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

SUMMARY RECORD OF THE THIRTY THIRD (33RD) MEETING OF EXPERT APPRAISAL COMMITTEE HELD DURING 9TH TO 11TH JULY 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 **9th to 11th July 2018** in the Ministry of Environment, Forest and Climate Change. The list of participants is annexed.

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

33.2 Confirmation of the Minutes of the 32nd Expert Appraisal Committee (Industry-1) held during 11th – 13th June 2018.

32.9 Expansion of Integrated Steel Plant & Captive Power Plant (WHRB 8 MW; AFBC 17 MW) at village Punjipatra, District Raigarh, Chhattisgarh by **M/s Scania Steels and Powers Limited** [Online proposal No. **IA/CG/IND/67506/2007;** MoEFCC File No. J-11011/1267/2007-IA.II (I)] **- Further consideration for environmental clearance based on reply to ADS.**

The project proponent has made a request for corrections in the Minutes of the Meeting (MoM) of 32nd meeting of Expert Appraisal Committee held during 11th to 13th June, 2018 vide e-mail dated 18th June, 2018 for following and recommendation of the EAC in this regard is given below:

Reference	For	Requested to read as	EAC recommendation to read as
Sl. No. 1 of General Condition, page 109	Enterprise Social Commitment	Corporate Environment Responsibility	Corporate Environment Responsibility
Sl. No. 4(a) of General Condition, page 109	Thermal Power Plants	Steel Plants	Thermal Power Plants
Sl. No. 5(a) of General Condition, page 109	Thermal Power Plants	Steel Plants	Thermal Power Plants
Sl. No. 9(b) of General Condition, page 111	The project proponent shall (Energy Conservation) use dolochar generated for power generation	This may not be relevant as the power plant for using dolochar has been dropped from the list of the project.	Recommended for deletion of the condition as the AFBC boiler was dropped

Sl. No. 24 of General Condition, page 112	100% utilization of fly ash shall be ensured. 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	there is no fly ash generation in the project	Recommended for deletion of the condition as the AFBC boiler was dropped

32.20 Aluminum Smelter plant (0.72 MTPA) and Captive Power Plant (1650 MW) at village Lapanga, Rengali, C.D. Block, Dist. Sambalpur, Odisha by **M/s Aditya Aluminium Ltd** (A division of M/s Hindalco Industries Ltd) **–** [Online Proposal No. **IA/OR/IND/2726/2012;** MoEFCC File No. J-11011/136/2009-IA-I(I)] – **Further consideration for Amendment in Environmental Clearance based on reply to ADS.**

Reference	For	Read as
Para 11 (iv)	Sale of baked anodes; sale of bath material; and sale of molten metal is permitted with permission under Hazardous and Other Waste Management Rules, 2016	Sale of baked anodes; sale of bath material; and sale of molten metal is permitted following the provisions of Hazardous and Other Waste Management Rules, 2016, applicable if any

32.24 Expansion of Ferro Alloys plant at Manesamudram & Malguru Villages, Hindupur Mandal, Ananthpur District, Andhra Pradesh by **M/s M.B. Smelters Private Limited** [Online proposal No. IA/AP/IND/6013/2011; MoEFCC File No. J-11011/647/2009-IA.II(I)] - **Validity of extension & amendment to EC.**

After para 7 of the 32.24 at page 217 of 290, the following para is inserted as 8.

8.0 After detailed deliberations, the committee recommended for change in the total extent of land from 150.68 acres to 100.46 acres and extension of validity of the environmental clearance for further period of three years i.e. up to 24th April, 2021.

32.31 Proposed Integrated Steel Plant (3.0 MTPA) at Village Nagarnar Tehsil Jagdalpur, District Bastar Chhattisgarh by M/s National Mineral Development Corporation – Amendment in Environmental Clearance for minor changes in plant configuration and product mix [Online proposal No. IA/CG/IND/6115/2009; MoEFCC File No. J-11011/681/2008- IA.II(I)].

After para 12 of 32.31 at page 251 0f 290, the following is inserted

13. After detailed deliberation, the committee recommended for amendment in the environmental clearance subject to following conditions:

i. Specific water consumption shall be less than 4.5 M^3 per ton of long product within the one year from the commission.

ii. The PP shall plant one lakh plants in the vicinity of the plant.

iii. The emissions from bag houses shall be limited 30 mg /Nm^3

9th July 2018

33.3. Alloy Steel Rolling Mill of 700,000 TPA located at village Kanakapur, Taluka & District Koppal, State: Karnataka by **M/s. Mukand Alloy Steels Private Ltd. (MASPL)** [Online proposal No. **IA/KA/IND/75547/2016**; J-11011/105/2016-IA-II(I)] – **Environmental Clearance**.

