open Auction MCL, SECL etc.	By Rail & Then road

11.11.9 The electricity load of 32 MW will be procured from NESCO.

11.11.10 Water Consumption for the proposed project will be 312 m^3/hr and it will be met from Ardei river flowing at a distance of 3-4 km from the site. Domestic waste water will be treated in the Sewage Treatment Plant and industrial waste water generated will be treated and recycled back into the process.

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

11.11.12 Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar is the consultant accredited by NABET, QCI with accreditation no. NABET/EIA/1720/RA0090, dated-30.04.2018. And Sl. no. in the QCI list is 155 as on September 05, 2019.

Observations of the Committee:

11.11.13 The Committee noted that baseline data collected during March to May, 2019 will be used for EIA report preparation.

Recommendations of the Committee:

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

i. Traffic assessment study of materials shall be furnished.
ii. No tailing pond is permitted.
iii. Iron ore slimes shall be filtered in filter press and the cake shall be used for construction purpose/land fill.
iv. Slime storage is permitted within the plant site maximum two months during monsoon season only.
v. Particulate matter emission from the bag filters shall be less than 30mg/Nm^3.
vi. Phenolic water shall be treated in ETP to meet the statutory norms.
vii. Trucks/dumpers carrying raw materials/ products shall be covered with tarpaulin to avoid fugitive emissions.

11.12 Expansion of Integrated Steel Plant from 3.6 MTPA to 7.2 MTPA of **M/s Jindal Steel & Power Ltd., (JSPL)** located at **District Raigarh, Chhattisgarh-** [Online Proposal No. IA/CG/IND/117194/2019, File No. J-11011/799/2008-IAII(I)]**– Prescribing of Terms of Reference (ToR) – regarding.**

11.12.1 **M/s Jindal Steel & Power Ltd., (JSPL)**has made application vide online proposal no. IA/CG/IND/117194/2019 dated 07/09/2019 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 & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

11.12.2 M/s. Jindal Steel & Power Ltd. (JSPL) proposes to undertake optimization of existing DRI plant, Sinter plant and Coke Oven of existing Integrated Steel Plant of 3.6 MTPA and further expansion to 7.2 MTPA by addition of new sub-units at Villages Kalmi&Gorka District- Raigarh, Chhattisgarh. It is proposed to set up the expansion plant of 3.6 MTPA based on BF-BOF route.

11.12.3 The existing project was accorded Environmental Clearance by MoEF&CC vide letter no. J-11011/799/2008-IA.II(I) dated 4/11/2009. Thereafter, EC was amended from time to time, the last being through letter no. J-11011/799/2008-IA.II(I) dated 29.04.2016. Consent to Operate renewed by Chhattisgarh Environment Conservation Board (CECB) on 06.10.2018 and is valid up to 31.12.2019.

11.12.4 The status of implementation of facilities envisaged in the existing EC is given as below:

Sl. No.	Plant	Capacity as per EC	Operation status as on day
1	DRI I	0.6 MTPA	0.6 MTPA
2	DRI II	0.72 MTPA	0.72 MTPA
3	Coke Oven	0.8 MTPA	0.8 MTPA
4	Sinter Plant	2.85 MTPA	2.85 MTPA
5	Blast Furnace I	0.8 MTPA*	0.525 MTPA*
6	Blast Furnace II	2.25 MTPA*	1.60 MTPA*
7	SMS I SMS II SMS III	1.25 MTPA 1.1 MTPA 1.25 MTPA	1.25 MTPA 1.1 MTPA 1.25 MTPA
8	Rail and Universal Beam Mill (RUBM)	0.75 MTPA	0.75 MTPA
9	Plate Mill	1.0 MTPA	1.0 MTPA
10	Medium and Light Structural Mill (MLSM)	0.7 MTPA	0.7 MTPA
11	Lime-Dolime Kiln	0.4165 MTPA	0.4165 MTPA
12	Ferro Alloys Plant	0.06 MTPA	0.06 MTPA
13	Producer Gas Plant	79200 Nm^3/hr	79200 Nm^3/hr
14	Oxygen Plant	37683 Nm^3/hr	37683 Nm^3/hr
15	Captive Power Plant	353.6 MW	299 MW

** CTE has been obtained. Applied for CTO and awaited for full capacity of 0.8 & 2.25 MTPA, respectively.*

11.12.5 The proposed expansion will be undertaken at Villages Kalmi and Gorka, District-Raigarh, Chhattisgarh.

11.12.6 The land required for the proposed plant expansion is 163.2 Ha. out of which 16.039 Ha is Forest land, 0.999 Ha was Government land and remaining 146.162 was agricultural private land. The entire land including forest land has been acquired for the project. Of the total land including expansion project, 33% land will be used for green belt development.

