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

SUMMARY RECORD OF THE THIRTY FOURTH (34TH) MEETING OF EXPERT APPRAISAL COMMITTEE HELD DURING 6TH TO 7TH AUGUST 2018 FOR ENVIRONMENTAL APPRAISAL OF INDUSTRY-I SECTOR PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The thirty third meeting of the Expert Appraisal Committee (EAC) for Industry-I Sector as per the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-I Sector Projects was held during **6th to 7th August 2018** in the Ministry of Environment, Forest and Climate Change. The list of participants is annexed.

34.1 After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

34.2 Confirmation of the Minutes of the 33rd Expert Appraisal Committee (Industry-1) held during 9th – 11th July, 2018.

33.5 Integrated Cement Plant [Clinker 1.98 MTPA; Cement: 5.0 MTPA CPP: 20 MW; WHRB: 8 MW] and Lime Stone Mine [4.8 MTPA, 267.695 Ha and 281.339 Ha] at Malpuri Khurd Village, Dist. Durg, Chhattisgarh by **M/s JK Laxmi Cement Limited** - Amendment in Environmental Clearance for change in configuration of Clinker production of 1.5 Million TPA to 1.98 Million TPA through Up-gradation and Optimization in Phase-I under the provisions of 7(ii) of EIA Notification.

At Sl. No. 3 of table given under para 4 may be read as

For	Read as
Mine 2.4 Million TPA	Mine 4.8 Million TPA

6th August 2018

34.3. Integrated Steel Plant (1.2 MTPA) with 225 MW CPP Mouza – Nandarchak (J.L. No. 124), Bargai (J.L No. 197) & Kanjarichak (J.L. No-125) at Village – Gokulpur, P.O – Shyamraipur, P.S – Kharagpur(L), Dist. Paschim Mednipur, West Bengal by M/s Orissa Metaliks Private Limited Online proposal No. IA/WB/IND/64050/2017; MoEFCC File No. J-11011/169/2017-IA.II(I)] – Environmental Clearance.

M/s Orissa Metaliks Private Limited made online application vide proposal no. **IA/WB/IND/64050/2017** dated 19th July 2018 along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

Details submitted by the Project Proponent

2.0 The proposed **Integrated Steel Plant (1.2 MTPA) with 225 MW Captive Power Plant** of **M/s Orissa Metaliks Private Limited**, is located at Mouza- Nandarchalk (J.L. No.-124), Bargai (J.L. NO-197) & Kanjarichak (J.L. No-125), Village Gokulpur, Post Office Shyamraipur, District Paschim Mednipur, West Bengal was initially received in the Ministry on 19th April 2017 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 18th meeting held on 3rd-5th May, 2017 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 22nd May 2017& 19th April 2018 vide Ref. File No J-11011/169/2017-IA.II (I).

3.0 The project of M/s Orissa Metaliks Private Limited located in Gokulpur Village , P.O. Shyamraipur, P.S. Kharagpur (L), West Medinipur District, West Bengal State is for setting up of a new Integrated Steel Plant of 1.2 million tons per annum (million TPA) with 225 MW CPP using standard and proven down grade technology for production of Hot Metal/Pig Iron, Sinter, Sponge Iron, Billets, Ferro Alloys, Fe-Cr Briquette, Coke, Lime & Dolomite, Oxygen, H.R. Coils, Plates (Checkered or Flat)/ TMT Bar, Wire Rod & Wire/ Structural long product like-Angel, Channel & Beam , Galvanized Sheet/ Plate / Coils, Flat Sheet/ Checkered Sheet, Strip & Nail, DI Pipe, Power, Iron ore Pellet, Iron Ore Concentrate, Producer Gas. The proposed capacity for different products for new site area as below:

Sl. No.	**Name of the Unit**	**Capacity**	**Production**	**Product**
1.	Blast Furnace	2 x 550 m^3	1.0 Million T.P.A	Hot Metal / Pig Iron
2.	Sinter	1 x 175 m^2	1.0 Million T.P.A	Sinter
3.	DRI	2 x 500 TPD + 2 x 350 TPD	0.5 Million T.P.A	Sponge Iron
4.	Steel Making Facilities - Induction Furnace - Electric Arc Furnace with matching LRF and oxygen optimized furnace	- 10 x 20 T IF - 2 x 50 T EAF	1.0 Million T.P.A	Billets
5.	Ferro Alloy Plant	10 x 9 MVA	0.12 Million T.P.A	Ferro Alloys
6.	Fe-Cr Briquette Manufacturing plant	1 x 40 TPH	40 ton/hr	Fe-Cr Briquette
7.	Non-recovery type Coke Oven Plant	2 x 0.25 MTPA	0.5 Million T.P.A	Coke
8.	Lime Dolomite Plant	1 x 200 TPD	200 TPD	Lime & Dolomite
9.	Oxygen Plant	1 x 200 TPD	200 TPD	Oxygen
10.	Hot Rolling Mill	0.6 Million T.P.A	0.6 Million T.P.A	H.R. Coils, Plates (Checkered or Flat)/ TMT Bar, Wire Rod & Wire/ Structural

				long product like- Angel, Channel & Beam
11.	Cold Rolling Plant with Pickling Line & Continuous Galvanizing	0.35 Million T.P.A	0.35 Million T.P.A	Galvanized Sheet/ Plate / Coils, Flat Sheet/ Checkered Sheet, Strip & Nail
12.	Ductile Iron Pipe Unit	0.2 Million T.P.A	0.2 Million T.P.A	DI Pipe
13.	Captive Power Plant	225 MW [WHRB Based 90 MW (54 MW from DRI Plant+ 34 MW from Coke Oven Plant + 2 MW from EAF + CFBC (Coal & Dolochar Mix based) 3 x 45 MW]	225 MW [WHRB Based 90 MW (54 MW from DRI Plant+ 34 MW from Coke Oven Plant + 2 MW from EAF + CFBC (Coal & Dolochar Mix based) 3 x 45 MW]	Power
14.	Pellet Plant	2 x 1.2 MTPA	2.4 MTPA	Iron ore Pellet
15.	I/O Beneficiation Plant	2 x 1.2 MTPA	2.4 MTPA	Iron Ore Concentrate
16.	Producer Gas Plant	20 x 7,500 $N.m^3/hr$	1,50,000 Nm^3/hr	Producer Gas

4.0 The total land required for the project is 125.45 ha which is grazing land. No forestland involved. Out of the 125.45 ha of land, 96.32 ha of land is in possession by M/s Orissa Metaliks Private Limited and for rest of the land consent has been obtained from private rayat. The river Kangsabati passes at a distance of 4.5 km from the project site. Modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lie between Latitude 22°21'39.58"N to 22°22'13.00"N & Longitude 87°17'54.24"E to 87°18'28.60"E in Survey of India toposheet No. 73 N/7 at an elevation of 33.5m AMSL. The depth of water as measured in the open wells is between 11 and 12 feet below the land surface. The water occurring in deeper zones is under pressure and is reported usually to rise by 25 to 30 feet below the land surface. The total thickness of the aquifer in the study area varies from 3.1 m to 17.1 m.

6.0 No National park/Wild life sanctuary/Biosphere reserve/tiger reserve/Elephant reserve is reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule – I fauna. The authenticated list of flora and fauna provided through theChapter-3.0, Section-3.12 reporting presence of flora and fauna in the study area.

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

Sr. No.	Raw Materials	Source of Raw Materials	Mode of Transportation	Distance from Project Site (Km)	Estimated Quantity (in TPA)
1	Iron Ore Lump	Barbil-Joda, Orissa	Rail/ Road	201	1,55,000
2	Iron Ore Fines	Barbil-Joda, Orissa	Rail/ Road	201	37,00,000
3	Non-cooking Coal	E-Auction or Imported	Rail/ Road	--	17,21,125
4	Cooking Coal	Purchased from BCCL, Dhanbad Alternate source: Imported	Rail/ Road	177	6,70,000
5	Dolomite	From Birmitrapur, Orissa / Bilaspur, CG	Rail/ Road	264/541	1,08,375
6	Limestone	From Birmitrapur, Orissa / Bilaspur, Raipur CG / Katni MP	Rail/ Road	264/541	2,42,023
7	Manganese Ore	Captive mines in Balaghat, Orissa, M.P	Rail/ Road	719	3,12,000
8	Chromium Ore	Jajpur, Orissa	Rail/ Road	202	2,64,000
8	Quartzite	From Belpahar Orissa / / Bilaspur, Raipur CG	Rail/ Road		4,38,125
9	Inoculants	Local Market	Road	<150	192
10	Magnesium	Local Market	Road	<150	340
11	Runner Coat	Local Market	Road	<150	1022
12	Slag Coagulant	Local Market	Road	<150	277
13	Zinc	Local Market	Road	<150	378
14	Bitumen Solution	WRAS* Approved Vendor	Rail/ Road	<150	841 KL/Year
15	Epoxy Paint	WRAS* Approved Vendor	Rail/ Road	<150	200 KL/year

8.0 Solid Waste Management for 1.2 MTPA I.S.P with 225 MW CPP is as follows:

Sl. No.	**Type**	**Quantity in Tons/Year**	**Utilization**
1.	Slag from MBF	6,73,000	To be used for Cement Making.
2.	DoloChar from DRI Plant	1,75,000	To be used in proposed CFBC Boilers.
3.	Slag from SMS (IF & EAF)	1,09,083	To be used for Road construction / Land filling purpose, Paver Block Making after

			recovering metal from Slag Crushing unit
4.	Slag from Ferro Alloys Plant	1,50,000	➢ Slag generated during Ferro Manganese production will be used as a raw material for Silico Manganese production. ➢ Slag generated during Silico Manganese production will be used for road construction / land filling. ➢ After maximum recovery of Chrome, Ferro chrome slag after undergoing TCPL Test will be used in green concreting.
5.	Core Sand And Slag from DIP	5429	To be used for Road construction / Land filling purpose
6.	Cement Slurry	572	To be used for Brick making and also in Captive Cement Plant
7.	Bottom Ash	5,44,916	To be used for Road construction / Land filling purpose
8.	Dust from APC Devices	2,86,220	Used in Sinter Plant and also for Brick Manufacturing Zinc Dust will be sold to PCB certified Paint manufacturer.
9.	Tar Sludge from Producer gas plant	14,400	Sold to WBPCB authorized vendor
10.	Miss Roll/ End Cuts	50,000	To be used in Proposed S.M.S Plant.
11.	Fly Ash	3,01,860	To be used for Cement Making.

9.0 The targeted production capacity of the Integrated Steel Plant is 1.2 million TPA. The ore for the plant would be procured from Rungta Mines (linkages). The ore transportation will be done through rail/road.

10.0 The daily make up water requirement for the entire project as mentioned in the EC is 26,592 KLD. The raw water will be sourced mainly from the supply system of Kharagpur Municipality & Kansabati River and partially from Bore Wells. Already project proponent has obtained recommendation / Single window clearance by West Bengal Industrial Development Corporation for use of 27912 KLD water. Apart from that permission/consent for use of 12,650 KLD water from Kharagpur Municipality (12,000 KLD) & SWID (650 KLD) is obtained by Project Proponent

11.0 The power requirement of the project is estimated as 334.8 MW, out of which 225 MW will be obtained from proposed Captive Power Plant and the remaining109.8 MW power will be obtained from WBSEDCL.

12.0 Baseline Environmental Studies were conducted during summer season i.e., from Oct, 2017 to Dec, 2017. Ambient air quality monitoring has been carried out at 8 locations and the data submitted indicated: PM_{10} (70.7µg/m^3 to 82.0µg/m^3), $PM_{2.5}$ (29.1µg/m^3 to 37.2µg/m^3), SO_2

(8.6µg/$m^3$to 18.1µg/m^3) and NOx (20.3µg/$m^3$to 29.3µg/m^3). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 12.52 µg/m^3(SW direction), 4.88 µg/m^3 (SW direction)and 3.37 µg/m^3(SW direction), with respect to the PM, SO_2 and NOx.

13.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.1 to7.5, Total Hardness: 180 to 212 mg/l, Chlorides: 75 to 99mg/l, Sulphate: 8to 16mg/l, Nitrate: 2.2 to 4.2 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 10 locations – 2 **Kangsabati** river water samples and 8 pond water samples. For **Kangsabati** River water, pH: 7.3 to 7.4; DO: 6.8 to 6.9 mg/l and BOD: 4 to 6 mg/l. For 8 pond water samples, pH: 6.7 to 7.4; DO: 5.7 to 6.3 mg/l and BOD: 4 to 8 mg/l.

14.0 Noise levels are in the range of 55.7 – 68.2 dBA for daytime and 49.0 – 57.7 dBA for nighttime.

15.0 It has been reported that there are 6,38,918 people in the study area. R&R Action Plan is presented in Annexure-7-III in the EIA Report. It has been envisaged that 95 families to be rehabilitated, which will be provided compensation and preference in the employment.

16.0 It has been reported that a total of 23,10,480 TPA of waste will be generated due to the project, out of which 975432 TPA will be used in cement making, 175000 TPA Dolochar will be used in proposed CFBC Boilers, 809428 TPA slag from SMS, Ferro, DIP will be used in road construction/land filling purpose/ brick making, 286220 TPA dust from APC device will be used in Sinter Plant, 50,000 TPA end cuts miss rod from rolling mill to proposed SMS and Tar Sludge and Zn dust will be sold to WBPCB authorized vendors.

17.0 The Public hearing of the project was held on 27th July 2018 at Mahasakti Mahasangha, Salkui, P.O. Malkalpur near B.D.O. office), Kharagpur-1, Distt. Paschim Mednipur, West Bengal under the chairmanship of Mr. S.K Meena, I.A.S, Additional District Magistrate (G) & DLLRO, Paschim Medinipur for the proposed 1.2 MTPA Integrated Steel Plant along with 225 MW Captive Power Plant. The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Sl. No.	Name	Issues raised during PH	Response by project proponent (after PH)	Time Bound Action Plan proposed WHERE IT TIME BOUND PROGRAM IN some COLUMNS	Budgetary provision
1	Sri Deepak Bagli, Village Shyamraipur	• Pollution from the proposed project has to be controlled.	M/s Orissa Metaliks Private Limited stated that after detailed engineering APC devices of adequate capacity are proposed in order to minimise the pollution.	Adequate capacity APC devices and **OCEMS** (Online Continuous Emission Monitoring System) will be installed at relevant point in parallel with implementation of the plant.	Pollution Control Cost Details • Capital Cost:Rs.105.2Crores; • Recurring Cost:Rs. 11.35 Crores/ Annum.
2	Sri SomanathShar	• Provide jobs for the locals.	OMPL in past has given priority to the	In the proposed project top most priority will	-

	am, Village Khidipur		local people for employment generation based on their academic qualification for their existing plants.	be given to the local people based on their academic qualification. (tentatively upto 2025)	
		• Health check-up facilities.	Free medical Camps, health check-up for surrounding villages are organised on regular basis. And same will be continued in upcoming years.	Funds have been earmarked under Corporate Environment Responsibilities to be utilized over a period of 7 years tentatively by 2025.	Rs 2300 Lakhs of the project cost is earmarked under CER head. Out of this Rs. 193 Lakhs is earmarked for health facility which will be utilized over a period of 7 years.
				Primary health check-up facility	Rs 44 Lacs
				Construction of charitable Dispensary	Rs 84 Lacs
				Ambulance to nearby panchayats	Rs 30 Lacs
				Providing equipment to the local hospitals	Rs 35 Lacs
		• Development of the local areas.	OMPL in past has developed and provided necessary help to the nearby school, NGO & village through CSR program and in future they will also con the same work.	Financial support to Local School for extension of building classroom, development of library facility	Rs 50 Lacs
				Solar/LED Street Lighting provision in some areas	Rs 72 Lacs
				Local Village pond up gradation	Rs 45 Lacs
				Drinking water infrastructure (Tube Well, ATM Water Machine)	Rs 162 Lacs
				Development of community hall	Rs 75 Lacs
				Sanitation Facility-Construction of Toilet, Dustbin	Rs 362 Lacs
				Promotion of sports	Rs 24 Lacs
				Skill development & Scholarship to unprivileged student	Rs 304 Lacs
				Infrastructure Facilities	Rs 155 Lacs
				Transportation facilities	Rs 32 Lacs
				Irrigation Infrastructure	Rs 45 Lacs

				Construction of road	Rs 648 Lacs
				Development of Park, Tree Plantation	Rs 133 Lacs
3	Sri Dijen Senapati, Village Baharapat	• Develop local roads	OMPL stated that road nearby existing plant is being repaired periodically in construction with Road Construction Department, Govt. of West Bengal and in future more focus will be given to develop the local roads under CER Activities.	OMPL will coordinate with Road Construction department officials for repairing of roads in the nearby area. 7 Years (tentatively 2025)	Company has allocated Rs 6.48 Cores under Corporate Environment Responsibilities (CER).
		• Control of pollution to be generated from the project.	M/s Orissa Metaliks Private Limited stated that after detailed engineering APC devices of adequate capacity are proposed in order to minimise the pollution.	Adequate capacity APC devices and OCEMS (Online Continuous Emission Monitoring System) will be installed at relevant points in parallel with implementation of the plant.	<u>Pollution Control Cost Details</u> • Capital Cost:Rs.105.2Crores; Recurring Cost:Rs. 11.35 Crores/ Annum.
4	Sri AchintyaGhosh, Village Barkola	• Provide jobs opportunities for the local people and land looser.	OMPL has given priority to the local people for employment generation based on their academic qualification for their existing plants. And same will be done for the proposed project	In the proposed project top most priority will be given to the local people based on their academic qualifications. (tentatively upto 2025)	-
		• Look into the safety aspects.	OMPL stated their concern about safety about the workers in the plant premises and outside the plant premises. OMPL has already taken some steps to prevent the accidents near plant premises.	• Deploying private security staff near plant gate to control traffic. • Providing guard rails to control harsh traffic on roads near plant area.	-
5	Sri Narayan Patro, Kharagpur	• Look into the pollution matter to be generated form the proposed project.	OMPL has confirmed that they will take all major necessary actions to control the pollution from the proposed project	Adequate capacity APC devices and OCEMS (Online Continuous Emission Monitoring System) will be installed at relevant point in parallel with implementation of the	<u>Pollution Control Cost Details</u> • Capital Cost:Rs.105.2Crores; Recurring Cost:Rs. 11.35 Crores/ Annum.

				plant. Proper green Belt will be developed in the plant premises with time bound manner. (tentatively upto 2025)	
6	Sri Bhavesh Senapati, Village Baharapat	• Provide jobs for the locals.	OMPL has given priority to the local people for employment generation based on their academic qualification for their existing plants. And same will be done for the proposed project	In the proposed project top most priority will be given to the local people based on their academic qualification. (tentatively upto 2025)	-
		• Develop drinking water facilities, health check-up facilities, education for under privilege children.	Since inception of the company in Kharagpur, OMPL has committed for development and upliftment of socio economic status of entire jangalmahal area. OMPL in past has developed and provided necessary help to the nearby school, NGO & village through CSR program and in future also will continue the same work.	Financial support under CER for next seven years will be given: ▪ Local School for extension of building class room ▪ Drinking water infrastructure (Tube Well) ▪ Village pond upgradation ▪ Primary health & sanitation facilities, Construction of charitable dispensary, providing ambulance facility to near-by panchayats and providing equipment to the local hospitals. ▪ Promotion of Sports	Company has earmarked Rs 23.00 Crores under Enterprises Social commitment for a period of seven years.
		• Development of roads.	OMPL stated that road nearby existing plant is being repaired periodically in construction with Road Construction Department, Govt. of West Bengal and in future more focus will be given to develop the local roads under CER Activities.	OMPL will coordinate with Road Construction department officials for repairing of roads in the nearby area. 7 Years (tentatively 2025)	Company has allocated Rs 6.48 Crores for road developemnt under Corporate Environment Responsibilities.