1.0 The proponent has made online application vide proposal no. **IA/KA/IND/75547/2016**dated 23rd June 2018along 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 700,000 Integrated Steel Plant Project of M/s Mukand Ltd. located in Village Kanakapura, Tehsil & District Koppal, State Karnataka submitted an application for environmental clearance to the Ministry online on 10th March 2016 vide Online Application No. IA/KA/IND/51427/2016 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 4th meeting held on 30th -31st March,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 19th May 2016 vide Lr. No. F.No.J-11011/105/2016-IA.II(I).

3.0 M/s Mukand Ltd made an application on 30th Mar 2018 for transfer of name to M/s Mukand Alloy Steels Private Ltd and thereafter MoEFCC Vide its letter dated 24th April 2018 granted approval for transfer of TORs from M/s Mukand Ltd to M/s Mukand Alloy Steels Private Ltd (MASPL).

4.0 As the project is proposed to establish in the area of 300 acres of the land which involves 101 Acres 21Gunthas under possession of MASPL and remaining 203 Acres 3Gunthas to be acquired through KIADB and Revenue Department. MASPL is fully equipped to implement the Phase-I. But Looking at the delay in the acquisition of land (203 Acres 3 Gunthas out of 300 acres of total requirement) & firm approval for approach road, which is necessary for execution of Phase-II, MASPL decided to hold Phase-II until acquisition of balance land including provision of approach road is completed and hence MASPL decided to go ahead to execute Phase-I only i.e. 700,000 TPA Rolling Mill (Wire Rod Cum Bar Mill) which will be integrated to the Proposed Integrated Steel Plant of 700,000 TPA.

5.0 The project of M/s. Mukand Alloy Steels Private Ltd. located in Kanakapura Village, Koppal Tehsil & District, Karnataka State is for setting up of a new Rolling Mill (Wire Rod Cum Bar Mill) of

700,000 Tonnes per annum (TPA) of Specialty Alloy Steels. The proposed capacity for different products for new site area as below:

Description of plant	**Production Capacity (MT)**	**Annual Production Capacity (MT)**
Products		
Alloy Steel bar, Bar in coil, Wire Road	2200 Tons Per Day	700,000
Production Units		
Rolling Mill – 2 Nos.	2200 Tons Per Day	700,000
Reheating Furnace – 2 Nos	75 Tons per Hour	
Bar/Coil Finishing Facilities Includes conditioning, treating & Testing Facilities.	The final products shall pass on through various testing and treatment facilities as per customer requirement before dispatch.	

6.0 The total land required for the project is 41.09ha (101 Acres 21 Gunthas) which is in possession of MASPL.The water bodies include Tungabhadra dam is about 5 km in SE away from project site.

7.0 The topography of the area is flat and reported to lies between 15° 20'07.79" to 15° 19'24.96" N Latitude and 76°15'22.23" to 76°15'47.86" E Longitude in Survey of India topo sheet No. 57 A/3, at an elevation of 510 m AMSL. The ground water table reported varies between 0.82 m to 13.55 m below the land surface during the post-monsoon season and 1.82 m to 12.26 m below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be 5,733 ha m. Further, the stage of groundwater development is reported to be 68 % (Koppal taluka).

8.0 There is no National Park Wild Life Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are located in the core and buffer zone of the project. The area does not report any kind of form corridor for Schedule-I fauna. The authenticated list of flora and fauna provided through reporting shows presence of no /schedule-I fauna in the study area.

9.0 The proposed new mill is the State of the Art manufacturing facilities to produce Bars of 18-65 mm size in straight lengths, bars in coils in 17-45 mm size and Wire Rods in 5.5 to 22 mm size in Coils. Billets of Size 160 mmx160 mmx12 Mtr length which is considered adequate to provide high reduction ratio for all the sizes of bars & rods. These billets are heated to approximate 1200 Degree Celsius in the Reheating Furnace and thereafter Rolled in the Mill. MASPL has opted for a Top & Bottom Fired Walking Beam Furnace which is today's heating technology is considered the best in view of Most Uniform Heating in Minimum heating time, Minimum Scale Loss, Minimum Surface Decarburization & Minimum Maintenance Down Time & Cost. The selected rolling technology provide high reductions in the initial roughing passes when the material is at its highest temperature to achieve internal soundness. The material passes through a Continuous 14-Stand H-V Mill in 3-Sections,two (2) Stand Roughing, six (6) Stand Intermediate and Six (6) Stand Finishing Sections with Crop-Cum-Cobble Shears after each section. A four (4) Stand precision sizing Mill (PSM) of 3-roll type to produce bars in straight lengths, bar in coils and provide precise stock to Wire Rod rolling line. The Wire Rod rolling line is with a 10-Stand Wire Rod Block. The blocks permits free size rolling of infinite sizes within the product range and produce dimensional tolerances in size and quality to the most stringent levels exceeding national and international standards. Thereafter the final

products shall pass on through various testing and treatment facilities as per customer requirement before dispatch.