11.12.7 The expansion project site co-ordinates are furnished as below:

Coordinate No.	Latitude (N)	Longitude(E)	Coordinate No.	Latitude (N)	Longitude(E)
1	21º55’15.04”	83º21’29.08”	7	21º54’37.51”	83º22’24.70”
2	21º55’10.78”	83º21’40.32”	8	21º54’15.78”	83º21’59.62”
3	21º55’1.19”	83º21’53.22”	9	21º54’28.54”	83º21’42.31”
4	21º54’47.24”	83º22’31.47”	10	21º54’36.99”	83º21’48.01”
5	21º54’48.05”	83º22’11.06”	11	21º54’44.00”	83º21’29.00”
6	21º54’44.06”	83º22’8.56”	12	21°54'37.49"	83°21'26.84" E
13	21°54'47.53"	83°21'12.17"			

11.12.8 There is no National Park/ Wildlife Sanctuary, etc. within the core and buffer zone of the project. The area does not form part of any corridor for Schedule- I fauna.

11.12.9 Total project cost is approximately Rs. 10613 Crores. Employment generation from the proposed project will be 8250 (both direct and indirect employment).

11.12.10 The targeted production capacity of the existing project will remain unchanged after proposed optimization i.e. 3.6 MTPA and targeted total production from existing & expansion project will be 7.2 MTPA. The iron ore for the expansion plant would be procured through auction/ linkages from Odisha& Chhattisgarh. The ore transportation will be done through rail.

11.12.11 The proposed capacity for different products will be:

S. No	Plant	Capacity as per EC	Proposed additional	Total	Units
1.	DRI	1.32	0.13	1.45	MTPA
2.	Coke Oven I	0.8	0.1	0.9	MTPA
	Coke Oven II (New)	-	2.0	2.0	MTPA
	Total	0.8	2.1	2.9	MTPA
3.	Sinter Plant I	2.85	0.3	3.15	MTPA
	Sinter Plant II (New)	-	5.0	5.0	MTPA
	Total	2.85	5.3	8.15	MTPA
4.	Blast Furnace I	0.8	-	0.8	MTPA
	Blast Furnace II	2.25	-	2.25	MTPA
	Blast Furnace III (New)	-	3.6	3.6	MTPA
	Total	3.05	3.6	6.65	MTPA
5.	SMS I	1.25	-	1.25	MTPA
	SMS II	1.1	-	1.1	MTPA
	SMS III	1.25	-	1.25	MTPA
	SMS IV (BOF) (NEW)	-	3.6	3.6	MTPA
	Total	3.6	3.6	7.2	MTPA
6.	Product mills				

S. No	Plant	Capacity as per EC	Proposed additional	Total	Units
	Rail and Universal Beam Mill (RUBM)	0.75	-	0.75	MTPA
	Plate Mill	1.0	-	1.0	MTPA
	Medium and Light Structural Mill (MLSM)	0.7	-	0.7	MTPA
	Rolling Mills (CSP) (New)	-	3.0	3.0	MTPA
	Total	2.45	3.0	5.45	MTPA
6.	Lime-Dolime plant I	0.4165	-	0.4165	MTPA
	Lime-Dolime plant II (New)	-	0.5	0.5	MTPA
	Total	0.4165	0.5	0.9165	MTPA
7.	Submerged Arc Furnace (SAF)	0.06	-	0.06	MTPA
8.	Producer Gas Plant	79200	-	79200	Nm^3/hr
9.	Oxygen Plant I	37683	-	37683	Nm^3/hr
	Oxygen Plant II (New)	-	87500	87500	Nm^3/hr
	Total	37683	87500	125,183	Nm^3/hr
10.	Captive Power Plant	353.6	-		MW

11.12.12 The salient features of the proposed expansion project are given as below:

Parameters	Existing Plant	Proposed Expansion	Total
Villages	Patrapali, Saraipali, Chirraipani	Kalmi&Gorka	5 villages as mentioned
District, State	District Raigarh, Chhattisgarh		
Total Area, ha	774.18	163.20	937.38
Product	Steel		
Rated capacity	3.6 MTPA	3.6 MTPA	7.2 MTPA
Manpower, persons	10,150	8,250	18,400
Estimated Cost (in Rupee crores)	15,000 (approx.)	10,813	-
Completion period	Installation of all units complete as on date	48-60 Months from zero date*	-
Fresh Water requirement	2652 m^3/hr	1155 m^3/hr	3807 m^3/hr
Fresh water source	Mahanadi &Kelo river	Mahanadi river	--

Power requirement	380 MW	200 MW	580 MW
Power source	CaptivePowerPlant at ISP Raigarh and at Dongamahua, Tehsil Tamnar, Raigarh		

11.12.13 Proposed additional raw material and fuel requirement (with approximate quantities) for the project are: Iron ore fines (3.89 MTPA), Pellets (1.97 MTPA), coking coal (2.96 MTPA), limestone (0.70 MTPA), dolomite (0.35 MTPA) and pulverized coal (0.84 MTPA).