7	Sri Satadal Banerjee, Malancho Kharagpur	• Request to more efforts need to be done regarding CSR.	Since inception of the company in Kharagpur, OMPL has committed for development and upliftment of socio economic status of entire jangalmahal area. OMPL has been doing the CSR activities from long back and assure will continue it in future.	Funds have been earmarked under Corporate Environment Responsibilities to be utilized over a period of 7 years tentatively by 2025.	Company has earmarked Rs 23.00 Crores under Corporate Environment Responsibilities.
		• Pollution aspects should also be looked into.	OMPL has confirmed that they will take all major necessary actions to control the pollution from the proposed project	Adequate capacity APC devices and OCEMS (Online Continuous Emission Monitoring System) will be installed at relevant point in parallel with implementation of the plant.	Adequate funds will be deployed in CAPEX (Rs. 105.2 crores) and OPEX (11.35 Crores) for environmental protection measures and will not be diverted to other purposes**.**
8	Sri Uttam Ghosh, Village Barkola	• Provide job opportunities to land losers.	Management of OMPL stated that sincere efforts would be made to address the issue.	Job will be provided to the land losers on the basis of their academic qualifications. (upto 2025 tentatively)	-
9	Sri TrilochanDutta , Village Bargai	• Provide job opportunities to the unemployed and land losers.	OMPL has given priority to the local people for employment generation based on their academic qualification for their existing plants. And same will be done for the proposed project	Job will be provided to the land losers on the basis of their academic qualifications. (upto 2025 tentatively)	-
		• Request to look into the matter of land acquisition	The local land owners sell their land for industrialization (setting up greenfield plant and also for recreational work, greenbelt development/creation) after various discussion and proper negotiation only.	-	-

		• Look into the matter of pollution.	M/s Orissa Metaliks Private Limited stated that after detail engineering APC devices of adequate capacity are proposed in order to minimise the pollution.	Adequate capacity APC devices and OCEMS (Online Continuous Emission Monitoring System) will be installed at relevant point in parallel with implementation of the plant.	Adequate funds will be deployed in CAPEX (Rs. 105.2 crores) and OPEX (11.35 Crores) for environmental protection measures and will not be diverted to other purposes.

18.0 The company proposes to invest on the Corporate Environment Responsibility (CER) activities. For this purpose, the company proposes to 23.0 Crores. This fund shall be utilized over a period of 7 years. Company has identified certain areas, to be considered for implementing the CER activities in the context of the local scenario of the area:

Sl. No.	PROPOSED CER ACTIVITIES	INVESTMENT (IN LACS)						
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
PUBLIC HEARING RELATED ACTIVITIES								
1	Construction of 32 Toilets at16 school (@ Rs. 8.00 Lakhs per set of 2 Toilets, separately for Ladies & Gents)	48	48	32	32	32	32	32
2	Open Defecation free village by introducing community & Individual Toilets	10	10	10	10	10	10	10
3	Drinking Water Infrastructure (Tube well in nearby villages – 65 nos. @ Rs. 1.20 Lakhs); ATM Water Machine 28 nos. @ Rs 3 lakhs	24	24	24	24	24	24	18
4	Construction and repairing of metal road (27 km) in villages (@Rs. 24 Lakhs per km)	96	96	96	96	96	96	72
5	Development of Community Hall – Total 5 nos. (@ Rs. 15 Lakhs per Hall)	15	15	15	0	15	0	15
6	Local Village Pond up gradation, cleaning & maintenance - 15 ponds (@ Rs. 3 Lakhs per Pond)	9	6	6	6	6	6	6
7	Construction of charitable Dispensary (07 nos.)	12	12	12	12	12	12	12
8	Ambulance to nearby Panchayat	10	0	10	0	0	10	0
9	Providing equipment to the local hospitals	6	6	6	5	4	4	4

10	Primary health for the surrounding villages	8	8	6	6	6	5	5
11	Financial Support to the Local School for extension of building / class room/ development of library facilities	8	8	7	7	7	7	6
12	Skill development to unemployed local youth through National Skill Development Corporation, Govt. of India Scheme	27	27	26	26	24	24	20
13	Supporting schools for establishment of mini sports complex or playgrounds in providing the facilities like badminton court, tennis court and levelling of ground.	4	3	3	4	3	4	3
14	Workshop centre with latest tailoring machines for training women (like tailoring, stitching, Pickle & Sauces making, Soft Toys & Gem Jeweller, and Beautician Courses and for making affordable price of Sanitary Pads.)	7	7	7	6	6	5	5
15	Local villagers will be given employment on the basis of their eligibility. However a training camp shall be provided when new recruitment is done to enable check and select from the local pool of applicability.	8	8	8	7	7	6	6
16	Development of parks, plantation of trees in the nearby areas.	20	20	19	19	19	18	18
NEED BASED ACTIVITIES								
17	Transportation facility for school students	5	5	4	4	4	5	5
18	Street Lighting (Solar/Led) provision at suitable public places – 180 nos. (@ Rs. 0.40 Lakhs per Solar Light)	10.4	10.4	10	10	10.4	10.4	10.4
19	Creation of irrigation infrastructure in the peripheral villages(Water Harvesting Structure, Irrigation Channel)	7	7	7	6	6	6	6
20	Drainage Development - side drains & Construction of Culvert on drainage	13	12	13	14	13	13	12

21	Boundary wall & Burial grounds in three village and renovation of roads to burial ground	9	9	8	8	7	8	8
22	Financial Support to Local Temple	2	1	1	1	1	1	1
23	Scholarship award to unprivileged Students	6	6	6	6	5	4	4
24	Provide Dustbin in Village (under Swach Bharta Scheme)	6	6	6	5	5	4	4
TOTAL : 2300Lacs.								

19.0 The capital cost of the project is Rs 1700 Crores and the capital cost for environmental protection measures is proposed as Rs 105.2 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 11.35Crores. 5500 in-direct employment & 3000 persons will get direct Employment during operational phase. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

Item	**Capital Cost (in Crores)**	**Recurring Cost (in Crores)**
Cost of Air Pollution Control Devices/ System	58.0	5.1
Cost of Water conservation & Pollution Control	5.0	0.5
Cost of Solid Waste Management System	6.0	0.6
Green belt development	9.0	0.5
Noise Reduction Systems	8.0	1.0
Occupational Health Management	4.5	0.45
Risk Mitigation & Safety Plan	6.5	0.6
Online Monitoring Surveillance System	3.8	1.4
Setting Environmental Management Cell &	3.0	0.7
Setting Environmental Laboratory	1.5	0.5
GRAND TOTAL	**105.2**	**11.35**

20.0 Greenbelt will be developed in 41.4 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. Total no. of 103500 saplings will be planted and nurtured in 41.40 Hectares in 7 years.

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

22.0 Name of Environmental Consultant: Envirotech East Pvt. Ltd., Kolkata-700 075, NABET certificate no. NABET/EIA/1011/010.

Recommendation of the committee:

23.0 After detailed deliberations, the committee sought the following additional information for further consideration of the proposal.

1. Details of Source of water, wastewater treatment process, revised water balance and water management.
2. Type of iron ore and source, process of beneficiation, details of slime management.
3. Management of Tar sludge generated from producer gas plant
4. Revised corporate environment policy
5. Modification of wet quenching process to dry quenching
6. Waste heat recovery from stove gases
7. Details of sinter cooler waste heat recovery
8. Disposal of sludge generated from the cold rolling mills, pickling and galvanizing process
9. Detailed plan for completion of green belt in two years
10. Revised CER plan alongwith budgetary requirement and time schedule for completion of CER activities
11. Chrome slag management, including option for use as green concrete
12. Details of rainwater harvesting
13. Scheme for skill development as per the programmes of Skill Development Council of India to improve the employability in the proposed project.

34.4. Proposed Greenfield Cement Plant of capacity 3.15 MTPA Clinker & 2.0 MTPA Cement and 2×25 MW Thermal Power Plant Kalvatala Village, Kolimigundla Mandal, Kurnool District, Andhra Pradesh of M/s The Ramco Cement Ltd. [Proposal No. IA/AP/IND/63579/2017, F.No. IA-J11011/135/2017-IA-II(I))] – Environmental Clearance

1.0 The proponent has made online application vide proposal no. **IA/AP/IND/63579/2017** dated 12th July 2018 along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

Details submitted by the Project Proponent

2.0 The Greenfield Cement Plant of M/s. The Ramco Cements Limited (Formerly Known as Madras Cements Ltd)) proposed to be located in Kalvatala Village, Kolimigundla Mandal, Kurnool District, Andhra Pradesh State was received online on 31.03.2017 vide Application no. IA/AP/IND/63579/2017. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 18th meeting of EAC May, 2017 and prescribed Terms of Reference (ToR) 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 J-11011/135/2017-IA-II (I) dated 22.05.2017.

3.0 The project of M/s. The Ramco Cements Limited (RCL) proposed to be located in Kalvatala Village, Kolimigundla Mandal, Kurnool District, Andhra Pradesh is for setting up of a green field cement plant for production of 3.15 MTPA (2 x 1.575 MTPA) Clinker and 2.0 MTPA Cement Plant and 50MW (2 X 25 MW) Coal Based Captive Thermal Power Plant. Clinker required for production of 2.0 Million TPA Cement will be utilized at this plant and balance clinker will be transported to RCL cement grinding units.

4.0 The total land required for the project is 186.56 Ha (169.66 Ha Private Patta Land + 16.9 Ha Govt. Land). RCL has already acquired 123 Ha [106.1 Ha Private Patta Land + 16.9 Ha Govt. Land (alienated)]. Balance area is under acquisition. No River passes through the project area. It has been reported that no water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed. In pursuant to the Terms of Reference, the Layout of the cement plant is designed without disturbing the seasonal nalla passing through the proposed site. A culvert will be provided on the road over the nalla to enable the local people cross the nalla safely

5.0 A total of 28.3 Ha has been earmarked for greenbelt development which include both sides of the nalla and the northern side of the nalla as per TOR point of MoEF&CC. This area will not be used for any other activities of the project except for green belt development. This area will be developed with local broad leaved species. An area of 5.0 Ha is earmarked for diversion of existing roads along the eastern boundary of the plant site.

6.0 The topography of the area is flat and reported to lie between 15° 03' 42.86" N - 15° 04' 31.21" N Latitude and 78° 07' 59.97" E - 78° 08' 50.68" E Longitude in Survey of India topo sheet No. 57/I/4 (1:50000), at an average elevation of 260 m AMSL. The ground water table in the study area reported to range between 10-100 m below the land surface during the post-monsoon season and 15-105 m below the land surface during the pre-monsoon season.

7.0 Total water requirement of the integrated plant is estimated to be about 2000 m^3/day. Initially ground water will be used for plant construction. An application is made for 2500 m^3/day, which is in pipeline. Andhra Pradesh Government has initiated a proposal of 0.4 TMC reservoir at Mettupalli on Srisailam Right Bank Canal adjacent to OWK reservoir. The present ground water utilization is 30.97%. For the present proposal the utilization will be 2.51% and the total utilization of the study area will be 33.48%. Thus the ground water utilization computation is estimated as 33.48 % only and since it is well below the 70 % of ground water availability, hence, categorized as safe.

8.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in 10 km radius of the study area. No Reserved forest is located in 10 km radius of the study area. No forests are located in 10 km radius of the study area. Based on the information obtained from the Forest Department, Black Buck which is Schedule – I specie is reported in the study area. During the ecological studies, Peafowl, Schedule – I specie is observed. To protect these schedule – I fauna, a conservation plan has been formulated with total fund of Rs 10 Lakhs.

9.0 Belum Caves is the nearest tourist place at 3.8 km in NW direction of the Plant site. The cement plant will not have any adverse effect on the caves, as they are located under the ground.

10.0 The major raw material for manufacture of Cement is Limestone and the same will be sourced from the Captive Limestone Mine. Details of the raw material requirement are given below:

S. No	Material	Quantity	Source Locality	Approx. distance from plant (km)	Mode Of Transport
1	Limestone	4.50	Captive mines	Less than 5 km	Closed Belt Conveyor/ Dumpers/ Tippers
2.	Laterite & Iron ore	0.27	Veldurthi surroundings, Bellary	300	Trucks
4	Gypsum	0.08	Visakhapatnam	500	Rail
5	Fly Ash	0.30	Rayalaseema Thermal Power Station, (RTPS) Muddanuru	150	Bunkers
6	Slag	0.50	JSW, Tornagallu	160	Rail
Coal Mix for cement plant:					
7	100 % Indian Coal	0.47	SCCL	300	Rail
	100% Imported Coal	0.38	Imported	280	
	100 % pet coke	0.30	Reliance Refinery	700	
8	Coal Mix for thermal power plant	0.42	-	-	Rail

11.0 State-of-Art technology for manufacturing of the cement will be adopted. The main features of the process, inter alia include raw material grinding; blending of raw material; coal mix grinding and handling; preheating of coal mix in the six stage pre-heater; pyro processing and calcination in the kiln; clinker cooler and storage; and cement grinding & packing. RCL proposes to install 50 MW coal based Thermal Power Plant. Power generation process is based on Rankine Steam cycle. The steam generated in the boiler when expanded through a turbine, turns the turbine shaft, which in tandem is coupled to an electric power generator.

12.0 Limestone will be sourced from the Captive Limestone Mine. The Limestone transportation will be done through Closed Belt Conveyor/ Dumpers/ Tippers.

13.0 Total water requirement of the integrated plant is estimated to be about 2000 m^3/day. Initially ground water will be used for plant requirement. An application is made for 2500 m^3/day, which is in pipeline. Andhra Pradesh Government has initiated a proposal of 0.4 TMC

reservoir at Mettupalli on Srisailam Right Bank Canal adjacent to OWK reservoir. The water drawl permission was applied for 2500 m^3/day.

14.0 The total power requirement of the cement plant including the requirement of the colony is estimated to be about 45 MW. This requirement will be met from the proposed 50 MW Coal Based Captive Power Plant.

15.0 Baseline Environmental Studies were conducted during Post Monsoon season i.e., from October 2017 to December 2017. Ambient air quality monitoring has been carried out at 8 locations during October 2017 to December 2017 and the data submitted indicated: PM_{10}: 49.8 – 57.4 µg/m^3), $PM_{2.5}$ (21.7 – 29.5 µg/m^3), SO2 10.7 – 12.8 µg/m^3) and NOx (12.9 – 14.4 µg/m^3). The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 11.64 µg/m^3 with respect to the PM_{10}, 1.35 µg/m^3 with respect to the $PM_{2.5}$, 2.36 µg/m^3 with respect to the SO_2 and 14.26 µg/m^3 with respect to the NOx.

16.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 6.7 to 7.28, Total Hardness: 231 to 585 mg/l, Chlorides: 36 to 328 mg/l, Fluoride: 0.65 to 0.96 mg/l. Heavy metals are within the limits. Surface water sample was analyzed in one location. pH:7.72; Total Hardness 162 mg/l, Chlorides: 0.51 mg/l, Fluoride: 0.6 mg/l. Heavy metals are within the limits.

17.0 Noise levels are in the range of 50.6 – 70.8 dB (A) for daytime and 41.8 – 62.5 dB (A) for nighttime.

18.0 The proposed plant site does not involve any displacement of human settlement. No public buildings, places, monuments etc., exist within the proposed plant area or in the vicinity. The plant operations will not disturb / relocate any village or need resettlement.

19.0 No solid waste will be generated from the cement plant. The dust collected in the air pollution control equipment in the cement plant will be recycled back to the process. Solid waste generated from the power plant (flyash) (410t/day) will be used in cement plant. It has been envisaged that an area of 65.46 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.

20.0 The Public hearing of the project was held on 31.5.2018 at proposed site under the chairmanship of Sri S. Satyanarayana I.A.S (District Collector & District Magistrate, Kurnool District) for setting up of Cement plant with production of 3.15 Million Tonnes Per Annum (MTPA) Clinker and 2.0 MTPA Cement Plant and 50MW (2 X 25 MW) Coal Based Captive Thermal Power Plant. As per the TOR of MoEF&CC, the project proponent has shared with the villagers, the plan for diversion of existing roads, and plan for laying and construction of new roads in consultation with villagers and the same is recorded in the minutes of public hearing. The issues raised during public hearing along with action plan and budget allotment are addressed in final EIA report. Summary of the Public hearing issues along with action plan and budget are given below:

Sl	Issues Raised In Public Hearing	Response Of The Project Proponent After Public Hearing	Time Bound Action Plan	Budgetary Provision

1.	Control measures proposed to control the pollution problems during blasting activity in the mine, from the thermal power plant and also from the proposed cement plant.	The consultant explained the details of pollution control measures in the cement plant and thermal power plant. The same are recorded in minutes of Public hearing on page 5 of 12.	All Pollution control equipment will be installed before commissioning of the plant	Rs. 100 crore allocated for air pollution control equipment for plant. Total capital cost for EMP activities is Rs. 120 crore.
2.	Corporate Environmental Responsibility and Corporate social responsibility activities proposed by them in the surrounding villages.	As per the recent guidelines, Rs 15.5 crores was allotted for Corporate Environmental Responsibility. The same will be spent in areas like skill development, Primary health centres, Roads, Drinking water supply, sanitation & others. Similarly CSR activities will be drawn in consultation with the Village Committees as per the priority once the plant is commissioned.	CER will be carried out as per the enclosed Table -1. The activities considered are based on the Need based assessment study and issues raised in the public hearing conducted on 31.05.2018	Rs 15.50 Crores (as per CER MoEF&CC OM)
3.	Employment to the villagers who have given their agricultural lands, to the factory and requested a written commitment from the management in this regard.	Regarding employment, preference to those who sold lands will be given for employment based on eligibility. Those who are not employed will be provided employability opportunity.	RCL will provide skill development programme to ITI & Diploma passed out locals	Rs 120 Lakhs is allotted for skill development as part of CER budget
4.	To inform the exact location of the proposed cement plant including survey numbers and also the actual distance of the proposed cement plant	The survey numbers where the plant will be installed are provided in the Public hearing advertisement both in English and Telugu and also provided in	-	-

	to the Kalvatala village.	the Draft EIA Report. The actual distance of cement plant from Kalvatala village is 0.4 km and the same is mentioned in the Draft EIA report		
5.	Kolimigundla Mandal is drought prone area due to the low rainfall and requested the authorities not to permit the proposed cement industry for drawing of water from the bore wells as it may adversely affect the agricultural sector in the area apart from scarcity of drinking water in the Kolimigundla area.	Management will draw ground water for construction of plant. RCL will implement rainwater in the cement plant Rainwater harvesting pits will be provided in the villages.	Rain water harvesting pits will be provided during construction of plant Rain water harvesting pits @ 30 Nos. in 2 villages are proposed and the same will be provided within 3 years.	Rs 100 lakhs is provided as part of EMP budget Rs 60 Lakhs provided as part of CER budget
6	The proposed cement plant will cause raise in the temperature levels of Kolimigundla area due to CO_2 emissions from the plant and requested the management to implement the measures for controlling the CO_2 emissions and also to develop afforestation in the nearby hillocks.	33% of the plant complex area will be brought under greenbelt with wide leaf trees and fruit bearing trees. RCL also has considered Plantation in surrounding villages and along the road sides. The plantation activities proposed will act as CO_2 sink	Total 65.46 ha (35 % of total project area) will be developed as greenbelt area in 5 years, in phased manner which include 28.3 Ha of the area earmarked for greenbelt development on both sides of the nalla and the northern side of the nalla. Plantation in poramboke & govt. lands in each village and along the road sides (Rs. 2500 per pit, 1500 pits for hectare and 5 ha area) in 3 years' time.	Rs 150 Lakhs allotted as part of EMP budget Rs 187.5 Lakhs provided as part of CER budget
7	Details of disposal of fly ash generated from thermal power plant.	Fly ash generated in power plant will be totally consumed in cement plant.	-	-