10.0 The targeted production capacity of the Proposed Rolling Mill (Wire Rod cum Bar Mill) is 700,000 TPA. Steel Billets are the main raw material. The Billets shall be purchased from the local market or its subsidiary company at Ginigera, Karnataka. Other required materials will be obtained locally and transported by road/rail to the plant.

11.0 The water requirement of the project is estimated as 1,525 m^3 /day, out of which 1,525 m^3 /day of fresh water requirement will be obtained by drawing water from the downstream of Tungabhadra reservoir within the sanctioned capacity of 18 MLD by the Government of Karnataka's letter no. WRD.15/MTP/2013 dated 22 December 2015. For this Project no ground water shall be used.

12.0 In the proposed project approximately 25 KLD Domestic and Canteen will be generated and it will be treated in the STP of Capacity 25KLD and thereafter shall be sent to the ETP tank for Treatment. In the proposed project approximately 30 KLD Effluent is generated which shall be treated in Effluent Treatment Tank and then reused for gardening and dust suppression purpose.There will be no effluent released from the Rolling Mill and hence MASPL will adhere to **"Zero Liquid Discharge"** for this proposed project.

13.0 Total Power requirement for 700,000 TPA Rolling Mill is 21 MVA and shall be sourced from the state utility grid (KTPCL/GESCOM)/ Captive Plant. One no. of D.G. sets of 1250 KVA will be used for power backer back-up.

14.0 Baseline Environmental Studies were conducted during Pre-monsoon season i.e. from April 2016 to June 2016. Ambient air quality monitoring has been carried out at 8 locations during April'16 to June'16 and the data submitted indicated: PM_{10} (71.7 μg/m^3 to 89 μg/m^3), $PM_{2.5}$ (34.41 to 45.48 μg/m^3), SO2 (7.89 to 9.9 μg/m^3) and NOx (24.38 to 32.99 μg/m^3). The results of the modelling study indicated that the maximum increase of GLC for the proposed project is 0.18 μg/m^3 with respect to the PM_{10}.

15.0 Ground water quality has been monitored in six (6) locations in the study area and analysed. pH: 6.96 to 7.35, Total Hardness: 212 to 690 mg/l, Chlorides: 32 to 136 mg/l, Fluoride: 0.61 to 0.84 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 3 locations. pH: 7.38 to 8.02 ; /l and BOD: 6 to 8 mg/l. COD from 20 to 32 mg/l.

16.0 Noise levels are in the range of 42 to 61.3 dB(A) for daytime and 41 to 52.64 dB(A) for night-time.

17.0 It has been reported that there are no people in the core zone of the project. No/ R&R is involved. It has been envisaged that no families to be rehabilitated, which will be provided compensation and preference in the employment (only Job for 47 land losers in the upcoming factory).

18.0 It has been envisaged that an area of 14.16 ha (35 acre) 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.

19.0 Solid wastes generated during the Project will be sold to authorized vendors.Following are the details of the Solid Non-Hazardous Waste Details:

Sl.	**Type of waste**	**Proposed Quantity**	**Disposal**
1	Mill Scales	7500 TPA	To be sold
2	Used Refractories	700 TPA	To be Sold
3	End Cuts & Miss Roll	14,434 TPA	To be Sold
4	Metallic Dust from Shot Blasting Machine	140 TPA	To be sold
5	Metallic Dust and Chips form Billet Grinding	3,893 TPA	To be sold

20.0 The Hazardous waste generated from the plant process will be sold to authorized vendors. The details of the Hazardous Waste are mentioned below:

Sl.	Type of waste	Category	Proposed Quantity	Disposal
1	Used Oil	5.1	30 KL/Annum	Sold to HW Authorized parties.
2	Maintenance Waste – Nonhazardous maintenance waste consisting of used Cotton, used cloth cuttings, electrode stubs, hand gloves, other cleaning materials etc.	35.1	500 Kg /Month	Sold to HW Authorized parties.
3	E-Waste	E- waste Rules 2011	10 kg/Month	As this is a green field Project so initially negligible quantity of E-Waste will be generated Although at later stage the E-waste Generated shall be sold to Authorized recyclers
4	Empty Barrels/containers/liners contaminated with hazardous chemicals/wastes.	33.1	6 TPA	Sold to Authorized parties.

21.0 As this is a new project the Consent for Establishment (CFE) and Consent for Operation (CFO) for the plant will be taken from the State Government after grant of Environment Clearance from MoEF&CC.