11.12.14 Water consumption for the proposed project will be 1155 cum/hr. The entire wastewater generated will be treated and reused within the plant. Zero liquid discharge would be adopted.

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

11.12.16 Name of consultant: Min Mec Consultancy Private Limited, New Delhi. MinMec 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.

Observations of the Committee:

11.12.17 The Committee observed that as per the information submitted by the project proponent, the existing facilities for which EC was granted in 2009 are all operational. Further, noted that the canal will not be diverted.

Recommendations of the Committee:

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

i. The canal will not be diverted. Part of the canal will be covered and balance length will have culverts with landscaping on both sides.

ii. Cumulative impact of existing units and proposed expansion shall be carried out.

iii. Briquetting of dust for recycling shall be carried out.

iv. Action plan for 100% solid waste utilization shall be furnished.

v. No ground water drawl is permitted for the existing as well as proposed expansion. Additional 1150 m^3/hr required for the expansion shall be entirely sourced from Mahanadi river as stated.

vi. CDQ will be installed for the existing and the proposed Coke Oven plant as the limiting capacity for installation of CDQ is 0.8 MTPA.

vii. Report from Regional Office of MoEF&CC on existing all ECs shall be submitted.

viii. Action plan for transportation of materials by rail only shall be furnished.

ix. Particulate matter emission from the APCD shall be less than 30mg/Nm^3.

x. BOD plant shall be installed and ZLD would be maintained for the entire complex inclusive of ZLD for coke oven plant in isolation.

xi. Prediction of air quality for the proposed activity shall be carried out involving terrain features of the study area, atmospheric inversions and background levels of air quality. Further, DEM model shall be used for AAQ modeling.

xii. Noise quality modeling shall be carried out.

xiii. Secondary fume extraction system for converters in SMS shall be provided.

xiv. Gas holders shall be included for Blast Furnace, Coke Oven and SMS.

xv. New blast furnace shall be equipped with TRT, stove heat recovery system, cast house fume extraction, stock house de-dusting facility and dry gas cooling system.

xvi. Detailed hydrogeological studies which include aquifer mapping and estimation of ground water quality shall be carried out.

11.13 Proposed expansion of existing Steel Plant by installation of 2x350 TPD DRI Kilns, 2x20 T and 2x16.5 T Induction Furnaces & 1x30 T Electric Arc Furnace with matching LRF & CCM, 10,000 TPA capacity Galvanization Plant along with 26 MW Captive Power Plant (16 MW WHRB + 10 MW AFBC) of **M/s. N.N Ispat Private Limited** located at village: Diwandighi, P.O. &Mouza: Mirzapur, Palitpur Road, P.S. & **District: Purba Burdwan, West Bengal** - [Online Proposal No. IA/WB/IND/117517/2019, File No. J-11011/280/2012-IAII(I)]– **Prescribing of Terms of Reference (ToR)** – regarding

11.13.1 M/s. N.N Ispat Private Limited has made application vide online proposal no. IA/WB/IND/117517/2019 dated 10/09/2019 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 & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

11.13.2 M/s. N. N. Ispat Pvt. Ltd. proposes an expansion of existing Steel Plant by installation of another (2x20 T + 2x16.5 T) Induction Furnaces & 1x30 T Electric Arc Furnace with matching LRF &CCM to produce 5,49,000 TPA billets, 2x350 TPD DRI Kilns to produce 2,10,000 TPA Sponge Iron, Galvanization Plant to produce 10,000 TPA Galvanised Product along with 26 MW capacity Captive Power Plant (16 MW WHRB + 10 MW AFBC) within the existing plant premises at village: Diwandighi, P.O. &Mouza: Mirzapur, Palitpur Road, P.S. & District: Purba Burdwan, West Bengal.