	Environmental Protection Measures in the area and also development of infrastructure facilities for education, health etc., in the surrounding villages till now. To pay additional amount for the farmers who have given their agricultural land earlier at lower price to the factory.	Implementation of Environmental Protection starts only when the plant installation starts after obtaining necessary statutory approvals. Developmental activities listed under CER will be initiated simultaneously with plant construction The farmers are still continuing farming till now and they were enjoying the same for last 13 years.	All EMP measures will be installed before commissioning of the plant CER activities will be implemented in three years time -	Rs. 120 crore. allotted as capital cost for EMP. Rs 15.50 Crores allotted (as per CER MoEF&CC OM) -
	To avoid usage of ground water to extent possible, to construct check dams & rain water harvesting structures in the area, to use advance art of technology for controlling pollution problems and to develop greenbelt in the area.	During operation of the plant, the water requirement will be met from 0.4 TMC reservoir at Mettupalli on Srisailam Right Bank Canal adjacent to OWK reservoir. The water drawl for the proposed cement plant is considered as 2600 m^3/day by the Government of Andhra Pradesh from this	Rain water harvesting pits will be provided during construction of	Rs 100 lakhs is provided as part of EMP budget Rs 60 Lakhs provided as part of CER budget

		proposed reservoir. RCL will implement rainwater in the cement plant Rainwater harvesting pits will be provided in the villages State of Art Technology will be adopted for the environmental measures. The consultant explained the details of pollution control measures in the cement plant and thermal power plant. The same are recorded in minutes of Public hearing on page 5 of 12. 33% of the plant complex area will be brought under greenbelt with wide leaf trees and fruit bearing trees. As per the recent guidelines, Rs 15.5 crores was allotted for	plant Rain water harvesting pits @ 30 Nos. in 2 villages are proposed and the same will be provided within 3 years All Pollution control equipment will be installed before commissioning of the plant Total 65.46 ha (35 % of total project area) will be developed as greenbelt area in 5 years, in phased manner which include 28.3 Ha of the area earmarked for greenbelt development on both sides of the nalla and the northern side of the nalla. CER will be carried out as per the enclosed Table The activities considered	Rs. 100 crore allocated for air pollution control equipment for plant. Total capital cost for EMP activities is Rs. 120 crore Rs 150 Lakhs allotted as part of EMP budget Rs 15.50 Crores (as per CER MoEF&CC OM)

		Corporate Environmental Responsibility. The same will be spent in areas like skill development, Primary health centres, Roads, Drinking water supply, sanitation & others. Similarly CSR activities will be drawn in consultation with the Village Committees as per the priority once the plant is commissioned	are based on the Need based assessment study and issues raised in the public hearing conducted on 31.05.2018	
9	To start construction of the factory only after the supply of water to them by the Government from the Mettupalli reservoir, not to encourage middle man while purchasing the land from the farmers	Andhra Pradesh Government has initiated the proposal of 0.4 TMC reservoir at Mettupalli on Srisailam Right Bank Canal adjacent to OWK reservoir. The water drawl for the proposed cement plant is considered as 2600 m3/day by the Government of Andhra Pradesh from this proposed reservoir.	Ground water permission was obtained recently on 25-07-2018 for ground water drawal of 652.56 kld which will be used for construction	-
10	To provide importance to the education and health infrastructure facilities in the surrounding villages	Developmental activities listed under CER will be initiated simultaneously with plant construction The District Collector convened a meeting on 9-6-2018, which was postponed because of some other priority work by the District Collector to discuss on the matter of additional payment, if any.	CER activities will be implemented in three years' time	Rs 15.50 Crores allotted (as per CER MoEF&CC OM)
11	To take up the avenue	RCL also has	Plantation in poramboke	Rs 187.5 Lakhs

	plantation in a massive way even up to 50 % of their area and also along the roads with fruit bearing trees & medicinal plants and suggested to form a CSR Co-ordination Committee involving public representatives, villagers, District administration for identifying the needs of the surrounding villagers for implementation under CSR activity	considered Plantation in surrounding villages and along the road sides the plantation activities proposed will act as CO_2 sink As per the recent guidelines, Rs 15.5 crores was allotted for Corporate Environmental Responsibility. The same will be spent in areas like skill development, Primary health centres, Roads, Drinking water supply, sanitation & others. Similarly CSR activities will be drawn in consultation with the Village Committees as per the priority once the plant is commissioned.	& govt. lands in each village and along the road sides (Rs. 2500 per pit, 1500 pits for hectare and 5 ha area) in 3 years' time Plantation in poramboke & govt. lands in each village and along the road sides (Rs. 2500 per pit, 1500 pits for hectare and 5 ha area) in 3 years time CER will be carried out as per the enclosed Table -1 The activities considered are based on the Need based assessment study and issues raised in the public hearing conducted on 31.05.2018	provided as part of CER budget Rs 15.50 Crores (as per CER MoEF&CC OM)

21.0 M/s RCL has budgeted an amount of Rs 15.50 Crores for Corporate Environment Responsibility (CER) in accordance to the MoEF&CC's Office Memorandum # F.No. 22-65/2017-IA.III dated 01.05.2018 which is given below:

S.No	DESCRIPTION	Budget in Rs. Lakhs (for 3 years)

1	Swachh Bharath	265.62
2	Education & Sports	115
3	Women Welfare	10
4	Roads and other infrastructures	280
5	Drinking water	200
6	Skill development	120
7	Health Care	52
8	Veterinary	3
9	Other	507.5
	Total	**1553.12**
Say Rs. 15.53 Crores		

DETAIL BREAKUP OF BUDGET TOWARDS CER ALONG WITH ACTIVITIES

S.No	Description of Activity	1st Year	2nd Year	3rd Year
1.Swachh Bharath				
1	Construction of 20 Nos. of toilets in 5 villages Kolimigundla village, Kalvatala village, Kanakadripalli village, Itikyala village, Nayanapalli village, etc., of the Kolimigundla Mandal each in Kolimigundla @ Rs. 1.8 lakh per toilet	60	60	60
2	Providing 75 Dust Bins & Trolleys for Kolimigundla village, Kalvatala village, Kanakadripalli village, Itikyala village, Nayanapalli village each of the Kolimigundla Mandal @ Rs. 1500 each.	5.62	0	0
3	Contribution towards various Government sponsored programmes	20	30	30
	Total (Rs in lakhs)	**85.62**	**90**	**90**
2. Education & Sports				
1	Providing infrastructure to Schools in Kolimigundla Mandal	20	40	40
2	Providing computers for ZP School, Kolimigundla	2	3	0
3	Renovation of playground for ZP School, Kolimigundla	2	3	3
4	Purchase of various sports equipment for ZP School, Kolimigundla	2	0	0
	Total (Rs in lakhs)	**26**	**46**	**43**
Women Welfare				
1	Construction of building for self-welfare schemes at Kolimigundla Mandal head quarters	4	3	3
	Total (Rs in lakhs)	**4**	**3**	**3**
4. Roads Development				
1	Renovation of village internal roads and drainage system in Kolimigundla (total - 1 km length)	0	20	20
2	Renovation of village internal roads and drainage system in Chintalayapalle village (total - 1 km length)	0	20	20
3	Renovation of village internal roads and drainage system in Kalvatala village (total - 1 km length)	0	20	20

S.No	Description of Activity	1st Year	2nd Year	3rd Year
4	Renovation of village internal roads and drainage system in Nayanapalli village (total - 1 km length)	0	20	20
5	Renovation of village internal roads and drainage system in Itikyala village (total - 1 km length)	0	20	20
6	Renovation of village internal roads and drainage system in Petnikota village (total - 1 km length)	0	20	20
7	Renovation of village internal roads and drainage system in Kanakadripalli village (total - 1 km length)	0	20	20
	Total (Rs in lakhs)	**0**	**140**	**140**
5. Drinking water				
1	Construction of elevated water tank and water pumping system at Kalvatala village	10	10	5
2	Construction of elevated water tank and water pumping system at Kolimigundla village	10	10	5
3	Construction of elevated water tank and water pumping system at Nayanapalli village	10	10	5
4	Construction of elevated water tank and water pumping system at Chintalayapalle village	10	10	5
5	De-silting & strengthening of bunds for existing water tanks in each villages	30	30	40
	Total (Rs in lakhs)	**70**	**70**	**60**
6. Skill development				
1	Providing skill development programme to ITI & Diploma passed out locals (for total number of 20 members) in other plants of RCL (till commissioning of the plant) for a span of 1 year per batch (Rs. 16,500 per person per month – Rs. 3.3 lakh per month – Rs. 40 lakhs per annum – Rs. 120 lakh for 3 years)	40	40	40
	Total (Rs in lakhs)	**40**	**40**	**40**
7.Health Care				
1	Purchase of hospital equipment at Petnikota Primary Health Centre (PHC)	0	0	4
2	Construction of Petnikota Primary Health Centre (PHC) building	15	15	10
3	Purchase of hospital equipment at Kolimigundla Primary Health Centre (PHC)	0	0	4
4	Renovation of Kolimigundla Primary Health Centre (PHC) building	1	1	2
	Total (Rs in lakhs)	**16**	**16**	**20**
8.Veterinary				
1	Purchase of hospital equipment at Kolimigundla Veterinary Health Care Centre	1	0	0
2	Renovation of Kolimigundla Veterinary Health Care Centre building	1	0.5	0.5
	Total (Rs in lakhs)	**2**	**0.5**	**0.5**

S.No	Description of Activity	1st Year	2nd Year	3rd Year
9. Others				
1	Rain water harvesting pits @ 30 Nos. in 2 villages @ Rs. 1 lakh per pit	20	20	20
2	Plantation in poramboke & govt. lands in each village and along the road sides (Rs. 2500 per pit, 1500 pits for hectare and 5 ha area)	67.5	60	60
3	Religious buildings (renovation / construction) in all 5 villages	30	30	20
4	Lining of nallah near plant	20	20	10
5	Development / construction of public buildings like Panchayat / community centre / libraries	20	20	20
6	Construction of pucca road (for villagers movement in the eastern direction of plant) including drainage system	20	20	20
7	Plantation along the above pucca roads	4	3	3
	Total (Rs in lakhs)	**181.5**	**173**	**153**

22.0 The capital cost of the project is Rs. 1500 Crores in 2 phases (Phase: I {Including Land, Colony and Railway siding} – Rs. 1000 Crores & Phase: II – Rs. 500 Crores) and Rs. 120 crores will be spent for Environmental Management Plan. The annual recurring cost towards Management Plan is proposed as Rs. 12 Crores. Budget for Environmental Management Plan as given below:

		Capital Cost (Rs. Crores)	Recurring Cost per annum (Rs. Crores)
Air Pollution	Air Pollution Control Equipment for Cement Plant & Thermal Power Plant	100	10.0
	Sheds & Silos for raw material storage	13.9	0
Wastewater Management	Installation of STP & Neutralization pit for TPP	0.50	0.20
Greenbelt development	Plant and Colony	1.5	0.50
Wild life conservation plan		0.10	-
Rainwater Harvesting Structures		1.0	0.05
Environmental monitoring		2.70	0.40
Total		**119.7 Say 120**	**11.15 Say 12**

23.0 The employment generation from the proposed project is 300 Direct & 1000 Indirect. In addition there will be indirect employment to many more people, in the form of contractual jobs, business opportunities, service facilities etc. The will enhance the economic status of the region.

24.0 Total 65.46 ha (35 % of total project area) will be developed as greenbelt area, in phased manner which include 28.3 Ha of the area earmarked for greenbelt development on both sides of

the nalla and the northern side of the nalla as per TOR point of MoEF&CC. This area will not be used for any other activities of the project except for green belt development. This area will be developed with local broad leaved species. The local species recommended by CPCB as per Progamme Objective series: PROBES/75/1999-2000 will be planted with a density of 1500 trees per hectare. Total no. of 98190 saplings will be planted and nurtured in 65.46 hectares in 5 years.

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

26.0 EIA Consultant: BS Envirotech, Hyderabad.

Recommendations of the committee:

27.0 After detailed deliberations, the committee sought the following additional information for further consideration of the proposal:

1) The permission from the competent authority for drawl of water from the Srisailam Right Bank canal as proposed by PP.
2) The potential Impact of the project on the tourist spot of Bilam caves.
3) Detailed plan ensuring that the natural drainage pattern of the site would not be altered / blocked.
4) Plan for storm water management
5) The revised layout plan clearly showing gates and the external connectivity
6) The permission from the competent authority for the over head conveyor belt across the state highway
7) In case the permission for overhead conveyor belt delayed/denied, an alternative plan for transporting raw material
8) The design details of Air pollution control systems
9) Details of Waste heat recovery from the kiln and cooler
10) Details of alternative fuels to be used.
11) Revised CER implementation along with time bound action plan with budget

34.5. Expansion of Tata Sponge Iron Plant at Joda in Odisha by M/s Tata Sponge Iron Limited - Enhancement of DRI Production from 4,25,000 TPA to 4,65,000 TPA in existing facility through R&D project under clause 7(ii) of EIA Notification, 2006 [Online Proposal IA/OR/IND/75808/2018; MoEFCC File No. J-11011/239/2018-IA.II(I)] – Environmental Clearance.

M/s Tata Sponge Iron Limited made an application vide online proposal No. IA/OR/IND/75808/2018 dated 13th July, 2018 seeking Enhancement of DRI Production from 4,25,000 TPA to 4,65,000 TPA in existing facility through R&D project under clause 7(ii) of EIA Notification, 2006.

Details of the project as per the submission of Project Proponent:

2.0 M/s Tata Sponge Iron Limited has existing 3,90,000 TPA SRI plant with 26 MW WHRB Power Plant in 122.65 Ha at Village Bileipada, Tehsil Barbil, District Keonjhar, Odisha. The project has received an EC vide letter no.J-11011/16/2004-IA.II(I) dated 11.11.2004 for a capacity of 3,90,000 TPA. Thereafter, we had applied in December 2016 for a capacity enhancement to 4,25,000 TPA (i.e. 35,000 TPA or 9% increase) and received EC for the same from MOEF vide letter no. J-11011/16/2004-IA.II(I) dated 01.05.2017.

3.0 Currently an R&D project is ongoing at the plant for enhancing the number of operating days. The R&D project is being conducted by IIT, Bhubneshwar. As an outcome of the R&D project, it is expect to be able to enhance our production from 4,25,000 to 4,65,000 TPA (i.e. by 40,000 i.e. 9.41%) without any change in plant & machinery. Minor modifications will be required like mechanized operation of feed tray, precise control of Kilns pressure through adoption of PID, automation in coal injection system to avoid interruption, availability of stand by roots blower independently and online, Modification of transfer chute between kiln to cooler to reduce the downtime to 18 hrs from 72 hrs, etc.

4.0 The additional water requirement is 139 cum per day which is equivalent to 5.8 CuM/Hr. This water requirement will be met from the existing sanction of 410 KL/hour; presently the plant is consuming about 50% of the allocated water. Tata Sponge will maintain its 'zero' wastewater discharge standard. 100% waste water will be utilized for its brick manufacturing unit, dust suppression, road washing, garden maintenance etc. after it preliminary treatment.

5.0 Presently 100% fly ash is utilized for fly ash brick, paver block making and land reclamation etc. 100% char is getting sold for its carbon utilization. Other wastes are either sold or dumped at the identified 17.5 Ha Dump yard.

6.0 Tata Sponge has already having 26 MW Waste Heat Recovery Power Plants of DRI plants. The energy requirement, if any, for increase in production will be met Pre-feasibility Report – Enhancement of production of DRI Plant of M/s TSIL 19 from the existing 26 MW Waste Heat Recovery Power Plants. 235 KW solar power unit has been installed within the premises.

7.0 No additional cost is involved for enhancement of production as the proposed enhancement in capacity is based on increase in operating days, optimum coal consumption, marginal increase in Iron oxide feed.

8.0 Certificate of compliance of earlier EC was obtained from regional office vide RO letter 101-162/EPE dated 6th July 2018.

Observations of the committee:

9.0 During detailed deliberations, the Committee noted the following,

i) The Environment Clearance dated 11.11.2004 was obtained after going through the process of public hearing which took place on 28.05.2004

ii) The committee noted that the project proponent has proposed to carry out the following modifications or process changes to increase the throughput from the existing kilns:

a. Optimisation of air input to control pressure in the kiln using MLD (multi louver dampers)

b. Multi variate process parameters analysis to stabilise temperature across the kiln to retard accretion formation rate

c. Mechanised operation of feed chute

d. Auto pressure control system

e. Uninterrupted coal injection, etc.

iii) Due to above modifications/ process changes, the number of available operating days would go from 313 to 335 days/annum

iv) The committee also noted that after the proposed modifications:

a. the specific coal consumption will be reduced from 950 kg/T to 940 kg/T.

b. Specific energy consumption will be reduced from 5.66 GCal/T to 5.47 GCal/T

c. SO_2 in flue gas will be reduced from 115.90 kg/hr to 85.2 kg/hr

d. The stack emissions (PM)- ESP (avg) would be reduced from 78 to 73 mg/Nm^3

e. The level of waste water utilisation would remain 100% and the plant would remain a zero liquid discharge plant

f. The specific CO_2 emissions would reduce from 1.822 to 1.811 T/T of DRI

g. The solid waste generation would be reduced from 0.46 to 0.457 T/T of DRI

v) The committee also noted that the water consumption would slightly increase from 1275 KLD to 1414 KLD i.e. 10.9%. However, the committee also noted that the project area does not face any water scarcity and falls in a good to very good rainfall zone (1100-1400 mm).

vi) The committee note that the modification proposed by the project proponent were largely pro environment and, therefore, were desirable and welcome.

vii) In view of above facts, having been brought to the knowledge of the committee, the committee, after detailed deliberations, recommended that the environmental clearance may be granted for the proposed modification under para 7(ii) of the EIA Notification, 2006 subject to the following additional conditions, in addition to general conditions:

a. PP shall plant 10,000 trees as avenue plantation with tree guard along NH adjacent to the plant site.

b. 100% utilisation of fly ash through brick production

c. Installation of advance controller for efficiency enhancement of ESP

viii) NOx generation is insignificant as the process and is operating below 1050 deg cent and the pressure is only 3mmwc. This condition is not sufficient for generation of NOx.

ix) Original EC dated 11.11.2004 was for a production of 3,90,000 TPA. The public hearing for the same was held on 28.05.2004. The points raised in public hearing were complied to

x) The details of reduction in specific consumption is as given below:

Sl. No.	Description of Pollution Parameters	Unit	EC amend. Dt. 01.05.2017	Submitted proposal	Remark
	Production	**TPA**	**425000**	**465000**	
1	Specific Coal Consumption	Kg/T	950	940	Lowering of energy consumption due to R&D project
2	Source		100% S. African	80% S.Afr. & 20% Indian	To save foreign exchange
3	Energy consumption	GCal/T	5.66	5.47	3.86% decrease
4	SO_2 in flue gas in Kg/Hr	Kg/Hr	115.90	85.2	By controlling coal mix ratio (SA:Indian)
5	Stack Emission (PM) – ESP (avg)	mg/Nm^3	78	73	By enhancing efficiency using advance controller
6	Water consumption	KLD	1275	1414	Will be met from existing sanction
7	Waste water utilization	%	100%	100%	Plant is zero discharge
8	CO_2	T/T DRI	1.822	1.811	Due to reduction in specific coal consumption
9	Solid waste	T/T DRI	0.46	0.457	Due to reduction in kiln accretion

Recommendations of the committee:

10.0 After detailed deliberations and hearing the verbal and written submissions (letter no.TSI/J/E9.3/PC/540) of the project proponent, the Committee considered the proposal under the provisions of Section 7(ii) of the EIA Notification 2006 and recommended the proposal for grant of environmental clearance with the following specific conditions:

i. The project proponent shall reduce the specific consumption of coal, energy, water and specific emission/discharge/production of PM, SO2, CO2, waste water and solid waste as proposed by the PP given above.