22.0 The Public hearing of the project was held on 30 January 2018 atM/s Mukand Alloy Steels Pvt Ltd. Project Site in Sy No 67/1, 67/2, Kanakapura-Village, Koppal Taluk & District. under the

chairmanship of Deputy Commissioner Koppal for production of 0.7 million TPA of Specialty Alloy Steels by setting up of New Integrated Steel Plant. The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Sl	Issue Raised	Response by PP	Time Bound Action Plan	Budget provision
1.	Job opportunities to the local people.	**Direct Employment** 47 Nos of Land losers are promised for Job on Company Role.	Shall be done in phase manner and completed before commissioning of the plant.	-
		Direct Employment All young deserving candidates based on qualification and skill level shall be given preference during recruitment and transparency in recruitments shall be assured		
		Indirect Employment Preference shall be given to local deserving candidates while awarding petty contracts.		
2.	Awareness & Monitoring of Environment	Well Qualified personnel of Company will conduct formal awareness programs across the Gram panchayat periodically	Periodic and Continuous process	10lakhs/Annum
		Online Monitoring system for Ambient Air will be installed and will be displayed in the Main gate of the premises.	Before hot commissioning Mar-2020	100 Lakhs
		Continuous Tree Plantation		35 Lacks
3	Protection of Environment	1) Company is determined to install latest and efficient technology in terms of controlling pollution. 2) Planning to install plenty of fog generator and water sprinklers across the company premises. 3) Covering of maximum dumping and loading points of raw Materials 4) Continuous Tree Plantation	Right from Basic Engineering. To Hot Commissioning of the Plant	498.8 Crores (EMP Budget)
4.	Ground water quality &Water availability	Water shall be allowed to guard pond after treatment through latest and efficient water treatment plants.	By Dec'18	100 lakh
		High Focus on Rain Water Harvesting.		
		The Plant will ensure zero water discharge and hence the quality of Ground water shall not be affected.		
		A Pipeline from TB Dam backwater to Village for Drinking Purpose.	By 2023.	325 lacks in 2 Phases
5.	Health of the local people was	Special Health awareness camp and medical camps for primary checkup	Yearly- Mar-2020 onwards	10lakhs/Annum

Sl	Issue Raised	Response by PP	Time Bound Action Plan	Budget provision
	affected due to pollution from the existing industries located nearby.	will be arranged at least once in a year in nearby villages for health check-ups.		
6	Requirement of CBSE school and facility for Skill development	School shall be considered. Facility for Skill development shall be created.	By 2023.	10 Lacks

23.0 The budget is Rs 9.50 Crores for two years in accordance to MoEF&CC's Office Memorandum F.No.22-65/2017-IA-III dated 01.05.2018 based on the Public Hearing issues towards capital expenditure for Corporate Environment Responsibility (CER). The detailed plan for CER is as follows:

Budget for Corporate Environment Responsibility (CER)			
PROJECT (2018-19 to 2019-20)	Budget for Improvements in physical infrastructure (Rs in Lacs)	Budget for Improvements in social infrastructure (Rs in Lacs)	TOTAL (Rs in Lacs)
Rolling Mill (Wire Rod Cum Bar Mill)	515	435	950

BREAK- UP (Improvements in physical infrastructure):

Improvements in physical infrastructure			
Sl	PLAN & BUDGET ESTIMATION FOR THE PERIOD 2018-19 to 2019-20		
	Welfare Activities	Amount in Lacks	Villages
1	Development of connecting road to NH-63	100	1. HosaKanakapura Village 2. KanakapuraTanda 3. Hale Kanakapura Village 4. Ginigera Village
2	R O Plant for drinking water	50	
3	Water line from T B Dam	150	
4	Drains Along Village Street	50	
5	Construction of Sanitation Facility for Male and Female with provision of Overhead Water Tanks	75	
6	Providing LED lighting with Solar Panels at Village Streets	50	
7	Providing Computers and Science Lab Equipment to the ZP High Schools and Primary Schools	40	
8	GRAND TOTAL (Rs in Lacks)	515	
	Improvements in social infrastructure		
1	School Building	75	1. HosaKanakapura Village 2. KanakapuraTanda 3. Hale Kanakapura Village
2	Infrastructure Facilities for Computer Education	5	
3	Establishment of Community Centres	150	
4	Facilities /Infrastructures for skill development of Women	50	

5	Avenue Plantation all along the Roads, Plantation at Public Places & Barren Lands	20	4. Ginigera Village
6	Provide 2 Ambulances for Medical Emergency Services	35	
7	Soil Conservation measures and Forest Management nearby site in consultation with Forest Department.	50	
8	Distribution of Fruit Bearing Sapling, Seeds to villagers& Plantation	50	
9	GRAND TOTAL (Rs in Lacks)	435	

24.0 The capital cost of the project is Rs. 724.50 Crores and the capital cost for environmental protection measures is proposed as Rs 170 Lakhs in construction Phase and Rs 585 Lakhs in Operation Phase. The annual recurring cost towards the environmental protection measures is proposed as Rs 34 Lakhs.The total manpower required for the proposed project will be around 315 permanent as well 400 Outsourced staff during operation of the Plant.

25.0 Greenbelt will be developed in 14.16 Ha which is about 35% of the total acquired area. A 10 m wide thick greenbelt, consisting of Casuarina, Ashoka Trees, shrubs etc. around plant boundary nearby Village area will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 1500 trees per hectare. Total no. of 21,250 saplings will be planted and nurtured in 14.16 hectares.