11.13.3 The existing as well as proposed capacity for different products is given as below:

Name of the Units	**As per EC dated 5-2-2015**		**Proposed units**	**Total Units**
	Units under operation	**Units not implemented**		
Sponge Iron Plant	-	-	2x350 TPD DRI Kilns	2x350 TPD DRI Kiln

Name of the Units	**As per EC dated 5-2-2015**		**Proposed units**	**Total Units**
	Units under operation	**Units not implemented**		
			(2,10,000 TPA Sponge Iron)	(2,10,000 TPA Sponge Iron)
Induction Furnaces with matching LRF & CCM	2x8 T + 2x15T (1,38,000 TPA Billets)	-	2x20 T + 2x16.5 T (2,16,000 TPA Billets)	2x8 T, 2x15 T, 2x20 T & 2x16.5 T (3,54,000TPA Billets)
Electric Arc Furnace	-	-	1x30 T (1,95,000 TPA Billets)	1x30 T (1,95,000 TPA Billets)
Rolling Mill	1,20,000 TPA Structural Steels (Angels, Channels, TMT etc.)	-	-	1,20,000 TPA Structural Steels (Angels, Channels, TMT etc.)
Galvanising Plant	-	-	10,000 TPA Galvanized Product	10,000 TPA Galvanized Product
Ferro Alloy Plant	-	2x9 MVA Submerged Arc Furnaces (Ferro Manganese - 20,460 TPA or Silico Manganese - 14,850 TPA or Ferro Silicon - 6,600 TPA)	-	2x9 MVA Submerged Arc Furnaces (Ferro Manganese - 20,460 TPA or Silico Manganese - 14,850 TPA or Ferro Silicon - 6,600 TPA)
Foundry Consisting of Cupola Furnace	-	2x5 T (21,500 TPA Cast Iron)	-	2x5 T (21,500 TPA Cast Iron)
Induction Furnace	-	2x3 T (18,000 TPA Ductile Iron)	-	2x3 T (18,000 TPA Ductile Iron)

Name of the Units	As per EC dated 5-2-2015		Proposed units	Total Units
	Units under operation	Units not implemented		
Green Sand Plant	-	2x20 TPH (72,000 TPA Mould)	-	2x20 TPH (72,000 TPA Mould)
Sand Reclamation Plant	-	2x10 TPH (80,000 TPA fresh sand)	-	2x10 TPH (80,000 TPA fresh sand)
Captive Power Plant	-	-	26 MW CPP (16 MW WHRB + 10 MW AFBC)	26 MW CPP

11.13.4 The existing project was accorded environmental clearance vide F. No. J-11011/280/2012 - IA II (I) dated 5-2-2015 from MoEF&CC, New Delhi. Chronology of the existing clearances (EC, NOC & CTO) obtained are presented as below.

Permissions Obtained	Memo No.	Date of Issue	Name of Units	Obtained from
Consent to Establish (NOC)	9599-2N-33 5/2004	30.11.2004	• Induction Furnaces (IFs) - 2x8T	West Bengal Pollution ControlBoard (WBPCB)
Environmental Clearance (EC)	F.No. J-11011/ 280 /2012-IAII(I)	05.02.2015	• Induction Furnaces (IFs) - 2x15 T - 90,000 TPA Liquid steel • LRF - 90,000TPA Liquidsteel • Continuous Casting Machine (CCM) - 90,000 TPABillets • Rolling Mill - 1,20,000 TPA Structural steels (Angles, Channels, TMT, etc.) • Ferro Alloy Plant (2x9 MVA Submerged Arc Furnaces) - Fe-Mn : 20,460 TPA, Si-Mn : 14,850 TPA, Fe-Si : 6,600 TPA • Foundry consisting of Cupola Furnace(2x5 T) - 21,500 TPA Cast Iron	MoEF&CC

Permissions Obtained	Memo No.	Date of Issue	Name of Units	Obtained from
			• Green Sand Plant (2x20 TPH) - 72,000 TPA Mould • Sand Reclamation Plant (2x10 TPH) - 80,000 TPA fresh sand	
Consent to Establish (NOC)	281-2N-11/ 2011(E)	16.04.2015	• Induction Furnaces (IFs) with matching LRF & CCM - 2x15 T (7500 TPM of MS Billets) • Rolling Mill - 10,000 TPM Structural steels (Angles, Channels, TMT, etc.) • Ferro Alloy Plant (2x9 MVA Submerged Arc Furnaces) - Fe-Mn: 1705 TPM or Si-Mn: 1238 TPM or Fe-Si:	WBPCB

11.13.5 The proposed unit is located at Village: Diwandighi, P.O. &Mouza: Mirzapur, Palitpur Road, District: Purba Burdwan, West Bengal. The geographical co-ordinates are Latitude - 23°17'15.37"N to 23°17'27.19"N & Longitude - 87°52'19.14"E to 87°52'22.50"E.

11.13.6 The proposed expansion project will be installed on the available land within the existing plant premises, comprising of total 8.38 hectares (20.7 acres) as well on the additional land of total 10.24 hectares (25.3 acres) adjoining the existing plant premises. Thus, total land will be 18.62 hectares (46 Acres) and out of that 6.14 hectares (15.18 acres) land will be used for green belt development.

11.13.7 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. Ramnabagan Wildlife Sanctuary is around 4.0 km from the Project Site towards South direction.