34.6. Establishment of Integrated Steel Plant [DRI Kilns (2,31,000 TPA); Steel Melting Shop (2,47,000 TPA); Rolling Mill (2,47,500 TPA); Power Generation – 40 MW (16 MW WHRB and 24 MW FBC)] at Plot No. AL-2, Sector 23, GIDA Industrial Area, Village Sahbazganj & Domharmafi, Tehsil Sahjanwa, District Gorakhpur, Uttar Pradesh by M/s Ankur Udyog Limited (Steel Division) [Online proposal No. IA/UP/IND/75680/2018; MoEF&CC File No. IA-J-11011/229/2018-IA-II(I)] – Terms of Reference.

M/s Ankur Udyog Limited (Steel Division) made application vide online proposal no. **IA/UP/IND/75680/2018** dated 2nd July 2018 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" EIA Notification; 2006.The proposal of expansion is submitted and appraised at Central Level.

Details of the project as per the submission of Project Proponent:

2.0 **M/s Ankur Udyog Limited (Steel Division)** proposed to install a new unit to establish DRI Kilns (3,30,000 TPA), Induction Furnace with Concast (MS Billets/Hot metal for hot charging) along with 1 x 35 T Ladle Refining Furnace (LRF) & 1 x 3 Strand Billet Caster (3,56,400 TPA), Rolling Mill (3,56,400 TPA), Power Generation – 50 MW (24 MW through Waste Heat Recovery Boiler (WHRB) and 26 MW through Fluidized bed combustion (FBC) Boiler). It is proposed to manufacture the above products based on the following technology

- Producing Sponge Iron through DRI route.
- Producing MS Billets through IF route & LRF
- Producing MS Re-Bars (TMT) and structural steel through Rolling mill and Hot charging route.
- Power generation through Waste Heat Recovery & FBC Boilers

3.0 The proposed project is a Greenfield project. CTE will be obtained after getting Environment Clearance from MoEF&CC. Consent to Operate will be obtained after getting CTE from UPPCB, Uttar Pradesh.

4.0 The proposed unit will be located at Plot No. AL-2, Sector 23, GIDA Industrial Area, Village Sahbazganj & Domharmafi, Tehsil Sahjanwa, District Gorakhpur, Uttar Pradesh.

5.0 Total land envisaged is 79.0 acres / 32.0 Ha. and same is in possession of management. Total land is situated in Gorakhpur Industrial Development Authority (GIDA) Industrial Area. Of the total area, 26.0 acre / 10.5 Ha. (33%) land will be used for greenbelt developed. No Forest land involved.

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

7.0 Total project cost for proposed project is approx. Rs. 330.0 Crores. Proposed employment generation from proposed project will be 500 nos. direct employment and 1000 nos. indirect employment.

8.0 The targeted production capacity of the total plant is 0.356 million TPA. The ore for the plant would be procured from Barbil, Odisha OR NMDC, Chhattisgarh. The ore transportation will be done through by rail & road (through covered trucks). Railway siding is envisaged in the present proposal. The proposed capacity for different products for new site area as below:

S. No.	**Units**		**Plant Configuration (Production Capacity)**
1.	DRI Kilns (Sponge Iron)		2 x 500 TPD (3,30,000 TPA)
2.	Induction Furnace with Concast (MS Billets/Hot metal for hot charging) along with 1 x 35 T Ladle Refining Furnace (LRF) & 1 x 3 Strand Billet Caster		3 x 30 T (3,56,400 TPA)
3.	Rolling Mill [MS Re-Bars (TMT) and structural steel]		1 x 800 TPD & 1 x 280 TPD (3,56,400 TPA)
4.	Power Plant (Electricity) (50 MW)	WHRB - 2 x 50 TPH	24 MW
		FBC - 1 x 110 TPH	26 MW

9.0 The total power requirement for the proposed project will be 55 MW, this will be met mainly with captive power plant of 50 MW (i.e. 24 MW WHRB and 26 MW FBC based power plant), A load of ~10 MW is proposed to be procured from the state grid i.e. Purvanchal Vidyut Vitran Nigam Limited (PuVVNL).

10.0 Proposed raw material and fuel requirement for proposed project are Iron Ore, Dolomite, Scrap, Ferro Alloys, Requirement would be fulfill by external purchase /in house. Fuel Consumption will be mainly Coal & Furnace Oil.

S.No.	**Raw Material**		**Quantity (TPA)**	**Source**	**Mode of Transport**
For DRI Kilns (Sponge Iron) – 3,30,000 TPA					
1.	Iron Ore		2,64,000	Orrisa, NMDC	By Rail
2.	Iron Ore Pellets		2,64,000	Orissa	By Rail
3.	Coal	Indian Coal	4,29,000	Jharkhand	By Rail
		Imported Coal	2,97,000	Indonesia / South Africa / Australia	Through sea route & Rail
4.	Dolomite		16,500	Local Area	By road

S.No.	Raw Material		Quantity (TPA)	Source	Mode of Transport
					(through covered trucks)
For Steel Melting Shop (MS Billets) – 3,56,400 TPA					
1.	Sponge Iron		3,00,000	Own generation	----
2.	MS Scrap / Pig Iron		1,30,000	Local Area	By road (through covered trucks)
3.	Ferro alloys		5,300	Local Area	By road (through covered trucks)
For Rolling Mill (TMT bars & Structural Steel) – 92,400 TPA (1 x 280 TPD)					
1.	MS Billets		1,00,000	Own generation & Chattisgarh, West Bengal, Local Area	---- By Rail / Road (through covered trucks)
2.	Furnace oil		4620	Local Market	By road (through covered trucks)
3.	Coal (for Gasifier 5544 NM^3/Hr.)	Indian Coal	18480	Jharkhand	By Rail
		Imported Coal	11830	Indonesia / South Africa / Australia	Through sea route & Rail
For Rolling Mill (TMT bars & Structural Steel) – 2,64,000 TPA (through hot charging) 1 x 800 TPD					
1.	Hot metal		2,64,000	Own generation	----
For CFBC Boiler - Power Generation 26 MW					
1.	Dolochar		99,000	Own generation	----
2.	Coal	Indian Coal	1,40,400	Jharkhand, UP, MP	By rail
		Imported Coal	90,000	Indonesia / South Africa / Australia	Through sea route & Rail
3.	Rice Husk		40,000	Local Market	By road (through covered trucks)

11.0 Water consumption for the proposed project will be 1800 KLD and wastewater generation from the proposed project will be 140 KLD (120 KLD from Power plant & 20 KLD from Domestic). Domestic wastewater will be treated Septic tank followed by sub-surface dispersion trench and there will be no wastewater generation from the DRI, SMS & Rolling Mill processes, as closed-circuit cooling system will be provided. Boiler blowdown & DM plant regeneration wastewater will be treated in Neutralization tanks and will be mixed with CT Blowdown in a Central Monitoring Basin (CMB). The treated effluent from CMB will be reused for dust suppression, ash conditioning and for greenbelt development.

12.0 The proponent has mentioned that there is no violation under EIA Notification to the project or related activity. Writ Petition (C) 1110 of 2011 (Honble High Court Allahabad) Order dated 11th January 2011, pertaining to land dispute, has been CLOSED vide Order dated 2nd July 2018.

13.0 EIA Consultant: **Pioneer Enviro Laboratories & Consultants Pvt. Ltd, Hyderabad**.

Recommendations of the Committee:

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

1. Raw material linkage shall be made to minimize the road transportation
2. Scheme for no coal gasifier shall be provided in the EIA/EMP
3. Scheme for Air cooled condenser shall be provided in the EIA/EMP
4. Scheme for Rainwater harvesting shall be provided in the EIA/EMP
5. Ambient Air Quality monitoring shall be conducted at 5 locations for baseline data generation.
6. Scheme for skill development as per the programmes of Skill Development Council of India to improve the employability of the locals in the proposed project.
7. Public Hearing to be conducted by the concerned State Pollution Control Board.
8. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
9. The project proponent should carry out social impact assessment of the project and submit the Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018.
10. Certificate compliance of earlier EC from the Regional officer of the MoEFCC shall be submitted along with EIA/EMP.

34.7. Expansion of Steel Plant [Up-gradation of existing DRI Kiln (from 29,700 TPA to 30,000 TPA); establishment of New DRI Kilns (2,31,000 TPA); New Induction Furnaces (Mild Steel Ingots & Billets – 3,96,000 TPA); Change of route in existing Induction Furnaces – 1,00,000 TPA (Change of product from Billets & Ingots to TMT Bars & Structural Steel by Hot Charging); New Rolling Mills (TMT bars & Structural Steel – 3,96,000 TPA); WHRB based Power Plant from 7 MW to 23 MW; CFBC based Power Plant (from 8 MW to 22 MW); New Ferro Alloys Plant (FeSi-15,600 TPA / FeMn-32,400 TPA / SiMn – 32,400 TPA) located at Villages Sarora & Parsada, Tehsil Tilda, District Raipur, Chhattisgarh by M/s Mahendra Sponge & Power Ltd. [Unit – II] [Online proposal No. IA/CG/IND/2406/2009; MoEFCC File No. J-11011/1154/2007-IA.II(I)] – Terms of Reference.

M/s Mahendra Sponge & Power Ltd made application vide online proposal no. **IA/CG/IND/2406/2009** dated 16th July 2018 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" EIA Notification; 2006 and appraised at Central Level.

Details of the project as per the submission of Project Proponent:

2.0 **M/s Mahendra Sponge & Power Limited** proposed to Ugradation of existing DRI Kiln from 29,700 TPA to 30,000 TPA, establishment of New DRI Kilns (Sponge Iron – 2,31,000 TPA), New Induction Furnaces (Mild Steel Ingots & Billets – 3,96,000 TPA), Change of route in existing Induction Furnaces – 1,00,000 TPA (Change of product from Billets & Ingots to TMT Bars & Structural Steel by Hot Charging), New Rolling Mills (TMT bars & Structural Steel – 3,96,000 TPA), WHRB based Power Plant from 7 MW to 23 MW, CFBC based Power Plant from 8 MW to 22 MW, New Ferro Alloys plant (FeSi-15,600 TPA / FeMn-32,400 TPA / SiMn – 32,400 TPA). It is proposed to manufacture the above products based on the following technology

- Producing Sponge Iron through DRI route.
- Producing MS Ingots & Billets through IF route & LRF
- Producing TMT bars / Structural steels through Rolling mill and Hot charging route.
- Power generation through Waste Heat Recovery & FBC Boilers
- Producing Ferro alloys through SEAF route

3.0 The existing plant was accorded Environment Clearance vide F.No. J-11011/1154/2007-IA-II (I) dated 27th January 2010 & 30th November 2015 (for name change), 17th July 2017 & 7th March 2018 (EC validity extension). Consent to Operate was accorded by Chhattisgarh Environment Conservation Board vide order No. 1356/TS/CECB/2017 Naya Raipur dated 24th June 2017 for 1 x 90 TPD & 1 x 100 TPD Sponge Iron units. Remaining unit for which EC was obtained are under implementation. Environmental Clearance is valid till 26th January 2020.

4.0 The existing unit is located at Villages Sarora & Parsada, Tehsil Tilda, District Raipur, Chhattisgarh.

5.0 Existing plant is located in 19.25 acres / 7.79 Ha. of land. Proposed expansion will be taken up partially in the Existing plant (i.e. 19.25 acres / 7.79 Ha.) and partially in the land adjacent to the existing plant (i.e. 32.25 acres / 13.05 Ha.). Total land after proposed expansion will be 51.5 acres / 20.84 Ha. Out of the total area, 17.0 Ac. / 6.9 Ha. (33%) land is allocated for greenbelt developed. No Forest land involved.

6.0 Bilari RF (0.7 Kms) & Bilari Ghughua RF (4.0 Kms) are within 10 Kms. Radius of the plant site. Seonath river (7.0 Kms.), Kharun River (8.1 Kms.), Kulhan Nallah (8.5 Kms.), Bhatapara Branch Mahanadi Canal (1.5 Kms.) are flowing within 10 Kms. radius of the plant site. No National park/Wild life sanctuary/Biosphere reserve/tiger reserve/Elephant reserves are

reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule – I fauna.

7.0 Total project cost for proposed expansion is approx. Rs. 325 Crores. Proposed employment generation from proposed project will be 400 nos. direct employment and 600 nos. indirect employment.

8.0 The targeted production capacity of the total plant is 0.396 million TPA. The iron ore for the plant would be procured from NMDC, Bailadila / Bacheli and Indian coal from SECL, Chhattisgarh / MCL Odisha. The ore transportation will be done through by Rail (upto nearest railway station) & Road (through covered trucks) up to the site. The proposed capacity for different products are furnished below:

S. No.	**Unit (Product)**	**Plant configuration & Production Capacity**			
		Existing	**EC obtained in Jan. 2010**	**Present Proposal (TPA)**	**After Present Proposal (TPA)**
1.	DRI Kilns (Sponge Iron)	29,700 TPA (1 x 90 TPD)	66,000 TPA (2 x 100 TPD)	Upgradation of existing 29,700 TPA to 30,000 TPA + 2,31,000 (2 x 350 TPD)	3,27,000 TPA
2.	Induction Furnaces (Mild Steel Ingot & Billets)	--	---	3,96,000 TPA (8 x 15 MT)	3,96,000 TPA
3.	Induction Furnaces (Hot liquid metal to TMT Bars & Structural Steel)	--	1,00,000 TPA (3 x 10 MT)	Change of product from Billets & Ingots to TMT Bars & Structural Steel (by Hot Charging) [Now proposed to establish 2 x 15 MT instead of 3 x 10 MT]	1,00,000 TPA
4.	Rolling Mill (TMT Bars & Structural Steel)	--	--	3,96,000 TPA (2 x 600 TPD)	3,96,000 TPA (2 x 600 TPD)
5.	Power Plant (Electricity)	--	15 MW (7 MW WHRB + 8 MW CFBC)	30 MW (16 MW WHRB + 14 MW CFBC)	45 MW

6.	Submerged Electric Arc Furnaces (FeSi/SiMn/FeMn)			2 x 9 MVA (FeSi – 15,600 TPA or SiMn – 32,400 TPA or FeMn – 32,400 TPA	2 x 9 MVA (FeSi – 15,600 TPA or SiMn – 32,400 TPA or FeMn – 32,400 TPA

9.0 The electricity load of 85.7 MW for operating existing & expansion projects will be met from proposed captive WHRB, FBC based power plant & remaining will be supplied from Chhattisgarh State Electricity Board. It is also proposed to install 2 x 500 KVA DG set.

10.0 Proposed raw material and fuel requirement after proposed expansion project are Iron ore, Coal, Mn ore, Dolomite, Scrap etc., Requirement would be fulfill by external purchase / in house. Fuel Consumption will be mainly Coal & Furnace Oil.

S.No.	**Raw Material**		**Quantity (TPA)**	**Source**	**Mode of Transport**
For DRI Kilns (Sponge Iron) – 2,31,000 TPA					
5.	Iron Ore		3,70,000	NMDC, Bailadila/ Bachheli	By rail & road (through covered trucks)
6.	Coal	Indian Coal	3,00,000	SECL, Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
		Imported Coal	2,08,000	Indonesia / South Africa / Australia	Through sea route & Rail
7.	Dolomite		11,500	Local Area	By road (through covered trucks)
For Steel Melting Shop (MS Billets) – 3,96,000 TPA					
4.	Sponge Iron		3,00,000	Own generation & Purchased from Outside (Local area)	---- By road (through covered trucks)
5.	MS Scrap		1,40,000	Local Area	By road (through covered trucks)
6.	Ferro alloys		5,300	Own Generation	----
For Rolling Mill (TMT bars & Structural Steel) – 3,96,000 TPA					
4.	MS Billets		4,20,000	Own generation & Chattisgarh, West Bengal, Local Area	---- By Road (through covered trucks)

S.No.	Raw Material		Quantity (TPA)	Source	Mode of Transport
5.	Furnace oil		19800	Local Market	By road (through covered trucks)
6.	Coal (for Gasifier 24000 NM^3/Hr.)	Indian Coal	79200	SECL, Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
		Imported Coal	50688	Indonesia / South Africa / Australia	Through sea route & Rail
For Rolling Mill (TMT bars & Structural Steel) – 1,00,000 TPA (through hot charging)					
2.	Hot metal		1,00,000	Own generation	----
For CFBC Boiler - Power Generation 26 MW (56 TPH Boiler)					
4.	Dolochar		69,300	Own generation	----
5.	Coal	Indian Coal	75,600	SECL, Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
		Imported Coal	48,000	Indonesia / South Africa / Australia	Through sea route & Road (through covered trucks)

11.0 Water consumption for the proposed expansion project will be 1460 KLD and wastewater generation from the proposed expansion project will be 164 KLD (156 KLD from Power plant & 8 KLD from Domestic). Domestic wastewater will be treated Septic tank followed by sub-surface dispersion and there will be no wastewater generation from the DRI, Induction Furnace, Rolling mill, Ferro Alloys unit as closed-circuit cooling system will be provided. Boiler blowdown & DM plant regeneration wastewater will be treated in Neutralization tanks and will be mixed in a Central Monitoring Basin (CMB). The treated effluent from CMB will be reused for dust suppression, ash conditioning and for greenbelt development.

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

13.0 EIA Consultant: Pioneer Enviro Laboratories & Consultants Pvt. Ltd, Hyderabad.

Recommendations of the Committee:

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

1. Detailed Road traffic study for inside and outside the plant shall be conducted and furnished in the EIA/EMP
2. Scheme for water withdrawl from Sivanath River shall be furnished in the EIA/EMP.