26.0 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:

27.0 Based on the presentation, the Committee noted that the project proponent has construed the proposal and the instant proposal is for reheating furnace, rolling mill and finishing facilities. The required land of about 101 acres is in the possession of project proponent

Recommendations of the Committee:

28.0 After detailed deliberations, the Committee recommended for environment clearance for the reheating furnace, rolling mill and ancillary facilities subject to following specific conditions:

1. The project proponent shall adhere to Zero Liquid Discharge.

2. The project proponent shall adhere to the project limits of OISD in the safety and disaster management for storage of fuel oil and LPG.

3. The outer shells of the storage tank shall be designed as per the norms prescribed by OISD.

4. The project proponent shall use furnace oil for reheating furnace and no coal as a direct and as a gasified shall be permitted in reheating furnace.

5. The specific water consumption shall not be 0.7 cubic meter per ton of rolled project.

6. The entire mill scale generated shall be utilized.

General Conditions:

1. An amount of Rs 950 Lakhs proposed towards Corporate Environment Responsibility (CER) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

2. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

3. The Capital cost for environmental protection measures Rs 170 Lakhs in construction Phase and Rs 585 Lakhs in Operation Phase, the annual recurring cost towards the environmental protection measures Rs 34 Lakhs shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.

4. The project proponent shall (Air Quality Monitoring):

    a. install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

    b. monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

    c. Install system 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 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;

    d. submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring for calibrations of CEMS and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

5. The project proponent shall (Water Quality Monitoring):

    a) install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 as amended from time to time;

b) 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; and

c) submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

6. The project proponent shall (Air Pollution Control):

a) provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources;

b) provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags;

c) provide sufficient number of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs regularly;

d) use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin;

e) provide primary and secondary fume extraction system at all melting furnaces; and

f) design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

7. The project proponent shall (Water Pollution Control):

a) adhere to 'zero liquid discharge';

b) provide Sewage Treatment Plant for domestic wastewater; and

c) provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

8. The project proponent shall (Water Conservation):

a) practice rainwater harvesting to maximum possible extent; and

b) make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

9. The project proponent shall (Energy Conservation):

a) provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.

b) practice hot charging of slabs and billets/blooms as far as possible;

c) ensure installation of regenerative type burners on all reheating furnaces;

d) 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; and

e) Provide the project proponent for LED lights in their offices and residential areas.

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

11. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces.

12. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

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

14. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

15. The project proponent shall adhere to the corporate environmental policy and system of the reporting of any infringements/ non-compliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF&CC as a part of six-monthly report.

16. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Induction/ Electric Arc Furnace and Rolling Mills shall be implemented.

17. A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of the organization.

18. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.

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

20. 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).

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

22. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dB(A) during day time and 70 dB(A) during night time.

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

24. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.

25. The project proponent shall (Post-EC monitoring):
    a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
    b. put on the clearance letter on the web site of the company for access to the public.
    c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http:/envfor.nic.in.
    d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
    e. 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;
    f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
    g. 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;
    h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

33.4. Up-gradation of Wet Iron Ore Grinding System to Beneficiation Circuit in existing 1.2 MTPA Iron Ore Pellet Plant located at Halavarthi Grampanchayat, Tehasil & District Koppal, Karnataka by **M/s MSPL**. [Online Proposal No. **IA/KA/IND/71698/2017**; MoEFCC File No. J-11011/383/2014- IA-II(I)] – Environmental Clearance

1.0 The proponent has made online application vide proposal no. **IA/KA/IND/71698/2017**dated 29th May 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 submitted by the Project Proponent

2.0 The proposed upgradation of M/s MSPL located in Village Halavarthi, Tehsil Koppal, District Koppal, State Karnataka was initially received in the Ministry on 19th December 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 28th meeting held on 5th to 7thFebruary, 2018 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 26thFebruary 2018 vide Lr. No F.N. J-11011/383/2014-IA.II (I).

3.0 The project of M/S MSPL located in Halavarthi, Village, Koppal Tehsil, Koppal District, Karnataka State is proposed for the upgradation of existing Wet Iron Ore Grinding System to Beneficiation Circuit in the Operational 1.2 MTPA Iron Ore Pellet Plant. The existing 1.2 MTPA Pellet Plant was accorded environmental clearance vide F No. J-1011/383/2014-IA II (I) dated 23rdSeptember 2016.The Status of compliance of earlier ECwas obtained from Regional Office, South Zone vide Lr. No. EP/12.1/2016-17/7/Kar, dated 4th October 2016. There are no non-compliances reported by Regional officer.

4.0 This present proposal is for upgradation of existing wet process of IOGS (Iron Ore Grinding System) unit to Beneficiation circuit. This modification will be useful for beneficiation of low grade iron ore from captive mines and open market to utilize in existing operational Iron Ore Pellet Plant. No change in the product mix change and quantity of production, which remain unchanged at 1.2 MTPA Pellet. Since this proposal is for upgradation of existing wet process to beneficiate iron ore available in the captive mines of Karnataka state having 53 to 54 % of Fe to 63% plus Fe suitable to be process through this pellet plant.