11.13.8 Total project cost is approx. Rs. 138 Crores. Manpower, to the tune of 440 persons (120 permanent and 320 contractual) will be required for the plant operations.

11.13.9 The targeted production capacity of the proposed DRI Plant (2x350 TPD) is 2,10,000 TPA, proposed Induction Furnaces (2x20T & 2x16.5T) is 2,16,000 TPA Billets, proposed Electric Arc Furnaces (1x30T) is 1,95,000 TPA Billets, Proposed Galvanising Plant is 10,000 TPA Galvanised Product, & 26 MW capacity Captive Power Plant (16 MW WHRB + 10 MW AFBC) utilizing waste heat &dolochar from proposed Sponge Iron Plants. The raw material transportation will be done through Rail and road.

11.13.10 The estimated power requirement of the proposed expansion project is about 49.5 MW. The above power requirement for the plant is proposed to be met from proposed 26 MW captive power plant and from DVC / India Power.

11.13.11 Proposed raw materials and fuel requirement for major products of the project are as follows.

Raw Material	Quantity (in TPA)	Source	Mode of Transportation
2x350 TPD DRI Kilns :			
Iron Ore Fines / Pellet	3,15,000	Orissa	Rail / Road
Imported coal	2,10,000	Imported	Rail / Road
Dolomite	6,300	Local Market	Road
2x20T + 2x16.5T Induction Furnace :			
Sponge Iron	2,10,000	In House	-
Pig Iron	43,000	Local Market	Road
Scraps	34,500	Local Market	Road
Ferro Alloys	3,200	In House	-
1x30 T Electric Arc Furnaces :			
Sponge Iron	86,000	Local Market	Rail / Road
Pig Iron	18,000	Local Market	Road
Scraps	12,000	Local Market	Road
Ferro Alloys	1,300	In House	-
Captive Power Plant (10 MW AFBC) :			
Imported coal	63,000	Imported	Rail / Road
Dolochar	63,000	In house	-

11.13.12 The total requirement of make-up water to meet process make-up and drinking needs of the proposed new facilities will be around 515 m3/day including 20 m3/day for drinking, greenery and sanitary purpose, to be sourced Borewells. Domestic waste water will be treated in septic tank-soak pit system and industrial waste water generated will be treated in water treatment facility and reused completely.

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

11.13.14 Name of the consultant: M/s. Envirotech East Private Limited [S.No. 52, List of Accredited Consultant Organizations (Alphabetically) Rev. 80, September, 2019].

Observations of the Committee:

11.13.15 The Committee requested the project proponent to explore the possibility of higher configuration of induction furnace in place of smaller configuration. Accordingly, the project proponent has submitted the revised configuration which is given as below:

Name of the Units	**As per EC dated 5-2-2015**		**Proposed units**	**Total Units**
	Units under operation	**Units not implemented**		
Sponge Iron Plant	-	-	2x350 TPD DRI Kilns (2,10,000 TPA Sponge Iron)	2x350 TPD DRI Kiln (2,10,000 TPA Sponge Iron)
Induction Furnaces with matching LRF & CCM	2x8 T + 2x15 T (1,38,000 TPA Billets)	-	4x20 T (2,40,000 TPA Billets)	2x8 T, 2x15 T, 4x20 T (3,78,000TPA Billets)
Electric Arc Furnace	-	-	1x30 T (1,95,000 TPA Billets)	1x30 T (1,95,000 TPA Billets)
Rolling Mill	1,20,000 TPA Structural Steels (Angels, Channels, TMT etc.)	-	-	1,20,000 TPA Structural Steels (Angels, Channels, TMT etc.)
Galvanising Plant	-	-	10,000 TPA Galvanised Product	10,000 TPA Galvanised Product
Ferro Alloy Plant	-	2x9 MVA Submerged Arc Furnaces (Ferro Manganese - 20,460 TPA or Silico Manganese - 14,850 TPA or Ferro Silicon - 6,600 TPA)	-	2x9 MVA Submerged Arc Furnaces (Ferro Manganese - 20,460 TPA or Silico Manganese - 14,850 TPA or Ferro Silicon - 6,600 TPA)
Foundry Consisting of Cupola Furnace	-	2x5 T (21,500 TPA Cast Iron)	-	Dropped.
Induction Furnace	-	2x3 T (18,000 TPA	-	2x3 T (18,000 TPA

Name of the Units	As per EC dated 5-2-2015		Proposed units	Total Units
	Units under operation	Units not implemented		
		Ductile Iron)		Ductile Iron)
Green Sand Plant	-	2x20 TPH (72,000 TPA Mould)	-	2x20 TPH (72,000 TPA Mould)
Sand Reclamation Plant	-	2x10 TPH (80,000 TPA fresh sand)	-	2x10 TPH (80,000 TPA fresh sand)
Captive Power Plant	-	-	26 MW CPP (16 MW WHRB + 10 MW AFBC)	26 MW CPP

Further, the Committee observed that water requirement shall be met from surface water source instead of ground water.