3. Scheme for skill development as per the programmes of Skill Development Council of India to improve the employability of the locals in the proposed project.
4. Public Hearing to be conducted by the concerned State Pollution Control Board.
5. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
6. The project proponent should carry out social impact assessment of the project and submit the Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018.
7. Certificate compliance of earlier EC from the Regional officer of the MoEFCC shall be submitted along with EIA/EMP.

34.8. Expansion and augmentation of integrating melting and rolling facility located at Plot no. 6 & 6A, Industrial area phase 2, Kala Amb, Tehsil - Nahan, District-Sirmaur, State Himachal Pradesh by M/s Amba Shakti Ispat Limited [Online Proposal No. IA/HP/IND/75487/2018; MoEFCC File No. IA-J-11011/228/2018-IA-II(I)] – Terms of Reference

1.0 **M/s Amba Shakti Ispat Limited** made application vide online proposal no. **IA/HP/IND/75487/2018** dated 29th June 2018 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" EIA Notification; 2006.The proposal of expansion is submitted and appraised at Central Level.

Details of the project as per the submission of Project Proponent:

2.0 **M/s Amba Shakti Ispat Limited** proposed to have an expansion of existing manufacturing unit for Expansion of Total Production Capacity and Augmentation of Integrating Melting and Rolling Facility.In the process the industrial unit will increase its Molten Metal generation capacity to 540 MT/Day (162000 MT/Annum) and Continuously Cast Billets to 531 MT/Day (159300 MT/Annum) and rolling products capacity to 521 MT/Day (156300 MT/Annum) by installing Multiple Induction Furnaces.

3.0 The existing plant of M/s Amba Shakti Ispat Ltd was accorded Consent to Operate by Himachal Pradesh State Pollution Control Board vide letter. no. HPSPCB/PCB-ID 14150. The validity of CTO is upto 31 March 2019 for production of 45000 MT/Annum of Rolled steel sections. These were produced from 28500 MT/Annum billets cast through existing Induction Furnace- Continuous Casting route and 17400 MT/Annum of billets directly purchased from the market.

4.0 The proposed unit will be located at Plot no 6 & 6A Industrial Area Phase-2, Kala Amb, Tehsil Nahan, District Sirmaur, State Himachal Pradesh.

5.0 The land area acquired for the proposed plant is 43360 Sq. m. out which total covered area is26873 Sq. m. & open area is 16487 Sq. m. No forestland is involved. The entire land has

been acquired for the project. Of the total area 4.3360 ha (30%) land will be used for green belt development.

6.0 There is no National Park/WL etc located at a distance of 10 KM from the site. No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

7.0 Total project cost is approx. Rs. 24.5 Crore. Proposed employment generation from proposed project will be 40. Total manpower will be 150direct employments.

8.0 The targeted production capacity of the Rolling Mill is 156300MT/Annum based on 162000 MT/Annum of molten metal produced in the Induction Furnaces and 159300 MT/Annum of billets cast in Continuous Casting machine. The raw materialsrequired are 173100 of MS scrap& Sponge Iron and alloying elements, purchased directly from the market and transportation will be affected through road.

S. No	Particulars	Existing	Proposed expansion	Total
1.	Induction Furnace	2X6 MT/Heat	3X15 MT/heat	45 MT/heat
2.	Installed production capacity	27600 MT/Annum (92 MT/Day)	**128700** MT/Annum	**156300** MT/Annum (521 MT/Day)
3.	Fixed capital investment	18.5 Cr	6.0 Cr	24.5 Cr.
4.	Fuel consumption	1200 MT/A of coal (Reheating furnace)	Nil	Nil
5.	Electrical power requirement	13.50 MVA	3.50 MVA	**17 MVA**
6.	Raw materials requirement	MS scrap /Sponge Iron 32100 MT/Annum Billets 17000 MT/A	141000 MT/Annum	MS scrap /Sponge Iron- **173100 MT/Annum**
7.	Land area	**43,360 sq.m.**	**-**	**43,360 sq.m.**
8.	Manpower requirement	110	40	**150**
9.	Gross water requirement	13 KLD	37 KLD	**50 KLD**
10.	Solid waste generation • Slag • Mill scale	• Slag – 3.6 TPD • Mill Scale- 1.2 TPD • End cuttings / trimmings- 2 TPD		• Slag – **46 TPD** • Mill Scale- **9 TPD** • End cuttings / trimmings- **10 TPD**
11.	Hazardous waste • APCD dust • Spent lubricant	• FLUE GAS DUST- 2 MT/Annum • Spent oil (5.1) 60 Ltr/Annum		Fly ash 1.50 MT/Annum APCD dust =300 MT/ Annum

				Spent oil= 60 L/ Annum
12.	No of operational days	• 300		300

9.0 The electricity load of 17 MVA will be procured from Himachal Pradesh State Electricity Board (HPSEB) and the Company has an existing 1 DG Set of 500 KVA capacity.

10.0 Proposed raw materials requirement for project are MS scrap, sponge iron and alloying elements in quantity of 173100 MT/Annum and fuel requirement will be only for the DG sets (to be used in case of mains power failure) as well as for transportation equipment.

11.0 Water Consumption for the proposed project will be 50 KLD. The waste water generation will be just the blow-down of cooling tower which will again be used for dust suppression in Slag Metal Extraction unit. The domestic waste water will be only the outflow of soak pits attached to Septic tank. The outflow of soak pits will be used for green belt development.

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

13.0 EIA Consultant: Shivalik Solid Waste Management Limited, Zirakpur, Punjab, Sr no 133in the List of Accredited Consultant Organizations (Alphabetically) Rev. 67 July 09, 2018

Recommendations of the Committee:

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

1) Permission for water withdrawl shall be obtained and enclosed in the EIA/EMP
2) Use of clean (liquid/gaseous) fuel for reheating furnace shall be furnished in the EIA/EMP.
3) Detailed shop floor management shall be provided in the EIA/EMP
4) Plan for achieving 100 % solid waste utilization (Recycling and reutilization of slag) shall be provided in the EIA/EMP
5) Public Hearing to be conducted by the concerned State Pollution Control Board.
6) The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
7) The project proponent should carry out social impact assessment of the project and submit the Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018.
8) Certificate compliance of earlier EC from the Regional officer of the MoEFCC shall be submitted along with EIA/EMP.

34.9. Setting up of 2 MTPA Pellet Plant at RINL Premises, Vishakapatnam, Andhra Pradesh by M/s KIOCL Limited [Online Proposal No. IA/AP/IND/75642/2018; MoEFCC File No. IA-J-11011/230/2018-IA-II(I)] – Terms of Reference.

1.0 **M/s KIOCL Limited** made application vide online proposal no. **IA/AP/IND/75642/2018** dated 30th June 2018 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" EIA Notification; 2006.The proposal of expansion is submitted and appraised at Central Level.

Details of the project as per the submission of Project Proponent:

2.0 M/s KIOCL Limited proposed to install a new manufacturing unit for Pellets. It is proposed to set up the plant for producing 2 MTPA of Iron Ore Pellets based on Travelling Grate Technology.

3.0 The proposed unit will be located within existing premises of RINL. Village: Kamithi (part), Pedagantyada (part), Nellimukkee (part), Taluka: Visakhapatnam, District:. Visakhapatnam, State: Andhra Pradesh.

4.0 The land area identified for the proposed plant is 80 acres which is an industrial area and is located within the existing premises of RINL. The entire land has been already acquired by RINL for the project. Of the total area of 80 acres about 24 acres of land (30% of the total area) is planned for green belt development.

5.0 No National Park / Wild Life Sanctuary /Bio Sphere 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.

6.0 Total project cost is approx 996 Crore rupees (INR) as on 2nd quarter of 2018. Proposed employment generation from proposed project will be 198 nos direct employment.

7.0 The targeted production capacity of the pellet plant is 2 Million TPA. The iron ore fines and other raw materials for the plant would be sourced from following locations:

Sl. No.	Raw material	Quantity (T/Year)	Source
1	Iron ore fines	1,984,920	Indigenous(NMDC, Chhattisgarh and other sources from Odisha)
2	Limestone	63158	Indigenous (Nearby locations)
3	Coke breeze	29,300	Indigenous (From RINL and other sources)
4	Bentonite	13,800	Indigenous (From Kutch)

8.0 The ore transportation is planned through rail upto Gangavaram. The existing facilities of KIOCL will be used for ore transportation from Gangavaram to RINL site by road. The list of facilities for the proposed plant are given below:

SI. No.	Unit name

SI. No.	Unit name
1	Iron ore day bin building
2	Iron ore grinding building
3	High rate thickener
4	Slurry storage tank
5	Filter feed pump house
6	Filtration building
7	Storage shed for filter cake
8	Storage shed for bentonite
9	Storage shed for coke breeze
10	Additive grinding building
11	Mixing & balling building
12	Induration building for straight grate machine
13	**ESPs & process fans**
14	**Process chimney**
15	Central control room
16	Hearth layer separation building & product screening
17	**Dedusting unit for hearth Layer Separation Building (HLSB) & chimney**
18	**Dedusting unit for Induration discharge end & chimney**
19	Fines bin building
20	Pellet stockyard
21	Furnace oil and Light Diesel Oil (LDO) storage unit & fuel oil pump house
22	Main Receiving Sub Station (MRSS)
23	Diesel generator
24	Load Centre Sub Station (LCSS)
25	Central laboratory
26	Compressed air station
27	Water pump house and soft water treatment plant

9.0 The estimated power requirement of the proposed plant is 20 MVA. A new transmission line is proposed for drawing power from Gangavaram port grid sub-station of APTRANSCO, through double circuit 132 kV overhead transmission line.

10.0 Proposed raw material is given in Table 01and fuel requirement for project are Furnace oil - 30,000 m^3/yr (from nearest oil storage company), LDO and LPG. Fuel consumption mainly is LDO for pelletisation process and LPG is planned for initial startup of the project.

11.0 Water consumption for the proposed project will be 84 m3/hr and effluent generation is not expected as complete recirculation of waste water generated from the plant is envisaged. Domestic waste water will be treated in MBR based sewage treatment plant and treated water will be reused.

12.0 The proponent, M/s KIOCL Limited has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

13.0 Name of the EIA Consultant: M/s MECON Limited, (Govt. of India Enterprise), Ranchi / Bangalore, Sl. No. in the QCI list – 101.

Recommendations of the Committee:

14.0 The committee observed that the proposed pellet plant will be located in the premises of RINL Visakhapatnam which is under violation of EIA Notification 2006. Therefore, the committee deferred the proposal till the violation case of RINL is decided.

34.10. Existing 4x100 TPD Sponge Iron Plant of Anindita Steels Limited – proposed addition of AFBC/CFBC and WHRB based Power Plant of 15 MW power generating facilities to utilize Dolochar and gainful utilization of waste heat from existing plant located at Village Senegarha. Panchayats- Rabodh-825330. Circle / Local Body- Giddi. Zila Parishad Hazaribagh. District- Hazaribagh (Jharkhand) by M/s Anindita Steels Limited [Online proposal No. IA/JH/IND/74838/2018; MoEFCC File No. IA-J-11011/178/2018-IA-II(I)] – Terms of Reference.

M/s Anindita Steels Limited made application vide online proposal no. **IA/JH/IND/74838/2018** dated 11th July 2018 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" EIA Notification; 2006.The proposal of expansion is submitted and appraised at Central Level.

Details of the project as per the submission of Project Proponent:

2.0 **M/s Anindita Steels Limited** proposed to install Captive Power Plant (CPP) of 15 MW based on WHRB and AFBC in the existing 4x100 TPD Sponge Iron Plant at Senegarha, Hazaribgh.

3.0 The existing project was installed prior to 2006 EIA Notification therefore Environmental clearance was not required.Consent to Establish was accorded by Jharkhand Pollution Control Board vide lr. No N-406dated 02/07/2005. Since than regular CTO is accorded.

4.0 The plant is located in the Senegarha village, District Hazaribagh, Jharkhand. National Highway NH-33 from Hazaribagh to Ramgarh is at 8.29 km, E. Nearest town is Ramgarh at 10.8 km, SE and nearest railway station is Arigada Railaway Station at 8.27 km, SSE. Nearest Airport is Ranchi at 44 km, SSW.

5.0 The proposed Power Generating Unitwill be setup in the existing plant premises utilizing the surplus landout of total 30 acres now available with the Sponge Iron Plant.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

7.0 Total project cost is approx.75Crore rupees. Proposed employment generation from proposed project will be 50 direct employment and 100 indirect employment.

8.0 Anindita Steel Limited proposes to Power Generating unit of 15 MW based on WHRB and AFBC in the existing 4x100 TPD Sponge Iron Plant. The water requirement of the project will be 45 cum per hour. At present Ground water is being used for sponge iron plant. For proposed project water will be drawn from the pond made on Water Harvesting Principle by the company in the existing Plant premises.The capacity of the pond is 100,000 m^3.

9.0 The proposed power plant will generate 15 MW energy in the form of electricity from the proposed WHRB and AFBC based power plant. These additional facilities are required to utilize waste heat generated during operations and to utilize Dolochar from operations of DRI and converting into energy. It will be serve as a Captive Power Source.

10.0 The detail of raw material and their sources for 15 MW CPP is given below.

Sl. No.	Unit	Raw Material	Source	CONSUMPTION		
				TPD	TPM	TPA
A	**POWER PLANER**					
		(i) Coal char	In House	60	1600	19200
		(ii) Coal Dust	In House	48	1280	15360
		(iii) Fresh Coal	Market	70	1670	20000

11.0 The estimated make-up water requirement for the 15 MW Captive Power Plant will be 45 cum per hour. The required water will be drawn from the pond made on Water Harvesting Principle by the company in the existing Plant premises. The capacity of the pond is 100,000 m3. If require for additional water, permission will be taken from CGWA.

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

13.0 EIA Consultant: Pollution & Ecology Control Services, Nagpur, NABET No. : 116

Recommendations of the committee:

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

1) Public Hearing to be conducted by the concerned State Pollution Control Board.
2) The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
3) The project proponent should carry out social impact assessment of the project and submit the Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018.

4) Certificate compliance of CFO from the Regional officer of the SPCB shall be submitted along with EIA/EMP.

34.11. Setting up of Cement Plant (600 TPD) located at Village SolnaranSaturmargKhrew, Tehsil Pampore, District – Pulwama, Jammu and Kashmir by M/s Jhelum Cements Ltd [Online proposal No. IA/JK/IND/75449/2011; MoEFCC File No. J-11011/358/2009-IA-II (I)] – Extension of validity of EC.

M/s Jhelum Cements Limited made an application vide online proposal no. IA/JK/IND/75449/2011 dated 18th June 2018 seeking extension of validity of environmental clearance granted for Setting up of Cement Plant (600 TPD) located at Village Solnaran Saturmarg Khrew, Tehsil Pampore, District – Pulwama, Jammu and Kashmir vide File No. J-11011/358/2009-IA-II (I) dated 20th December, 2011.

Details of the project as per the submission of Project Proponent:

2.0 The project site falls within the 10 Km radius of the Dachigam National Park and the Eco-sensitive zone of the National Park is yet to be declared from then. In view of this, the aforesaid environmental clearance was granted with the following specific condition:

'Environmental clearance is subject to obtaining clearance under the Wildlife (protection) Act 1972, from the National Board for Wildlife. Further, the grant of environmental clearance does not necessarily imply the wildlife clearance shall be granted to the project and the proposal shall be considered by the National Board for Wildlife on merits. The investment made on the project, if any based the environmental clearance so granted in anticipation of clearance from the wildlife angle shall be entirely at the cost and the risk of the company and MoEF in this regard shall not be responsible in any matter.'

3.0 Now, the project proponent informed that the company is pursuing the case for clearance project from National Board of Wildlife for the last 6 - 7 years. But, till date the clearance was not issued. Therefore, the project proponent could not made investment for implementation of the project.

Observations of the committee:

4.0 The project proponent made application in the state forest department for the wildlife clearance and it is under consideration.

Recommendations of the Committee:

5.0 After detailed deliberations, the Committee recommended for extension of validity of Environmental Clearance.

34.12. Expansion of Manufacturing unit of Lead Acid Batteries located at Hosur at Chichurakanapalli Village, Hosur taluk, Krishnagiri District in Tamilnadu by M/s Exide Industries Limited [Online Proposal No. IA/TN/IND/75887/2018; MoEFCC File No J-11011/243/2018-IA.II(I) - Terms of Reference

M/s Exide Industries Limited made application vide online proposal no. **IA/TN/IND/75887/2018** dated 20th July 2018 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.

Details submitted by the Project Proponent:

2.0 M/s. Exide Industries Limited proposed expansion of existing manufacturing unit for Lead Acid Batteries. It is based on existing process & technology.

3.0 The existing project was accorded Consent to operate by Tamilnadu State pollution Control Board vide 170818089941 (Water) & 170828089941 (Air) dated 20.12.2017. Validity of CTO is up to 31.03.2022.

4.0 The proposed unit will be located within the premises of existing plant at Chichurakanapalli Village: Hosur Taluk: Krishnagiri District: Tamilnadu State.

5.0 The land area acquired for the proposed plant is 29.8 ha (already existing). The entire land has been acquired for the project. Of the total area 9.8 ha (33 %) land will be used for green belt development.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

7.0 Total project cost is approx 113.49 Crore rupees. Proposed Employment Generation from proposed project will be 1900 direct employment and 1500 indirect employment.

8.0 The targeted production capacity of the Product

Product	Existing Capacity	Capacity After Expansion
Valve Regulated Lead Acid Batteries	100 MAh/Month	210 MAh/Month
Automotive Batteries	300000 Nos/Month	450000 Nos/Month

9.0 The electricity load of 21.5 MW will be procured Mainly from Tamilnadu State Electricity Board & from own Solar Power Plant (1.5 MW existing & 3 MW proposed)) Company has also proposed to install 2 numbers of 1500 KVA DG Sets (Stand by).

10.0 Major Raw materials are Lead & Sulphuric Acid and fuel used is LPG apart from Diesel. LPG is used for melting Lead & curing/drying of plates. Lead is melted at 440 DegoC in melting pots. Diesel is used for the operation of stand by Diesel generators during EB supply failure.

11.0 Water Consumption for the proposed project (existing +expansion) will be 1000 KLD and waste water generation will be 330KLD. Domestic waste water will be 200 KLD treated in Sewage Treatment Plant (SBR Technology) and industrial waste water of 130 KLD generated will be treated in ETP. Treated water from ETP will be recycled using RO & evaporator technology. Permeate will be used in process & for machine cooling whereas reject will be evaporated. Treated sewage will be used for green belt development & maintenance.

12.0 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:

13.0 The committee noted that the proposal involves metallurgical and chemical processes in the manufacturing of batteries including the use of acid.

Recommendations of the Committee

14.0 After detailed deliberations, the committee felt that the proposed project may be referred to the Ministry to decide on the applicability of EIA Notification 2006.

34.13. Proposed cement plant (Clinker 3.0 MTPA; Cement 4.5 MTPA] along with captive power plant 50 MW and WHRB 9 MW at Tehsil Mundwa, District Nagaur in Rajasthan by M/s Ambuja Cement Limited [Online proposal No. IA/RJ/IND/4731/2011; MoEFCC File J11011/394/2010-IA.II(I)] – Extension of Validity and amendment of EC – Further consideration based on reply to ADS.