5.0 The total land in possession for the project is 45.72Ha, which was allocated by KIADB and out of which the existing plant is operated in the area of 16.5Ha. The upgradation activity will be taken in an area of 200mts .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.

6.0 The topography of the area is undulating to flat, and reported to lies between 15° 19'49.9 N to15° 19'49.4" N Latitude and 76°12'29.9"E to 76°12'29.9E Longitude in Survey of India Topo sheet No. 57 A/3, in the Survey no. 2, 8, 9, 12 to 15, 132, 136 & part of 5, 6,7, 16, 17 and 131 of Halavarthi Village at an elevation of 515 m AMSL. The ground water table reported to ranges between4.5 to 16.50 m below the land surface during the post-monsoon season and 1.11 to 16.24 m below the land surface during the pre-monsoon season.

7.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported tobelocatedinthecoreandbufferzoneoftheproject.Theareaalsodoesnotreporttoform corridor for Schedule-I fauna.

8.0 The iron ore input is iron ore fines (-) 10 mm feed to the scrubber mixed with water and separated the clay in the form of slurry. Output of scrubber goes to a vibrating screen having 1 mm aperture. Screen coarse size particle are carried to the primary ball mill through a belt conveyor. Undersize particles from the screen are sent to de-sliming cyclones at 25µm. De-sliming cyclone underflow is mixed with primary ball mill output and overflow is sent to tailing thickener. Output from primary ball mill is fed to sizing hydro-cyclone targeted at 300µm size. The underflow (+300µm) from this cyclone will route back to ball mill for further grinding and overflow (-3-00µm) will proceed for further beneficiation steps. Sizing hydro-cyclone overflow will pass through de-sliming cyclone to prepare material (30% solids) for spiral circuit. Material with about 30% solids will pass to spiral circuit, where two products namely concentrate and tails will be generated. Spiral concentrate will have superior Fe grade of +63% Fe and will go to final grinding step. Spirals tails will go to a regrinding mill. The product of regrinding mill will be fed to magnetic separator circuit. Magnetic circuit concentrate will have +63% Fe grade and will go to final grinding step. Output of final grinding mill will be sent to the concentrate thickener. Tails generated from magnetic circuit will be sent to the tailing thickener. Material from concentrate thickener will be filtered using pressure filter to product cake with about 8-10% moisture and will be stacked in the designated area for pellet manufacturing. Tails from tailing thickener will be sent to tailing filter to produce cake of about 15-17% moisture. These cakes will be stacked in demarcated open area inside the plant for a short time before shifting to an environmentally controlled adjoining area for storage for further use.

9.0 Up-gradation of Wet Iron Grinding System to Beneficiation Circuit in Operational 1.2 MTPA Iron Ore Pellet Plant. The ore for the plant would be procured from MSPL Mines (70 - 73 Km) and Open market (35 – 40 Km). The ore transportation will be done by tarpaulin covered trucks.

10.0 The total water requirement including existing and upgradation project is estimated as 1594.06 m^3/day. The permission for drawl from Tungabhadra Dam is obtained from State Government Karnataka vide Lr. No. 775/B1/2008 date 23.04.2008.

11.0 The power requirement for the proposed Modification and Pellet Plant is 15 MW and will be met by the Karnataka State Electricity Board sanctioned quota. Power will be received at 220 kV from Utility (GESCOM) and stepped down to 33 KV and again to 6.6kV for further distribution.

12.0 Baseline Environmental Studies were conducted during summer season i.e. March 2015 to May 2015. Ambient air quality monitoring has been carried out at 9 locations during 01.03.2015 to 29.05.2015 and the data submitted indicated: PM10 (37.0 µg/m^3 to 62.2 µg/m^3), $PM_{2.5}$ (16.7 to 29.1 µg/m^3), SO2 (9.9 to 28.7 µg/m^3) and NOx (11.8 to 32.2µg/m^3). The results of the modeling study indicated that the maximum increase of GLC for the proposed project is 0.00986 µg/m3 with respect to the PM10: 0.05002 µg/m^3 with respect to the SO2:0.22194 µg/m^3 with respect to the NOx. The Baseline Data Collection has been done for the period March 2015 to May 2015 for getting environmental clearance for operational Pellet Plant. This baseline data is used for present proposal as per Office Memorandum No. J-11013/41/2006-IA-II (I) dated 29th August 2017.

13.0 Ground water quality has been monitored in 5 locations in the study area and analysed. pH:7.4 to 7.9 , Total Hardness: 268 to 792 mg/l, Chlorides: 75.4 to 255.9 mg/l,Fluoride: 0.2 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 5 locations. pH: 7.5 to 8.2 ; DO: 5.8 to 6.4 mg/l and BOD: 12.0 mg/l to 48.1 mg/l . COD from 30.1 to 120.3 mg/l.