Recommendations of the Committee:

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

i. Cumulative environmental impact assessment of existing and the current proposal under consideration shall be carried out and submitted.
ii. EIA study *inter alia* should include 'No ground water abstraction'.
iii. Traffic assessment study of materials shall be furnished.
iv. Scheme for ash handling system shall be furnished.
v. No dumping of fly ash is permitted.
vi. Details of galvanizing section including raw materials input and waste generation and disposal scheme shall be furnished.
vii. ZLD to be adopted.
viii. Particulate emission from the APCD shall be limited to less than 30 mg/Nm^3.
ix. Scheme for rain water harvesting shall be carried out to the extent of 200% of annual water consumption.

11.14 Proposed installation of Pellet Plant (0.6 MTPA), Sponge Iron Plant (2x350 TPD DRI kilns), Induction Furnaces (4x20 T) with matching LRF & CCM, Rolling Mill (0.25 MTPA) along with 26 MW capacity Captive Power Plant (16 MW WHRB & 10 MW AFBC based) of **M/s. AIC Metaliks Private Limited** at Jamuria Industrial Estate, Jamuria, **District – Paschim Burdwan, West Bengal** [Online Proposal No. IA/WB/IND/117709/2019, File No. IA-J-11011/274/2019-IA-II(I)] **– Prescribing of Terms of Reference (ToR) – regarding.**

11.14.1 **M/s. AIC Metaliks Private Limited** has made application vide online proposal no. IA/WB/IND/117709/2019dated 11/09/2019 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 & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

11.14.2 M/s. AIC Metaliks Private Limited is proposed for installation of Pellet Plant (0.6 MTPA), Sponge Iron Plant (2x350 TPD DRI Kilns), Induction Furnaces (4x20 T) with matching LRF & CCM, Rolling Mill (0.25 MTPA) along with 26 MW capacity Captive Power Plant (16 MW WHRB & 10 MW AFBC based) at Jamuria Industrial Estate, Jamuria, District – Paschim Burdwan, West Bengal.

11.14.3 The details of the proposed units along with its unit configuration is given as below:

Proposed Units	Units Capacity	Products
Pelletization Plant	6,00,000 TPA (Module: 1x6,00,000 TPA)	6,00,000 TPA Pellets
Sponge Iron Plant	700 TPD (2x350 TPD TPD)	2,31,000 TPA Sponge Iron
Induction Furnaces with matching LRF & CCM	4x20 T	2,60,000 TPA billets (2,64,000 TPA Liquid Steel)
Rolling Mill	2,50,000 TPA	2,50,000 TPA Structurals (Sheets, Angles, Channels, TMT Bars, Wires, Rods, Strips, Pipes)
Captive Power Plant	26 MW (16 MW WHRB based + 10 MW AFBC based)	26 MW Power

11.14.4 The proposed unit is located at Jamuria Industrial Estate, Jamuria, District: Paschim Burdwan, West Bengal. The geographical co-ordinates are Latitude 23°40'58.90"N to 23°41'13.19"N and Longitude 87° 5'47.01"E to 87° 6'8.50"E.

11.14.5 The proposed project will be located on a piece of vacant land measuring 19.27 hectares (47.62 acres), within Notified Jamuria Industrial Estate which is industrial in nature.

11.14.6 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.

11.14.7 Total project cost is approx. Rs. 353 Crores. Manpower, to the tune of 400 persons (150 permanent and 250 contractual) will be required for the plant operations.

11.14.8 The targeted production capacity of the Pellet Plant (0.6 MTPA) is 6,00,000 TPA Pellets, Sponge Iron Plant (2x350 TPD DRI Kilns) is 2,31,000 TPA Sponge Iron, Induction Furnaces (4x20T) with matching LRF & CCM is 2,60,000 TPA Billets (2,64,000 TPA liquid steel), Rolling Mill (0.25 MTPA) is 2,50,000 TPA Structurals (Sheets, Angles, Channels, TMT Bars, Wires, Rods, Strips, Pipes etc.) & 26 MW (16 MW WHRB + 10 MW AFBC) capacity Captive Power Plant utilizing waste heat & dolochar from proposed Sponge Iron Plants). The raw material transportation will be done through Rail and road.

11.14.9 The estimated power requirement of the proposed project is about 45.5 MW. The above power requirement for the plant is proposed to be met from proposed 26 MW captive power plant and rest from State Grid.