M/s Ambuja Cements Limited made application vide online proposal no. **IA/RJ/IND/4731/2011** dated 10th May, 2018seeking extension of validity of environmental clearance granted for the proposed Cement Griding Unit of 1.5 MTPA Capacity at Village Osara, Tehsil Bhanpura in District Madsaur in Madya Pradesh vide F. No. J-11011/394/2010-IA.II (I) dated 05.05.2011.

Details of the proposal submitted by PP:

2.0 M/s Ambuja Cements Limited is proposed for Integrated Cement Project (Clinker 3.0 MTPA, Cement 4.5 MTPA, along with CPP 50 MW and WHRB 9MW) at Tehsil Mundwa, District Nagaur in Rajasthan. Total land requirement of the project is 285.10 ha which is already in possession of the company. The total cost of the project is Rs. 1500 Crores. Rs. 120 Crores and Rs 100 Lakhs have been earmarked towards Capital and recurring cost for EMP measures respectively.

3.0 Due to unavoidable circumstances the company has not been able to commission our aforementioned plant within 7 years of EC validity. The prime reason for the delay being our EC was under abeyance as per MoEF direction during 24.07.2013 to 06.12.2016. EC abeyance was revoked by MoEF letter no. Z-11011/6/2013-IA.II (I) dated 06.12.2016. It was only after the abeyance revocation that we could start the project development activities.

4.0 The company has already completed construction of infrastructure facilities such as offices, stores / workshop, weighbridge, roads, material sheds, lying of electrical lines, site illuminations etc., and also in advance stage of ordering of plant. Moreover, all the required statutory clearances /permits from various Government bodies have also been obtained.

5.0 As on date, total amount spent for the above mentioned project is Rs. 300.47 Crores. Target project completion date is Q2-2020. Also engaged in community services in and around

the plant area. Upto March 2018, total amount spent for the community development is Rs. 18.70 Crores.

6.0 Therefore, it was requested for extension of validity of the EC for another 3 years i.e. upto04.05.2021.

7.0 A detailed presentation was made by the project proponent. The Committee noted that about 132 bigha of future land falling in their project area was cancelled by the Rajasthan State Government. Therefore, the area of the project site is now been reduced by 132 bigha from its original size. This has resulted into some minor revision in the lay out plan which requires mention in the environment clearance already granted to them.

8.0 The Committee also noted that delay in making application has already been condoned by the Ministry of Environment, Forest & Climate Change.

Recommendations of the committee:

9.0 Therefore, after deliberating on the proposal, the Committee desired that the following additional information be submitted by the project proponents:

i) Revised layout plan of the project site along with original lay out plan which was approved under the environment clearance already granted.

ii) The revised area of the project site.

10.0 Additional Details Sought (ADS) as mentioned above, uploaded on the portal of MoEF&CC on 17.07.2018.

11.0 After detailed deliberations, the committee recommended the proposal for the extension of validity of Environmental Clearance upto and amendment in the Environmental Clearance in accordance with the change in the project layout.

7th August 2018

34.14. Uranium recovery plant from Copper tailing at Mosabani for the capacity of 0.9 MTPA by M/s Uranium Corporation of India located at Mosabani, East Singhbam District, Jharkhand [Online Proposal No. IA/JH/IND/55622/2016 F. No. J-11011/223/2016-IA.II(I)] – Environmental Clearance.

M/s Uranium Corporation of India made online application vide proposal no. IA/AP/IND/75307/2017dated 3rd July 2018 along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 2(b) Mineral Beneficiation under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

Details of the proposal as per the submission of the project proponent:

2.0 The EIA-EMP Report for Proposed Uranium Recovery Plant from Copper Tailings at Mosabani of M/s Uranium Corporation of India Limited (UCIL) located in Village Rangamatiya and Badia, Tehsil Mosabani, District East-Singhbhum District of, State, Jharkhand was initially received in the Ministry on 22.08.2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 10thmeeting held on during 29.08.2016 to 31.08.2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 25.10.2016 vide Letter No. F. No. J-11015/141/2016-IA.II(M).

3.0 The project of M/s UCIL located in Rangamatiya and Badia Village, Mosabani Tehsil, East Singhbhum District, Jharkhand State is for setting up of a new Uranium Recovery Plant from Copper Tailings at Mosabani for production of 0.9 MTPA of uranium bearing material.

4.0 The total land required for the project is 4.158 ha, out of which 0.907 ha private land (already in possession) and is 3.251 ha others (Government Land). No forest land involved. The entire 0.907 ha private land has been acquired/ not acquired for the project. The no River passes through the project area. It has been reported that no water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The total Plant Area of 4.158 ha comes under Rangamatiya village (4.061 ha) and Badia village (0.097 ha). The project area comprises of 3.251 ha government land and 0.907 ha private land. Out of the total project area, 0.907 ha of private land has already been acquired by UCIL. There is no proposal to acquire any additional private land and hence no R&R issue. Moreover no forest land is involved in the proposed project, hence no forestry clearance is required. Earlier Hindustan Copper Limited (HCL) had transferred ~1.214 ha (3 acres) of land to UCIL on lease basis. However, later on, HCL surrendered the lease including this ~1.214 ha (3 acres) land to Government. In view of this, an application has been made by UCIL requesting Govt. of Jharkhand to transfer the same land to UCIL. Based on the application on Nov. 2017, State Govt. of Jharkhand instructed UCIL to deposit Rs. 13.90 lakh and UCIL vide letter no. UCIL/P.O.(mill)/19/2018 on 30.04.2018 deposited the amount by demand draft

6.0 The topography of the area is flat and reported to lies between 22°30'50.79" to 22°30'58.60" N Latitude and 86°27'48.30" to 86°27'57.44" E Longitude in Survey of India Topo sheet No. F45I6 (old topo-sheet no. 73J/6), at an elevation of 100m AMSL. The ground water table reported to ranges between 1.7 to 10.7 m below the land surface during the post-monsoon season. The present project will not intersect ground water table during operational phase. No ground water will be utilised for the proposed project

7.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The proposed Plant is located in the East Singhbhum district of Jharkhand. The entire district of East Singhbhum, West Singhbhum and Saraikela-Kharsawan have been declared as Singhbhum Elephant Reserve. The nearest elephant corridor is Dumriya-

Kundalika-Murakanjia Elephant Corridor and lies at a distance of ~8.0 km South - south-west of the Plant.

8.0 The proposed Plant will beneficiate the tailings by pipeline system from HCL's Copper Concentrator Plant and will extract uranium bearing material. The uranium content of the tailing will be raised to certain amount by Wilfley Tabling method of mineral extraction methodology. In this method, horizontal surfaces like tables are used for mineral extraction which moves backward and forward (reciprocate) in a straight line. These horizontal surfaces are designed in such a way that they can provide ample surface area and residence time for the feed material to get separated into desired materials. After recovery of uranium bearing material, the remaining tailings will be pumped back to HCL's Copper Concentrator Plant.

9.0 The targeted production capacity of the Uranium Recovery Plant from Copper Tailings at Mosabani is 0.105 million TPA. The tailings for the plant would be procured from HCL's Copper Concentrator Plant (linkages Annexure- 2.1 of EIA). The ore transportation will be done through slurry pipeline (Rail/Road/Conveyor/Slurry Pipeline).

10.0 The water requirement of the project is estimated as 816 m3 /day, out of which766 m3/day of fresh water requirement will be obtained by tapping water from the existing water pipe line of Mosabani Copper Concentrator Plant of HCL which draws water from Subarnarekha River and the remaining requirement of 50 m3 /day will be met from the recycling water. UCIL has submitted an application vide no. UCIL/Mill/708/215/2017 dated 25.03.2017 to Water Resource Department (WRD), Jharkhand for tapping of 766 m^3/d of water.

11.0 The power requirement of the project is estimated as 1.2 MW, out of which 1.2 MW will be obtained from Jharkhand Bijli Bitran Nigam Limited.

12.0 Baseline Environmental Studies were conducted during Post Monsoon 2016 season i.e.from01.10.2016 to 31.12.2016. Ambient air quality monitoring has been carried out at 8 locations during 01.10.2016 to 29.12.2016 and the data submitted indicated: PM10 (48 to 98μg/m^3), PM2.5 (26 to 54 μg/m^3), SO2 (3.3 to 20.2 μg/m^3) and NOx (7.9 to 37.5 μg/m^3). The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 0.55μg/m^3 with respect to the PM10,..μg/m^3 with respect to the SO2 μg/m^3 with respect to the NOx.

13.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.2 to 7.7, Total Hardness: 120 to 572mg/l, Chlorides: 20 to 424 mg/l, Fluoride: 0.1 to 0.45 mg/l. Heavy metals are within the limits. Surface water samples were analysed from8 locations. pH: 7.2 to 7.4; DO: 5.5 to 6.2 mg/l and BOD: 3 to 4mg/l.

14.0 Noise levels are in the range of 39.3 to 64.8 dB(A) for daytime and 37.2 to 51.4 dB(A) fortnight time.

15.0 No R&R is involved in the project.

16.0 The main waste expected to be generated from proposed Plant is in the form of residual tailings left after the recovery of uranium bearing material and will be to the tune of @0.80 Mt/yr. All residual tailings will be pumped backed to HCL's Concentrator Plant through pipeline

as per the agreement between HCL and UCIL. Thus no waste handling is envisaged for the present proposal

17.0 The Public hearing of the project was held on 13.04.2018 at project site under the chairmanship of Shri Subodh Kumar, (ADM, Law & Order, Jamshedpur, Jharkhand) for production of 0.9 million TPA of uranium bearing material of M/s UCIL for setting up of Uranium Recovery Plant from Copper Tailings at Mosabani, under Village Rangamatiya and Badia, Tehsil Mosabani, District East-Singhbhum District of, State Jharkhand. The issues raised during public hearing are mainly related to employment of local people, arrangement for drinking water, medical camp, tree plantation preventive measure due to radiation and environment pollution. The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Sl. No	Issues/ Demand during public hearing	Reply/ Action Plan by UCIL	Action Plan	
			Budget allocation (Rs.)	Time Frame
1	Employment to locals	Priority will be given to locals for employment. Indirect employment will be generated by providing support to dairy farming for SHG, providing tailoring centre, support to animal husbandry for SHG (Goat & Piggery farming), assistance in self-employment by providing tools.	25,00,000	36 month
2	Training for Skill Development for Women	Dairy farming for women, Tailoring centre for women.	5,00,000	12 months
3	Education, Computer training & English coaching	Computer training classes for rural youth, Career counselling and completive exam coaching including English, dual desk for schools in surrounding villages, study materials and stationaries to Aagan Bari Kendra in surrounding villages. Library materials to all surroundings clubs, financial assistance for promotion of tribal culture & art, furniture for surroundings existing clubs will be provided.	20,00,000	12 months
4	Drinking water / Deep Boring	Overhead drinking water tank, tube well installation along with bathroom in surrounding villages, tube wells repairing/ maintenance in surrounding village will be done.	15,00,000	12 months
5	Health facility: Medical camp	ENT check-up camps, Eye check-up camps, bleaching powder distribution, general medical check-up camp in surroundings village will be done.	10,00,000	12 months

Sl. No	Issues/ Demand during public hearing	Reply/ Action Plan by UCIL	Action Plan	
			Budget allocation (Rs.)	Time Frame
6	Agricultural support	Encouragement & assistance will be provided in agriculture means by training the farmers, agricultural assistance to surrounding farmers, lift irrigation facility to surrounding farmers, renovation of lift irrigation facility etc.	23,00,000	24 months
7	Tree Plantation	5000 tree plantation will be carried out within and outside the plant.	10,00,000	24 months
8	CSR initiative	Encourage and promote rural sports talents like football, coaching program for rural youths, organizing rural sports meets for surrounding sports talents, distribution of sports materials to sports clubs, sponsorship of sports program organized in surrounding villages and development of rural infrastructure like community/ club hall, football ground development, Jahersthan maintenance, and providing furniture to surrounding existing clubs.	72,00,000	12 months
9	Information on impact after operation of plant	Health Physics Unit of BARC will carry out radiological monitoring around the project. Awareness program will conducted in consultation with BARC.	10,00,000	12 months
10	Maintenance of existing sewage of Musabani	Not under scope of UCIL		
11	Stop discharge of HCL water	Not under scope of UCIL		
	Grand Total (Rs.)		**1,90,00,000**	
	Total Investment on proposed project (Rs.)		**95,00,00,000**	
	% of proposed investment		**2.00**	

18.0 An amount of 190 Lakhs (2 % of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues. The details of ESC proposed are as follows:

Sl. No.	Enterprise Social Commitment Activities	Year 1	Year 2	Year 3	--	--	Total
1.	• Training for Skill Development for Women • Education, Computer training & English coaching • Drinking water / Deep Boring	1,32,00,000					1,32,00,000

	• Health facility: Medical camp • CSR initiative • Information on impact after operation of plant						
2.	• Agricultural support • Tree Plantation		33,00,000				33,00,000
3.	• Employment to locals			25,00,000			25,00,000
	Total	1,32,00,000	33,00,000	25,00,000			1,90,00,000

19.0 The capital cost of the project is Rs 95 Crores and the capital cost for environmental protection measures is proposed as Rs 55 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 45 Lakhs. The employment generation from the proposed project / expansion is estimated to be 80. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

Sl. No.	**Description**	**Capital cost (Rs. Lakhs)**	**Recurring cost (Rs. Lakhs /y)**
1.	Pollution control	10	15
2.	Baseline monitoring (laboratory)	15	15
3.	Occupational safety	10	5
4.	Green belt& plantation	20	10
	Total	**55**	**45**

20.0 Greenbelt will be developed in 1.37 Ha which is about 33% of the total acquired area. 15 to 20 m wide greenbelt all around the project site, consisting of at least 3 tiers around plant boundary (depending on the available space) 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 1200 trees per hectare. Total no. of 1650 saplings will be planted and nurtured in 1.37 hectares in 5 to 7 years.

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

22.0 EIA Consultant: The Mecon India Ltd.

Observations of the committee:

22.0 After detailed presentation by the project proponent, the Committee noted the following:

1) It is proposed to extract uranium from the copper tailings which is the waste generated from the copper ore beneficiation process.
2) The water requirement for the beneficiation process can be met from the water recovered from the processed tailings.
3) The existing vegetation cover/greenbelt is inadequate.
4) The PP has prepared the wildlife conservation plan and submitted to the state forest department for the approval.
5) The PP has made application for drawl of surface water from Suvarna Rekha River.

6) The revised fund allocation for Corporate Environment Responsibility along with time frame which covers major issues raised during public hearing. During the presentation, the PP has submitted the revised CER as below:

Issues/Demands during public hearing	**Fund (Rs.)**	**Time Frame**
Infrastructure support to dairy farming (SHG), tailoring centre, animal husbandry (Goat and piggery farming) etc.	25,00,000	36 months
Training to locals in Industrial Training Centres (ITC) of UCIL	10,00,000	24 months
Training Centres for Skill Development for Women	5,00,000	24 months
Education, Computer training and English coaching centres	10,00,000	24 months
Drinking water facilities / Deep boring establishment	15,00,000	12 months
Health facility: Infrastructure support to nearby medical centres	20,00,000	24 months
Agricultural support: Awareness to local farmers to increase yield of crop, crop protection in consultation with Agricultural Institutes	25,00,000	36 months
Avenue plantation and plantation in community areas	20,00,000	48 months
Infrastructure for sanitation facilities (toilets) in nearby areas	20,00,000	24 months
Installation of Solar Lights in nearby areas	20,00,000	36 months
Rainwater harvesting in nearby villages	10,00,000	36 months
Awareness programme in consultation with Health Physics unit of BARC on radiological information	10,00,000	12 months
Grand Total	1,90,00,000	-
Total Capital Investment	95,00,00,000	-
CER- as per MoEFCC OM dated 01.05.2018	1,90,00,000	2% of capital investigation

Recommendations of the committee:

22.0 After detailed deliberations, the Committee recommended the project for the grant of environmental clearance with the following specific conditions and general conditions:

Specific Conditions:

1) The project proponent shall reuse the recovered water from tailings from tabling circuit in the process and reduce the water drawl from Suvarna Rekha River.
2) The PP shall under take greenbelt development in 1.5 ha with total no. of 3500 trees of local species.
3) Handling and transportation of radioactive material shall be as per the guide lines of Atomic Energy Regulatory Board.
4) The recommendations of the approved Site-Specific Wild life Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report.
5) The PP shall incorporate a system of reporting non-compliance to the board of directors in the Environmental Policy and submit the same to the Ministry.
6) The PP shall submit the water drawl permission from competent authority to the Ministry.

General Conditions:

I. Statutory compliance:

i. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.

ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time

II. Air quality monitoring and preservation

i. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual;)

III. Water quality monitoring and preservation

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

ii. Adhere to 'Zero Liquid Discharge'

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

iv. The project proponent shall practice rainwater harvesting to maximum possible extent.

IV. Noise monitoring and prevention

i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

ii. Provide LED lights in their offices and residential areas.

VI. Waste management

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

ii. Kitchen waste shall be composted or converted to biogas for further use.(*to be decided on case to case basis depending on type and size of plant*)

VII. Public hearing and Human health issues

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

ii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

VIII. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

i. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

iv. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out

v. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.

IX. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

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

v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

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

viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

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

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

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

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

xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

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

34.15. Brake Lining Manufacturing Plant (Two-wheeler- 6,67,000 PCS/day & commercial Vehicle - 5,400 Pcs/day ha.) at Plot No. - 5, Sector-7, IMT Manesar, Gurgaon, Haryana by M/s AA Friction Materials Private Limited [Proposal No IA/HR/IND/67766/2017; MoEF&CC File No. IA-J-11011/477/2017-IA-II(I)] – Environmental Clearance.

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

34.16. Sponge Iron Plant (5X100 TPD) and 20 MW (8 MW WHRB+ 12 MW AFBC) power plant at village Karakolha, district Keonjhar, Odisha of M/s Rungta Mines Limited (Sponge Iron Division) M/s Rungta Mines; [Online Proposal No. IA/OR/IND/75787/2018; MoEFCC File No. J-11011/229/2016-IA-II(I)] – Expansion of DRI Production from 1,50,000 TPA to 1,80,000 TPA under Clause 7(ii) of EIA Notification, 2006.

M/s Rungta Mines made application vide online proposal no. IA/OR/IND/75787/2018 dated 12th July 2018 seeking environmental clearance for the proposed expansion of DRI Production from 1,50,000 TPA to 1,80,000 TPA in the Sponge Iron Plant (5X100 TPD) and 20 MW (8 MW WHRB+ 12 MW AFBC) power plant at village Karakolha, district Keonjhar, Odisha for which environmental clearance was granted vide F.No. J-11011/229/2016-IA-II(I) dated 15th January 2018 under Clause 7(ii) of EIA Notification, 2006.