14.0 Noise levels are in the range of 37.7 to 54.5 dB(A) for daytime and 39.5 to 51.2 dB(A) for nighttime.

15.0 No R&R is involved.

16.0 With beneficiation of fine low-grade ores, a rejected portion i.e. tailing will arise which is approximately 30% of the overall iron ore through put. The tailings will be temporarily stored within the plant boundary for drying and then shifted to an adjoining site (land owned by MSPL) for storage for a few years till it is used at the filling work of the upcoming steel plant in the site or used by employing some of the upcoming technologies for recovery of silica and alumina. MSPL have identified about 12.2 Acres of land for storing tailing. In addition to this it is also proposed to utilize this tailing for land filling on adjacent land where ISP is proposed. It has been envisaged that an area of 15 acres, will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

17.0 It has been reported that the Consent to Establish/Consent to Operate from the Karnataka State Pollution Control Board obtained vide Lr. No AWH-301242 dated 20/10/2016 and consent is valid up to 30/06/2021.

18.0 The Public hearing of the project was held on 28th May 2018 at HalavarthiKoppal Karnataka under the chairperson of the Deputy Commissioner of Koppal District Smt. Kanagavalli for Upgradation of existing Wet Iron Ore Grinding System to Beneficiation Circuit in the Operational 1.2 MTPA Iron Ore Pellet Plant. The issues raised during public hearing are 1) Employment 2) Water Supply 3) Land Acquisition. An amount of 75 Lakhs (1 % of Project cost) has been earmarked for Corporate Environment Responsibility based on public hearing issues.

19.0 The capital cost of the upgradation project is Rs 75 Crores and the capital cost for environmental management plan is proposed as Rs4.07 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 0.51 crores. The detailed CSR plan has been provided in the final EIA report in its page No. 158 to 164.During operation phase additional 65 no. technical and nontechnical people will be employed.

20.0 Greenbelt will be developed in 6.07Ha 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. Adequate green belt is provided all around the pellet plant and inside the plant premises. About 10000 Nos. of locally available types of trees which are resistant to pollutants are planted. MSPL has already developed Green Belt over 6.07 Ha.

21.0 A court case has been filled for 109.03 Acres of land (Survey No. 295/2, 298, 299, 300/A, 300/B, 130/AP1, 130/AP2, 132/B, 133, 140, 140/P1, 147,150/B, 155/3, 155/B, 156/2, 170/D, 172/A, 172/B, 172/P3, 172/P4, 171/AA1, 172/H, 172/F, 172/P5 out of 922.19 Acres. The matter is under consideration.The land for present proposal and operational 1.2 MTPA Pellet Plant are not part of the land under consideration in Honorable Supreme Court.

22.0 EIA Consultant: Pollution & Ecology Control Services, Environmental Engineers & Consultant, Nagpur.

Observations of the committee:

23.0 After presentation by the project proponent, the committee observed following:

- The baseline data collected was of more than 3 years old and as per the Office Memorandum No. J-11013/41/2006-IA-II (I) dated 29th August 2017, the baseline data shall not be older than 3-year.
- The EMP posted on the website was draft report and not as per the generic structure envisaged in the EIA Notification, 2006
- Issues raised during the public hearing was not integrated in the EMP
- Specific ToR Points ii, iii, v and Standard ToR points, 7, 9, 11 and Sector specific ToR points 3,8,10, 17,18,20 were not addressed properly.
- No quantitative and specifications details regarding proposed pollution control equipment was provided.
- Details of FAEs and accreditation of consultant was not given at Chapter-11.
- Plant layout presented at page 14 was not legible
- Location, number, details of the post-project monitoring was not provided.

Recommendations of the committee:

24.0 After detailed deliberations and specifically in view of the fact that EIA was based on baseline data which was more than three years old, the Committee was of the view that a fresh EIA Report should be prepared with fresh data as laid down by MoEF&CC Notifications. Since public hearing is a part of EIA process, the fresh draft EIA report should be put up for public hearing and the points raised during public hearing and suggested actions thereon, should be incorporated in the final EIA Report and submitted to the Ministry. The fresh EIA report should address the deficiencies pointed above and should be in compliance of the ToR.

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.

1.0 M/s JK Laxmi Cement Limited made an application vide online proposal No. IA/CG/IND/75581/2018 dated 26th June, 2018 seeking 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.

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

2.0 Environmental Clearance for the existing Cement Plant was issued vide letter No. J-11011/1170/2007-IA.II(I) dated 13thMay, 2009 and corrected/modified copy issued by Ministry vide

its letter of even No. dated 27thFebruary, 2010 in the name of M/s. JK Lakshmi Cement Limited for Integrated Cement Plant [Clinker 3.0 MTPA; Cement: 10.0 MTPA], Lime Stone Mine [4.8 MTPA, 267.695 Ha and 281.339 Ha] and Captive power Plant 40 MW at Malpuri Khurd Village, Dist. Durg, Chhattisgarh which consists of Phase-I and Phase-II. The validity of the environmental clearance was extended up to 12.5.2019 vide letter No. J-11011/1170/2007-IA.II(I) dated 4th September, 2015.