11.14.10 Proposed raw materials and fuel requirement for the project are as follows.

SL. NO.	RAW MATERIALS	ANNUAL REQUIREMENT (IN TPA)
PELLETIZATION PLANT (1X6,00,000 TPA)		
1.	IRON ORE FINES	7,20,000
2.	LIMESTONE	6,000
3.	BENTONITE	51,000
4.	COAL	24,000
DRI PLANT (2x350 TPD)		
1.	PELLET	3,46,500
2.	IMPORTED COAL	2,31,000
3.	DOLOMITE	6,930
INDUCTION FURNACES (4x20 T)		
1.	SPONGE IRON	2,31,000
2.	SCRAPS FROM MARKET	24,000
3.	PIG IRON	47,000
4.	FERRO ALLOYS	3,500
CAPTIVE POWER PLANT (10.0 MW BASED ON AFBC BOILER)		
1.	IMPORTED COAL	63,000
2.	DOLOCHAR	63,000

11.14.11 The total requirement of make-up water to meet process make-up and drinking needs of the proposed new facilities will be around 743 m^3/day including 18 m^3/day for drinking, greenery and sanitary purpose, to be sourced ADDA Supply System. Domestic waste water will be treated in septic tank-soak pit system and industrial waste water generated will be treated in water treatment facility and reused completely.

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

11.14.13 Name of the consultant: M/s. Envirotech East Private Limited [S.No. 52, List of Accredited Consultant Organizations (Alphabetically) Rev. 80, September, 2019].

Observations and Recommendations of the Committee:

11.14.14 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA study in addition

to the generic ToR enclosed at **Annexure I read with additional ToRs at Annexure-2:**

i. EIA study *inter alia*s should include 'No ground water abstraction'.
ii. Traffic assessment study of materials shall be furnished.
iii. Scheme for ash handling system shall be furnished.
iv. No dumping of fly ash is permitted.
v. ZLD to be adopted
vi. Particulate emission from the APCD shall be limited to less than 30 mg/Nm^3.
vii. Scheme for rain water harvesting to the extent of 200% of annual consumption shall be furnished.

11.15 Expansion of Ferro Alloys unit with 5x9 MVA submerged electric arc furnaces (Si-Mn- 84,474 TPA, Fe-Mn - 1,03,958 TPA) and Captive Power Plant of 62 MW (including existing 12 MW power plant) by **M/s. MSP Sponge Iron Limited** located at village Manuapalli, Tehsil & D**istrict Raigarh, Chhattisgarh** [Online Proposal No. IA/CG/IND/115232/2019, File No. J-11011/178/2010-IA. II(I)] **– Extension of validity of Environmental Clearance – regarding.**

Project proponent vide e-mail dated 25/09/2019 expressed their inability to participate in the meeting and requested to consider the proposal in the next EAC meeting. After detailed deliberations, the Committee decided to consider the proposal in the next EAC meeting.

11.16 Proposed sponge iron and steel plant along with WHRB and FBC Captive Power Plant (12MW) (Sponge Iron 1,20,000 TPA, Liquid steel: 1,25,000 TPA, through induction furnace and 1,25,000 TPA through ladle furnace, Billets 1, 20,000 TPA) by **M/s. AIC Iron Industries Limited** located at village Benipur, **District Purulla, West Bengal** [Online Proposal No. IA/WB/IND/116489/2019, File No. J-11011/566/2008-IA. II(I)] **– Amendment in Environmental Clearance change in configuration of DRI from 4x100 TPD to 1x350 TPD – regarding.**

11.16.1 M/s AIC Iron Industries Pvt. Limited made an application vide online proposal no. IA/WB/IND/116489/2019 dated 3/9/2019 sought amendment in the environmental clearance accorded by the MoEF&CC, vide letter no. J-11011/566/2008-IA II(I) dated 27/08/2010 change in configuration of DRI from 4x100 TPD to 1x350 TPD.

Observations of the Committee:

11.16.2 The Committee noted that the validity period of the Environmental Clearance had already lapsed on 26/08/2017 and EC validity extension has not been obtained from the Ministry.

11.16.3 The committee felt that proposal presented by M/s. Envirotech East Private Limited has concealed the information related to the validity period of the EC. Earlier also, EAC has raised concern on such similar issue with the same consultant in its 9th meeting held on 30-31st July, 2019 wherein EAC advised MoEF&CC to refer the matter to QCI/NABET, in case of no improvement from the consultant. Therefore, EAC advised MoEF&CC to refer the matter to QCI/NABET as the consultant is repeatedly misleading the EAC and the Ministry. Further, it appears that consultant does not possess the expertise in the field of metallurgical industries.

Recommendation of the Committee:

11.16.4 In view of the foregoing and after detailed deliberations, the Committee rejected the proposal cited above as the validity period of the EC dated 27/08/2010 has already been lapsed.