Details of the proposal submitted by the Project Proponent:

2.0 The existing DRI plant is operational after obtaining CTO prior 2006. Environmental clearance for the setting up of 20 MW (8 MW WHRB+12 MW AFBC) Power Plant within existing premises of sponge iron plant (5x100 TPD) was obtained vide F.No. J-11011/229/2016-IA-II(I) dated 15th January 2018. The status of implementation of the earlier EC is as follows:

Sl.	Facilities	Capacity	Status as on 30.07.2018
1	Existing DRI 5X100 TPD	150,000 TPA	100% Operational
2	Power plant	20 MW	To be installed
	WHRB	8 MW	To be installed
	AFBC	12 MW	To be installed

3.0 Now, it is proposed for enhancement of DRI production from 150,000 TPA to 180,000 TPA (i.e. by 20%) in existing 5X100 TPD kilns under clause 7(ii) of the EIA Notification 2006 and amendment in technology of proposed 12 MW power plant from AFBC technology to CFBC technology. Enhancement in DRI production and amendment in power plant is being sought as follows:

Facilities	Production as per EC dt. 15.01.2018	Proposed enhancement/ amendment	Proposed Amendment in Production
DRI Plant (5X100 TPD)	150,000TPA	30,000 TPA	180,000 TPA
Power Plant	20 MW	No change	20 MW
(i) WHRB	8 MW	No change	8 MW
(ii) AFBC	12 MW (AFBC)	Only change of technology to CFBC	12 W (CFBC)

4.0 The increase in DRI production will be due to various self-improvement measures such as enhancement of the ID Fan & Heat Exchanger Capacity, increasing the number of working days (by ~10%) thereby increasing annual production, uninterrupted power supply becoming available due to upcoming power plant, utilisation of excess built in capacity in kilns (~10%), availability of better raw material quality leading to reduction in specific consumption of the raw materials and minor modifications.

5.0 It is proposed to change over from AFBC to CFBC technology as CFBC boiler offers many significant advantages. The furnace height is much higher in a CFBC boiler, when compared to AFBC boiler. The combustion temperature is lower and stage combustion takes place. Consequently, there is increased combustion efficiency, lower ash (bottom &flyash), lower un-burnt carbon carry over to ESP due to increase residence time, fuel flexibility (w.r.t. size, low CV, low VM, high ash, fuel type), low NOx emissions, higher sulphur capture, heigher turn down ratios, lower tube erosion and lower bed agglomeration. Hence the residence time of fuel in a CFBC boiler is much higher. The un-burnt content of CFBC boiler ash (bottom and fly ash) is lower (2%), when compared to AFBC boiler ash (4%).

6.0 The existing project is located on 25.149 acres land. There will be no change in plant area and plant layout for the proposed production enhancement or amendment.

7.0 Fresh water requirement as per EC dated 15.01.2018 is 28.54 cum/hr. The proposed additional fresh water requirement will be 3.11 cum/hr for expansion of DRI production. Thus, total water requirement will be 31.65 cum/hr(~760 KLD). The company has the sanction from Central Ground Water Authority to withdraw 550 KLD ground water vide Letter No. 21-4(117/SER/CGWA/2009-792, dated 01.05.2018, for industrial use and balance shall be met through surface rain water harvesting reservoir.

8.0 During the production of DRI, cooling water requirement will increase but no increase in waste water generation is anticipated as the water will evaporate. The company will maintain its zero waste water discharge policy. 100 % waste water will be utilised for its brick manufacturing units, dust suppression etc. after preliminary treatment. Domestic waste water generated from the plant office is taken to septic tank-soak pit system. Sludge generated from septic tanks will be periodically removed and used as manure in greenbelt development/ plantation. Oil and grease generated from plant is being and will continue to be sold to CPCB /SPCB authorized recycler.

9.0 With respect to emissions, increase in production is based on decrease of coal input and creating space for iron ore for greater productivity inside the fixed volume of rotary kiln. The

gross particulate emission shall be kept within limits sanctioned in EC dated 15.01.2018 by improving efficiency of existing ESPs.The sulfur in coal shall be captured by the dolomite fed into kiln.

10.0 All dolochar generated from DRI will be 100% utilised for power generation. There will be reduction in dolochar consumption from 34.7% to 33.3% of total fuel quantity from AFBC to CFBC. Consequently, there will be decrease in ash generation to the tune of 1695 TPA. This reduction offsets the increase in ESP dust, bag filter dust and kiln accretion due to increase in production from DRI. ESP and Bag Filter Dust will be completely reutilisable in Sinter plant of company in Kamanda, District Sundargarh, Odisha. Kiln accretion will be disposed in dump. Ash will be utilized in bricks manufacturing unit of company and any outside brick/ cement manufacturer and for road/ highway making.

11.0 There will be no increase in power requirement for the proposed production enhancement

12.0 No National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Tiger Reserve/ Elephant Reserve etc. are reported to be located in the core and buffer zone of the project.

13.0 Site Specific Wildlife Conservation Plan has been approved by PCCF cum Chief Wildlife Warden, Odisha, Department of Forest and Environment, Government of Odisha vide letter no. 5863/1 WL/EC-Industry-SSP-58/2018 dated 23.06.2018

14.0 Certificate of compliance of earlier EC was obtained from Regional Officer, Bhubaneswar vide letter No. 101-1002/EPE/171 dated 12.07.2018.

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

16.0 Name of the Consultant: M/s Min Mec Consultancy Pvt. Ltd., New Delhi with permission from High Court of Delhi vide in LPA 110/2014 and CM No.2175/2014 (stay) and W.P.(C) 3665/2016

Observations of the committee:

17.0 The committee noted that the PP desired to install CFBC in place of AFBC for which EC granted earlier and enhance the DRI production from 150000 to 180000. Further, the waste heat recovery may be enhanced for the power eneration.

Recommendations of the committee:

18.0 After detailed deliberations, the committee recommended for the grant of environmental clearance under para 7(ii) of EIA Notification 2006 with the following specific conditions.

1) The project proponent shall not draw any additional water beyond the existing permitting quantity.
2) The PP shall develop greenbelt in additional 5% of the total area.
3) The PP shall increase the power generation in 5x100 TPD kilns from proposed 8MW to 10MW through waste heat recovery.

34.17. Integrated steel plant (1.9 MTPA), WHRB (100 MW) and AFBC (200 MW) at village JharbandhGalpada and Tarakbeda, District Dhenkanal, Odisha by M/s Rungta Mines Limited [Online proposal No. IA/OR/IND/20891/2010; MoEFCC File No. J-11011/241/2009-IA.II(I)] – Extension of validity of environmental clearance and amendment in Environmental clearance for change in configurations.

M/s Rungta Mines Limited made application vide online proposal no. IA/OR/IND/20891/2010 dated 19th July 2018 seeking amendment and extension of validity of the environmental clearance grated for the Integrated steel plant (1.9 MTPA), WHRB (100 MW) and AFBC (200 MW) at village Jharbandh Galpada and Tarakbeda, District Dhenkanal, Odisha.

Details of the proposal submitted by the Project Proponent:

2.0 Environmental clearance for the Integrated steel plant (1.9 MTPA), WHRB (100 MW) and AFBC (200 MW) at village Jharbandh Galpada and Tarakbeda, District Dhenkanal, Odisha was granted vide F. No. J-11011/241/2009-IA.II(I) dated 2nd August, 2010 and subsequently amended for installation of 1X300 TPD Lime Plant; 1X300 TPD Dolo Plant; 1X200 TPD Oxygen Plant; and 1X70 TPD Vacuum De-gassing Plant vide F. No. J-11011/241/2009-IA.II(I) dated 25th January 2011. Extension of validity of the environmental clearance was obtained under clause (9) of EIA Notification, 2006 up to 31st March 2010 vide even letter number dated 7th July, 2017. The details of the facilities for which EC was granted are given below:

Production facility	**Phase I MTPA**	**Phase II (MTPA)**	**Total (MTPA)**
Beneficiation plant	2.1	2.1	4.2
Pelletization Plant	1.2	1.2	2.4
Sponge Iron Plant	0.75 (5x500 TPD)	0.75 (5x500 TPD)	1.50
Sinter plant	0.325 (1x42 m^2)	0.325 (1x42 m^2)	0.650
Blast Furnace	0.30 (1x350 m^3)	0.30 (1x350 m^3)	0.60
Steel Melt shop	0.95	0.95	1.90
Induction furnace (IF)	0.576 (9x20 T)	0.576 (9x20 T)	1.152
Ladle Refining Furnace for IF	0.576 (1x40 T)	0.576 (1x40 T)	1.152
Electric Arc Furnace (EAF)	0.448 (1x70 T)	0.448 (1x70 T)	0.896
Ladle Refining Furnace for EAF	0.448 (1x70 T)	0.448 (1x70 T)	0.896
Billet caster, Blooms, Slab caster	0.95 (6/11 m radius)	0.95 (6/11 m radius)	1.9
Flats, Rod and Structural mill	0.95	0.95	1.9
Coal washer	2.1	2.1 M	4.2
Captive Power Plant			
WHRB	50 MW (5x45 TPH)	50 MW (5x45	100 MW

		TPH)	
AFBC	100 MW (1x375 TPH)	100 MW (1x375 TPH)	200 MW
Coke Oven Plant	0.175	0.175	0.350

3.0 The project could have been initiated in 2017. However, the delay occurred due to various reasons such as weak market scenario of steel for the past few years, de-allocation of coal block, delay in land acquisition and R&R issues and teething problems of green field project at the new location and also due to investment cost escalations in the intervening period since grant of EC in 2010 and still partly unstable market for steel, the company has begun construction with lesser number of DRI kilns i.e. one out of five DRI kilns envisaged for phase-I at the time of EC. Presently the following facilities are under implementation:

S.L	**Facilities**	**Configuration**	**Production**
1	Sponge Iron plant	1x500 TPD	0.15 MTPA
2	Steel Melting Shop comprising IF along with CCM	2X 20 T	0.128 MTPA
3	Captive power plant		
	WHRB	1x45 TPH	10 MW

4.0 At the time of EC dt. 02.08.2010, an AFBC of 100 MW (1X375 TPH) was proposed based on dolochar& coal fines from DRI kiln and middlings from washery. With 1 DRI kiln now proposed initially, the boiler will also have to be downsized. Due to de-allocation of coal block, no washery will be established in near future and consequently no middling will be available for boiler. Therefore, the consumption of dolochar will take place along with purchased coal in the boiler. Hence, it necessitates change of technology from AFBC to CFBC now.

5.0 Furthermore, the total requirement of power to run the units under implementation (1X500 TPD DRI kiln and SMS) will be 25 MW of which 10 MW will be met through the concurrently constructed WHRB. The remaining will have to be met through proposed CFBC. Thus, initially a 25 MW CFBC is proposed and hence the proposed amendment in configuration & technology (against that sanctioned in EC dated 02.08.2010) as given below:

AFBC	Phase	As per sanctioned in EC dated 02.08.2010	Proposed change
	Ph-1	100 MW (1X375 TPH)	2 X 25 MW + 1X50 MW, all proposed to be changed to CFBC
	Ph-2	100 MW(1x375 TPH)	100 MW(1x375 TPH)
	Total	**200 MW**	**200 MW**

6.0 The furnace height is much higher in a CFBC boiler, when compared to AFBC boiler. The combustion temperature is lower and the stage combustion takes place. Consequently, CFBC boiler offers many significant advantages over AFBC boiler, which include increased combustion efficiency, lower ash (bottom &flyash), lower un-burnt carbon carry over to ESP due to increase residence time, fuel flexibility (w.r.t. size, low CV, low VM, high ash, fuel type), low NOx emissions, higher sulphur capture, lower turn down ratios, lower tube erosion and lower

bed agglomeration. Hence the residence time of fuel in a CFBC boiler is much higher. The un-burnt content of CFBC boiler ash (bottom and fly ash) is lower (2%), when compared to AFBC boiler ash (4%).

7.0 The construction of the phase-1 of the steel plant, as sanctioned in EC, has commenced in 2017 and will be completed by July 2020. In case of power plant, the change in technology will not have any impact on construction but the change in configuration will require construction of smaller units and accordingly more civil work as required in the earlier- one large boiler & turbine (to generate 100 MW). Now it is proposed to install 2X25 MW + 1X50 MW i.e. three smaller boilers and turbines. The area shall remain the same.

8.0 There will be no increase in the overall production, area, raw material, water consumption, waste water generation, energy requirement from grid or solid waste generation of the Integrated steel plant due to proposed change in configuration of CPP. Fresh water requirement as per EC dated 02.08.2010 is 2950 cum/hr. which will remain unchanged. There will be no change in effluent treatment systems or solid waste handling systems. The ash from CFBC will be of better quality and more easily utilisable for cement plants. The air pollution control equipments like ESP shall be upgraded as the previous design was for AFBC at an emission level of 50 mg/Nm^3, which will now be improved for CFBC to 30 mg/Nm^3.

9.0 Certificate of compliance was obtained from Regional Office, Bhubaneswar vide letter No. 101.639/EPE/392 dated 27.06.2017.

10.0 Now it was requested for amendment in configuration & technology for power plant as give above and extension of validity of EC up to 1st August 2020.

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

12.0 Name of the Consultant: Min Mec Consultancy Pvt. Ltd., New Delhi with permission from High Court of Delhi vide in LPA 110/2014 and CM No.2175/2014 (stay) and W.P.(C) 3665/2016

Recommendations of the Committee

13.0 After detailed deliberations, the committee recommended the extended the validity of environmental clearance upto 1st August 2020 with the revised configuration of power plant as follows.

Particulars	Existing	Modified /proposed
Captive Power Plant	100 MW	2x25MW+1x50MW

34.18. Integrated cement plant (Clinker 5.65 MTPA; Cement 7.05 MTPA; CPP 60 MW-Coal Based 35 MW and WHRB 20 MW) located at village Mangrol, Tehasil Nimbahera, District Chittorgarh, Rajastan by M/s JK Cement Works – Expansion of WHRB from 20 MW to 30 MW under the clause 7(ii) of EIA Notification, 2006

[Online proposal No. IA/RJ/IND/20196/2013; MoEFCC File No. J-11011/267/2013-IA.II(I)] – Environmental Clearance.

M/s JK Cement Works made online application vide proposal number IA/RJ/IND/20196/2013 dated 19th July 2018 seeking environmental clearance for the proposed expansion of WHRB from 20 MW to 30 MW in the Integrated cement plant (Clinker 5.65 MTPA; Cement 7.05 MTPA; CPP 60 MW- Coal Based 35 MW and WHRB 20 MW) located at village Mangrol, Tehasil Nimbahera, District Chittorgarh, Rajastan under the clause 7(ii) of EIA Notification, 2006.

Details of the proposal submitted by the Project Proponent:

2.0 There will no pollution load increment to enhancement of WHRB capacity from 20MW to 30 MW. The following measures will be implemented to increase the waste heat recovery power generation: The pre-heater exit gases and the clinker cooler vent air are the two sources of heat that are available for waste heat recovery. The unit is proposing to re-circulate the hot air from boiler outlet to cooler to enhance boiler inlet flue temperature from 380 deg. to 480 deg., thus producing gain of 2.5 MW of waste heat recovery power generation for line-2. Similarly for line-3, there will be increase of boiler inlet flue temperature upto 480 deg. with recirculation of hot air; this will gain 2.9MW of waste heat recovery power generation. The unit is also proposing to install a new boiler with efficient heat recovery as there will be higher steam recovery with temperature of 440deg. with minimization of condensing temperature, with gain of 4.6MW, thus there will be a gain of 10 MW. The environmental Impact due to the proposed expansion in capacity of WHRB adds to the positive impact as the heat loss will be used to generate electricity. Addition of gain of 10MW of electricity is contributed by this, which will reduce considerable amount of CO2 emission from the existing scenario.

3.0 The certified EC compliance has been obtained from Regional Office (Lucknow) of MoEF&CC vide letter no. IV/ENV/R/IND167/946/2017/732 dated 09.07.2018

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

Recommendations of the Committee

5.0 After detailed deliberations, the committee for the grant of environmental clearance with the following conditions.

1) The power generation from waste heat recovery boiler shall be enhanced to 20 MW to 36MW.
2) The PP shall under take additional greenbelt development in 5% of the total area.
3) The PP shall construct 5 additional rainwater recharging pits.

34.19. Proposed 1.0 MTPA Hot Metal Plant at Dimbuli village, Manoharpur, District West Singhbhum, Jharkhand of M/s Vedanta Limited Value Addition Business. [Online Proposal No. IA/JH/IND/62609/2017; MoEFCC File No. IA-J-11011/54/2017-IA-II(I).- Reconsideration based on reply to ADS for Terms of Reference

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

34.20. Proposed expansion of clinkerization plant (4 to 8 MTPA) along with Captive power plant (55 to 160 MW) at village Vayor, Tehasil: Abdasa district Kutch, Gujarat by M/s Ultratech Private Limited [Online proposal No. IA/GJ/IND/26831/2015; MoEFCC File No. J-11011/398/2007-IA.II(I)] – Extension of validity of ToR.

M/s Ultratech Private Limited made application vide online proposal no. IA/GJ/IND/26831/2015 seeking extension of validity of Terms of Reference granted for the Proposed expansion of clinkerization plant (4 to 8 MTPA) along with Captive power plant (55 to 160 MW) at village vayor, Tehasil: Abdasa district Kutch, Gujarat vide F. No. J-11011/398/2007-IA.II(I) dated 05th August, 2015.

Details of the project as per the submission of Project Proponent:

2.0 It was informed that the draft EIA/EMP report has been prepared and ready for submission to conduct public hearing, therefore M/s. UltraTech Cement Ltd. (Unit: Sewagram Cement Works) is now proposing for extension of the validity of ToR letter for another one year.

3.0 **Observations of the committee**:

After presentation, the committee observed the following:

- The baseline study for the proposed expansion was carried out during post monsoon season , Oct-December 2017.
- The committee observed that advertisement for conducting the Public Hearing was published in the local news papers.

Recommendations of the committee:

4.0 After detailed deliberations, the committee recommended for the extension of validity of ToRs for further period of one year.

34.21. Enhancement in cement production capacity of cement (1.37 to 2.0 MTPA), Clinker (1.0 to 3.0 MTPA) CPP (18 to 25 MW) & WHRB (15 MW) of M/s Marwar Cement Ltd., at Village: Ghorawat, Tehsil: Bhopalgarh, District: Jodhpur, Rajasthan [online Proposal No. IA/RJ/IND/27438/2015; J-11011/154/2009-IA.II(I) – Extension of validity of ToR.

M/s Marwar Cement Limited made application vide online proposal no. IA/RJ/IND/27438/2015 seeking extension of validity of Terms of Reference granted for the proposed expansion of cement production capacity of cement (1.37 to 2.0 MTPA), Clinker (1.0 to 3.0 MTPA) CPP (18 to 25 MW) & WHRB (15 MW) of M/s Marwar Cement Ltd., at Village: Ghorawat, Tehsil: Bhopalgarh, District: Jodhpur, Rajasthan vide F. No. J-11011/154/2009-IA.II(I) dated 22nd July, 2015.

Details of the project as per the submission of Project Proponent:

2.0 The Ministry prescribed ToRs for conducting EIA study for the proposed expansion project vide letter dated 22nd July 2015.

3.0 The baseline data generation was carried out March –May 2016 and the draft EIA report was also submitted to the Rajasthan State Pollution Control Board for conducting the Public Hearing. The date for the Public Hearing is awaited.

Recommendations of the Committee:

4.0 After detailed deliberations, the committee recommended for extension of validity of ToRs for further period of one year.

34.22. Proposed expansion of Sponge Iron Plant and proposed installation of Induction Furnce of capacity 30,000 TPA, Rolling Mill of capacity 30,000 TPA and Captive power plant of capacity 4MW (3MW AFBC+1MW WHRB) at village Halkundi, Taluk & Dist. Ballari, Karnataka by M/s Rangineni Steels Private Limited [Online proposal No. IA/KA/IND/73643/2018; MoEFCC File No. J-11011/702/2009-IA.II(I)]. – Environmental Clearance.