11.16.5 The Committee also recommended to refer the matter to QCI/NABET for cancellation of accreditation status of M/s. Envirotech East Private Limited in respect of metallurgical industries as the consultant has deliberately concealed the information pertaining to the validity period of the EC and mislead the EAC as well the Ministry with an intention to obtain amendment in EC by furnishing false information.

The 11th meeting of the EAC concluded with above discussions.

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ANNEXURE –1

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

1. Executive Summary
2. Introduction
   - i. Details of the EIA Consultant including NABET accreditation
   - ii. Information about the project proponent
   - iii. Importance and benefits of the project

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

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

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

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

6. **Environmental Status**

i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
ii. AAQ data (except monsoon) at 8 locations for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.
vi. Ground water monitoring at minimum at 8 locations shall be included.
vii. Noise levels monitoring at 8 locations within the study area.
viii. Soil Characteristic as per CPCB guidelines.
ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
xi. Socio-economic status of the study area.

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

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.
iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.
vi. Measures for fugitive emission control
vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
xii. Action plan for post-project environmental monitoring shall be submitted.
xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. **Occupational health**

i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre-designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.
iii. Annual report of health status of workers with special reference to Occupational Health and Safety.
iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

9. **Corporate Environment Policy**

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

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

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

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

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11. Corporate Environment Responsibility (CER)

i. To address the Public Hearing issues, an amount as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 amounting to Rs. .....crores, shall be earmarked by the project proponent, towards Corporate Environment Responsibility (CER). Distinct CER 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 CER 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 CER 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).

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

i. All documents shall be properly indexed, page numbered.

ii. Period/date of data collection shall be clearly indicated.

iii. Authenticated English translation of all material in Regional languages shall be provided.

iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.

v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.

vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report

vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.

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

ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCBshall 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.

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ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

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

ADDITIONAL ToRS FOR PELLET PLANT

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

ADDITIONAL ToRs FOR CEMENT INDUSTRY

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

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

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

ADDITIONAL ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

ADDITIONAL ToRs FOR COKE OVEN PLANT

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

ADDITIONAL ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

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

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

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

Executive Summary

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

i. Project name and location (Village, Dist, State, Industrial Estate (if applicable)

ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.

iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)

iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.

v. Measures for mitigating the impact on the environment and mode of discharge or disposal.

vi. Capital cost of the project, estimated time of completion

vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest, eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)

viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population

ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.

x. Likely impact of the project on air, water, land, flora-fauna and nearby population

xi. Emergency preparedness plan in case of natural or in plant emergencies

xii. Issues raised during public hearing (if applicable) and response given

xiii. CSR plan with proposed expenditure.

xiv. Occupational Health Measures

xv. Post project monitoring plan

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LIST OF PARTICIPANTS IN 10th MEETING OF EAC (INDUSTRY-I) HELD ON 22 - 23 AUGUST, 2019

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE	
			22nd Aug, 2019	23rd Aug, 2019
1	Dr. Chhavi Nath Pandey, IFS(Retired) Email: pandeychhavinath55@gmail.com	Chairman		
Members				
2.	Dr. A. K. Dixit, Representative of Central Pulp and Paper Research Institute, Saharanpur.	Member		Absent
3.	, Representative of Indian Meteorological Department, New Delhi.	Member	Absent	Absent
4.	Dr. G. Bhaskar Raju Email: gbraju55@gmail.com	Member	Absent	Absent
5.	Dr. Jagdish Kishwan, IFS (Retd.) Email: jkishwan@gmail.com	Member	22 Aug 2019	23 Aug 2019
6.	Dr. G.V. Subramanyam Email: sv.godavarthi@gmail.com	Member	22/8/19	23/8/19
7.	Shri. Ashok Upadhyaya Email: ahupadhy@rediffmail.com	Member	22/8/19	23/8/19
8.	Shri. R.P. Sharma Email: rpsh3@hotmail.com	Member		
9.	Shri. Sanjay Deshmukh Email: docsvd@yahoo.com	Member	Absent	

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE	
			22nd Aug, 2019	23rd Aug, 2019
10.	Prof. S.K. Singh Email: sksinghdee@gmail.com **singhsk@email.com**	**Member**	Absent	Absent
11.	Dr. R. Gopichandran Email: r.gopichandran@vigyanprasar.gov.in	**Member**	Absent	Absent
12.	Shri. Jagannath Rao Avasarala Email: avasaralajagan@gmil.com	**Member**	Absent	Absent
13	Shri. J.S. Kamyotra Email: kamyotra@yahoo.co.in	**Member**	JSKamyotra 22/8/19	JSKamyotra 23/8/19
14.	Shri. Aravind Kumar Agrawal Director, MoEF&CC Email: dirind-moef@gov.in	**Member Secretary**		

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