M/s Rangineni Steels Private Limited made online application vide proposal no. **IA/KA/IND/73643/2018** dated 12th March, 2018 along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level..

Details submitted by the project proponent:

2.0 The Proposed installation of induction furnace of capacity 30,000 TPA, rolling mill of capacity 30,000 TPA, captive power plant of capacity 4 MW (1 MW – WHRB and 3 MW – AFBC) and capacity addition of 1X50 TPD to the existing 1X35 TPD Sponge Iron Plant of M/s. Rangineni Steels Private Limited located in Village Halkundi, Tehsil Bellary District Bellary State Karnataka was initially received in the Ministry on 16th March 2010 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC (1)] during its 8th meeting held on 2nd – 3rd March 2010 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 16th March 2010 vide Lr. No. F. No. J-11011/702/2009-IA.II (I). Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry on 6th June 2011.

3.0 The project of M/s. Rangineni Steel Private Limited located in Halkundi Village, Bellary Tehsil, Bellary District, Karnataka State is for enhancement of production of induction furnace of capacity 30,000 TPA, rolling mill of capacity 30,000 TPA, captive power plant of capacity 4 MW (1 MW – WHRB and 3 MW – AFBC) and capacity addition of 1X50 TPD to the existing

1X35 TPD Sponge Iron Plant. The existing project 1X35 TPD was established before 2006 and does not attract EIA Notification 1994. The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Sponge Iron Plant	1	50 TPD	50 TPD
Induction Furnace	1	30,000 TPA	30,000 TPA
Rolling Mill	1	30, 000 TPA	30,000 TPA
Power Plant	1	4 MW (3 MW – WHRB + 1 MW – AFBC)	4 MW (3 MW – WHRB + 1 MW – AFBC)

4.0 The total land required for the project is 6.88 ha. No forestland involved. The entire land has been acquired. No River passes through the project area. It has been reported that no water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lies between 15° 03' 53.75" N Latitude and 76° 51' 47.46"E Longitude in Survey of India Topo sheet No. 57A/3, at an elevation of 513.89 m AMSL. The ground water table reported to ranges between 25 m below the land surface during the post-monsoon season and 20 m below the land surface during the pre-monsoon season.

6.0 The National Park/WLS etc. are located at a distance of 15 KM from the site. No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule - I fauna. The authenticated list of flora and fauna provided through the Bio-diversity reporting presence of no schedule - I fauna in the study area.

7.0 The process of project showing the basic raw material used and the various processes involved to produce the final output, waste generated in process – Given in Chapter 2 of EIA.

8.0 The targeted production capacity of the installation of induction furnace of capacity 30,000 TPA, rolling mill of capacity 30,000 TPA, captive power plant of capacity 4 MW (1 MW – WHRB and 3 MW – AFBC) and capacity addition of 1X50 TPD to the existing 1X35 TPD Sponge Iron Plant. The ore for the plant would be procured from (linkages Through E-auction). The ore transportation will be done through Road.

9.0 The water requirement of the project is estimated as 150 m^3/day, out of which 50 m^3/day of fresh water requirement will be obtained from the bore wells and Bellary Water Supply and Sewerage Board and the remaining requirement of 100 m^3/day will be met from the recycling from the process. The permission for drawl of groundwater is obtained from CGWA vide Lr. No. 21-4/CGWA/2k.

10.0 The power requirement of the project is estimated as 5 MW, out of which 1 MW will be obtained from the GESCOM till the operation of captive power plant. Thereafter, (1MW will be from GESCOM and 4MW will be obtained from the proposed Captive Power Plant).

11.0 Baseline Environmental Studies were conducted during Summer 2010 season i.e. from March 2010 to May 2010. Ambient air quality monitoring has been carried out at 8 locations during March 2010 to May 2010 and the data submitted indicated: PM10 (41 µg/m3 to 79 µg/m3), PM2.5 (22 to 55 µg/m3), SO2 (4.0 to 37.0 µg/m3) and NOx (7.0 to 41.0 µg/m3). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 80.1 µg/m3 with respect to the PM10, 37.5 µg/m3 with respect to the SO2 41.6 µg/m3 with respect to the NOx.

12.0 Ground water quality has been monitored in 8 (Eight) locations in the study area and analysed. pH: 6.8 to 7.8, Total Hardness: 260 to 410 mg/l, Chlorides: 130 to 600 mg/l, Fluoride: 1.0 to 1.5 mg/l. Heavy metals are within the limits.

13.0 Noise levels are in the range of 55.0 to 75.0 dBA for daytime and 45.0 to 70.0 dBA for nighttime.

14.0 No R&R is involved.

15.0 It has been reported that a total 26,196 of tons/m^3 of waste will be generated due to the project, out of which 1,365 will be used in Process And 24,831 TPA will be sold to brick manufacturing unit and Landfill/road construction through approved agencies dumped. It has been envisaged that an area of 33 % 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.

16.0 It has been reported that the Consent to Establish/Consent to Operate from the Karnataka State Pollution Control Board / Pollution Control Committee obtained vide Lr. No AW-303610 dated 30st June 2017 and consent is valid up to 30th June 2022.

17.0 The Public hearing of the project was held on 30th December 2010. At Project Site under the chairmanship of Deputy Commissioner (designation) for installation of induction furnace of capacity 30,000 TPA, rolling mill of capacity 30,000 TPA, captive power plant of capacity 4 MW (1 MW – WHRB and 3 MW – AFBC) and capacity addition of 1X50 TPD to the existing 1X35 TPD Sponge Iron Plant within the existing plant premises. The issues raised during public hearing are addressed in EIA Report Chapter 7. The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Sl. No.	Question/ Issue/ Suggestion	Response by project proponent (after PH)	Time Bound Action Plan proposed	Budgetary provision
The details are given in Chapter 7.0 (ADDITIONAL STUDIES) of EIA Report				

18.0 An amount of 6.45 Crores (2% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues. The details of ESC proposed are as follows:

Sl. No.	Enterprise Social Commitment Activities	Year 1	Year 2	Year 3	Total
1	Health - Health, Hygiene and	7.50	7.50	10.0	25.0

	Sanitation mass awareness program organized (Child Marriage awareness, Alcoholism and its Disadvantage, Examination and Distribution of Free medicine, Provided Ambulance to take care of patients in emergency case under program area & HIV-AIDS awareness).				
2	Education - Scholarship given to toppers student from class 1st to 10th in project area villages, School competitions & Distribution Bags, Books etc.,)	5.0	5.0	5.0	15.0
3	Sustainable Livelihood Program - Basic orientation of women's cloth Stitching & Self Help Group Importance and Benefits of SHG Formation & Started Income generation work.	2.5	4.5	5.0	12.0
4	Social - Swatch Bharath Abhiyan (Providing Toilets, conducting plantation programme, etc.,)	2.0	3.0	3.5	8.5

19.0 The capital cost of the project is Rs. 32.25 Crores and the capital cost for environmental protection measures is proposed as Rs 190 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 45 Lakhs. The employment generation from the project / expansion is 125. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

Sr. No.	Activity	Capital cost (Lakh Rs.)	Recurring cost per annum (Lakh Rs.)
1	Air Pollution Control Measures such as covering of belt conveyors, providing mist spray system at feed points, wind barricades etc.	190	45.00
2	Plantation and After Care Measures	2.10	0.50
3	Socio-Economic Welfare Measures as a corporate social responsibility (CSR) a. Provision of ambulance facility b. Construction of compound wall at nearby school.	 20.00 10.00	 4.00
4	Water Pollution Control Measures	5.50	3.50
5	Occupational Health & Safety (provision of first	4.00	3.50

	aid room and shelter)		
6	Environmental Monitoring	Nil	3.50
7	Preventive and corrective maintenance of plant and machinery to reduce noise pollution and consumption of non renewable resources (2.5% of the plant & machinery cost).	-	5.00
Total		231.6	65.0

20.0 Greenbelt will be developed in 2.27 Ha, which is about 33% of the total acquired area. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 4540 saplings will be planted and nurtured in 2.27 hectares in 3.0 years.

21.0 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:

22.0 The proposal was earlier considered by the EAC in its meeting held during 26th -27th August, 2011 and 20th -21st February, 2014 and recommended for Environmental Clearance.

The extract of MoM of the EAC held during 26th -27th August, 2011:

After detailed deliberations, the Committee recommended the project for environmental clearance subject to **submission of revised lay out plan showing the 20m wide green belt all around the plant area** the following specific conditions along with other environmental conditions:

i. Compliance to all the specific and general conditions stipulated for the existing plant(s) by the Central/State Govt. should be ensured and regular reports submitted to the Ministry and its Regional Office at Bangalore.

ii. Electrostatic precipitator (ESP), dust catcher, bag filters etc. shall be provided to keep the emission levels within 50 mg/Nm3 and by installing energy efficient technology.

iii. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 should be followed.

iv. Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed.

v. Hot gases from Rotary kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB). The gas then shall be cleaned in ESP before leaving out

into the atmosphere through ID fan and stack. The water consumption shall not exceed as per prescribed standards for the steel plants

vi. Total water requirement shall not exceed 160m3/day. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises. The company shall undertake measures for supply of drinking water to the nearby Villages after defloridation.

vii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources.

viii. Regular monitoring of influent and effluent surface, sub-surface and ground water should be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bangalore, SPCB and CPCB.

ix. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. All the fly ash shall be provided to cement and brick manufacturers for further utilization and 'Memorandum of Understanding' shall be submitted to the Ministry's Regional Office at Bangalore. The slag from the induction furnace after mixing with the cement shall be used for construction of building blocks.

x. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.

xi. Measures shall be taken to prevent impact of particulate emissions / fugitive emissions, if any from the proposed plant on the surrounding reserved forests.

xii. Green belt shall be developed in 33% of plant area in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO.

xiii. Risk and Disaster Management Plan alongwith the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bangalore, CECB and CPCB within three months of issue of environment clearance letter.

xiv. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program should be ensured accordingly in a time bound manner.

xv. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 31st December, 2010 shall be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bangalore.

xvi. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

MoM of the EAC held during 20th -21st February, 2014:

The aforesaid proposal was considered in the 27th Meeting of the Expert Appraisal Committee (Industry) held during 26-27th August, 2011 as item no. 27.2.4, wherein the EAC has recommended the project for the grant of environmental clearance. As per the information submitted by the proponent, the source of iron ore for the proposal cited above is from Bellary, Sandur, Hospet and Chitradurga districts of Karnataka.

As per the Ministry's O.M. dated 5.10.2011, the projects received for environmental clearance in MoEF / SEIAAs relating to integrated steel plants and sponge iron plants, which are largely dependent on iron ore as raw material to be sourced from the mines located in Districts of Bellary, Tumkur and Chitradurga in Karnataka and are at different stages of consideration/processing shall be delisted. In view of this, the project was kept on hold by MoEF for the grant of EC.

The Hon'ble Supreme Court vide its order dated 18.4.2013 in W.P(C) No. 562 of 2009 has allowed the resumption of mining operations in the aforesaid three districts in all Category 'A' mines and 63 Category 'B' mines subject to certain conditions including overall cap on production. MoEF vide O.M. dated 1.7.2013 lifted the moratorium for consideration of proposals for EC for integrated steel plants/sponge iron plants, as imposed earlier vide O.M. of 5.10.2011 subject inter-alia to the condition that while considering such proposals, the Expert Appraisal Committee will look into and satisfy themselves about availability of requisite iron ore, transportation requirements and other parameters of Environment law and rules for such projects.

Meanwhile, the proponent vide letter no. RSPL/MoEF/2014 dated 6.1.2014 requested MoEF to grant Environmental Clearance for the project cited above. In accordance with the provisions under the Ministry's O.M. dated 1.7.2013, the aforesaid proposal was placed before the Expert Appraisal Committee (Industry) for consideration. The PP along with their consultant (M/s KRS Enterprises - Bangalore) also made a presentation before the Committee.

It was informed that the iron ore requirement of the expansion project is 50 TPD + 35 TPD (85 TPD) i.e. 45,900 TPA which would be met by e-auction through a Government agency MSTC Limited. Apart from the E-auction iron ore will also be purchased from the nearby pellets plants - M/s.BMM Ispat Limited, Bellary; M/s. Janki Corp Limited, Bellary and M/s.MSPL Ltd, Koppal. The iron ore will be transported to the plant site by road. Char' is presently being sold to brick kilns. After expansion, Char would be used in the WHRB and in the 1 MW AFBC Power Plant. After detailed deliberations, the Committee recommended the project for environmental clearance subject to the specific conditions stipulated in its 27th meeting held on 26-27th August, 2011.

The extract of MoM of EAC(violation) meeting held during 19th -20th August 2018:

The EAC, during deliberations, noted that the proposal is for expansion of Sponge Iron plant of capacity (1x50 TPD) and proposed installation of Induction Furnace of capacity 30,000 TPA, Rolling Mill of capacity 30,000 TPA and Captive Power Plant of Capacity 4 MW (3 MW – AFBC + 1 MW – WHRB), this facility have not been established by the project proponent. The unit is presently engaged in manufacturing Sponge iron with its capacity of 35 TPD. The project proponent informed the Committee that while seeking ToR for the proposed expansion of sponge iron plant from 35 TPD to 50 TPD (along with installation of induction furnace of 30000 TPA to produce steel billets, rolling mill of 30000 TPA to produce the rolled products and CPP of 4 MW), the same was mentioned as 85 TPD inadvertently. Based on the proposal submitted, even the ToR dated 16th March, 2010 for the proposed expansion, finds mention of the sponge iron plant capacity as 85 TPD instead of 35 TPD.

The EAC, after deliberations, acknowledged the default of the project proponent as bonafide and inadvertent, while submitting the proposal for ToR, which may not constitute violation of the EIA Notification, 2006. The Committee further desired that since the project has already been recommended twice by the sectoral EAC in the Ministry, the revised/corrected proposal along with an undertaking, may be put up to them again for deliberations and/or corrections in their recommendations.

The PP submitted the undertaking in legal affidavit and submitted the revised proposal.

Recommendations of the Committee:

After detailed deliberations, the committee recommended for the grant of Environmental Clearance based on the recommendation of the earlier recommendation of the EAC in its meeting held during 20th -21st February 2014 with the specific general conditions stipulated as above.

34.23. Proposed cement plant with clinker (200TPD) production, cement grinding unit (600TPD) at Dag No.10 of K.P.Patta 1, village Sarutari, Dist.Kamrup, Assam by M/s Singo Industries Limited [Proposal No. IA/AS/IND/75912/2018; MoEFCC F.No IA-J-11011/245/2018-IA-II(I)) - Terms of Reference.

M/s Singo Industries Limited made application vide online proposal no. **IA/AS/IND/75912/2018** dated 23rd July 2018 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(b) Cement Plants under Category "A" EIA Notification; 2006.The proposal of expansion is submitted and appraised at Central Level.

2.0 M/s. Singo Industries Limited proposes to install a new manufacturing unit for Clinker and Cement. It is proposed to set up the new plant for Clinker: 200 TPD based on Vertical Shaft Klin (VSK) technology & Cement Grinding: 600 TPD.

3.0 The proposed project is Green field project will be located at Dag No. 10 of K.P. Patta 1,Village: Sarutari, Mouza: Sonapur, District: Kamrup (Metro), State: Assam.

4.0 The land area acquired for the proposed plant is 1.287142 Ha.Entire land is private land. No forestland involved. The entire land has been acquired for the project. Out of the total area 0.4250 Ha (33%) land will be used for green belt development.

5.0 The Amchang Wildlife sanctuary is located at a distance of 4.4 KM from the site. ESZ of the Amchang Wildlife sanctuary was defines wide MoEF notification no. S.O. 1817(E) dated 07/05/2017. The boundary of ESZ of Amchang Wildlife sanctuary is located at a distance of 4.2 Km approximately from the proposed project site. The project area does not report to form corridor for Schedule-I fauna.

6.0 Total project cost is approx. 16.32 Crore rupees. Proposed employment generation from proposed project will be 30 direct employment and 70 indirect employment.

7.0 The targeted production capacity of the Clinker 200 TPD (0.073 MMTPA) & Cement 600 TPD (0.219 MMTPA). The proposed capacity for different products for new site area as below:

Name of unit	**No. of units**	**Capacity of each Unit**	**ProductionCapacity**
Clinker (VSK Based)	2 nos.	100 TPD	200 TPD
Cement Grinding	2 nos.	15 TPH	600 TPD

8.0 The electricity load of 66 MW will be procured from Assam Power Distribution Company Ltd (APDCL). Company has also proposed to install 1000 kVA DG Set.

9.0 Proposed raw material i.e. Lime stone (305 MT/Day), Clay (10 MT/Day), Coke Breeze (45 MT/Day), Iron Ore/Other Minerals(5 MT/Day), Fly Ash/Slag (210 MT/Day), Gypsum (30 MT/Day), Clinker (370 MT/Day). Fuel requirement for the project are Coke breeze (45 MT/Day) for Clinker production and Diesel (75 Lit/hr) for D.G set. The requirement would be fulfilled by local market as well as from nearest states i.e. Meghalaya, Bihar and West Bengal.

10.0 Water Consumption for the proposed project will be 88 KLD and waste water generation from Industrial activities will be Nil. Domestic waste water i.e. 7 KLD will be disposed though Septic Tank/Soak Pit System. No industrial waste water will be generated from the proposed project.

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

12.0 Name of Consultant is Envision Enviro Technologies Pvt. Ltd., Surat. Listed on serial no in QCI list at 60.

13.0 After detailed deliberations, the committee noted that the proposed site is at the foot of the hills and surrounded by water bodies. The site is low laying area. The committee also noted that the road connecting the national highway to the proposed project site site passess through a congested human settlements with industrial units. One existing cement plant is also located near

by. It was felt that the road is already being very congested with vehicular traffic. The proposed project will further increase the traffic load.

14.0 In view of above, the committee after detailed deliberations, recommended that the PP should submit the following information for further consideration.

1) Alternate site analysis

2) Detailed traffic analysis giving the existing traffic load and likely incremental traffic load on the road connecting the project to the national highway and also traffic load on the national high way.

ANNEXURE –I

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. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
ix. Geological features and Geo-hydrological status of the study area shall be included.
x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
xii. R&R details in respect of land in line with state Government policy

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

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

6. **Environmental Status**

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

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

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

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

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

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

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

viii. Soil Characteristic as per CPCB guidelines.

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

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

xi. Socio-economic status of the study area.

7. Impact Assessment and Environment Management Plan

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

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

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

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

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

vi. Measures for fugitive emission control

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

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

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

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

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

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

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

8. Occupational health

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

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

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

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

9. Corporate Environment Policy

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

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

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

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

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

11. 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).

The following general points shall be noted:

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCl)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.
ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The 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.

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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

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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.

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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.

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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.

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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.

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INDUCTION/ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE

1. Details of proposed layout clearly demarcating various units within the plant.
2. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
3. Details on design and manufacturing process for all the units.
4. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
5. Details on requirement of raw materials, its source and storage at the plant.
6. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
7. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
8. Details on toxic content (TCLP), composition and end use of chrome slag. Details on the recovery of the Ferro chrome from the slag and its proper disposal.

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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 gaseousemission, 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. Capitalcost 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

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