3.0 However, M/s JKLCL operating Phase-I of an Integrated Cement Manufacturing Unit having cleared production capacity of 1.5 Million TPA (~4,500 TPD) of Clinker & 5 MTPA Cement (OPC, PPC, PSC & CSC)along with 8 MW Waste Heat Recovery (WHR) based Power Plant at Malpuri Khurd Village in Durg District of Chhattisgarh State. The integrated Cement Manufacturing Unit commenced commercial operation since 21stMarch, 2015. WHR based Power Plant has commenced operation since 31stDecember, 2017. The Plant is based on Dry Process Technology and is having Single String-5 Stage Pre-heater with inline Calciner.

4.0 M/s JKLCL has found that the Clinker production capacity of the existing Plant could be enhanced by 0.48 Million TPA with available infrastructure, process optimization, modifications &investment and also to capitalize on the projected improved cement demand. The existing Clinkerization Plant will be optimized and bottlenecks will be removed to reach maximum potential. Considering efficient Plant & Machinery installed and infrastructure available in the Plant, it is felt that the Clinker Production Line has potential to produce more by process optimization and minor modification / investment. The proposed modifications will be carried out within the existing Plant; there will not be any additional land or site requirement. Only the existing infrastructure will be utilized for the proposed modifications. In this regard, JKLCL is proposing only 32% enhancement in Clinker production capacity from1.5 Million TPA to 1.98 Million TPA by with available infrastructure, process optimization, modifications & investment. The details of existing and proposed production capacities are as follows:

S.No.	Product	Product Existing Capacity	Additional Capacity	Total Capacity after Proposed enhancement
1	Clinker	1.5 Million TPA	**0.48 Million TPA**	1.98 Million TPA
2	Cement	5.0 Million TPA	No change	5.0 Million TPA
3	Limestone	Mine 2.4 Million TPA	No change	2.4 Million TPA
4	CPP	20 MW	No change	20 MW
5	WHR	8 MW	No change	8 MW

5.0 Limestone constitutes about 95% of raw material requirement and its transportation from Mine to Plant is through truck. However, quantity / frequency of dumpers for transport of limestone to crusher and subsequently to plant shall be suitably increased. JKLCL is in the process of constructing a pipe conveyor which after the completion would eliminate the need for trucks. Similarly, JKLCL shall develop railway siding in near future eliminating the need for truck for transport of fuel. Considering 3,500T carrying capacity rakes, there would be requirement of 1 wagon in every 4 days for a 6,000 TPD Plant and 1 wagon in every 6 days for a 4,500 TPD plant. Thus, additional 19 wagon load shall be required on annual basis in transport of coal.

6.0 Existing water requirement is 3,150 KLD and no additional water will be required for proposed enhancement in Clinker production capacity by process optimization. Thus, the total water requirement after enhancement will remain same as existing. JKLCL has approval from Water

Resource Department, Raipur (Letter No. 6558/F 4-165/S-2/31/OJP/2010 dated 11.09.2012) for withdrawal of 1.64million cubic meter water per annum from river Shivnath for which the company has constructed an anicut as per the conditions of the Chhattisgarh State Government. There is also a permission from Central Ground Water Authority for withdrawal of 320m^3/day ground water (Letter No. 21-4(34)/NCCR/CGWA/2012-2036, dated 26thSeptember,2016), for domestic use.

7.0 JKLCL has an agreement with Chhattisgarh State Power Distribution Company Limited(CSPDCL) for a contract demand of 31.11 MVA for Cement Plant and Mines at 220 KV. Existing power requirement is 13.6 MW. However, after proposed enhancement, increase in power demand is expected by 3.1 MW and total power will be required 16.7MW.JKLCL has installed 8 MW (Gross) WHRS which is operational. Further, JKLCL is also in the process of setting up a Thermal Power Plant (TPP) of 20 MW in the existing premises of Integrated Cement Manufacturing Unit to meet the major power requirement of the Plant in an uninterrupted and economical manner. The CPP is scheduled to commence operation from December 2018. In addition, JKLC has also available 500 KVA DG sets for meeting power requirement during emergency. Thus most of the power requirement can be met in existing Cement Production Line.

8.0 Domestic wastewater generated from the Plant is being / will be treated in STP and treated water is being / will be used for greenbelt development / plantation. Dust collected from air pollution control equipments is being / will be recycled into the process. Sludge generated from STP is being / will be used as manure in greenbelt development/ plantation. Oil, Grease and Empty Paint Drums generated from plant are being / will be sold to CPCB authorized recycler.

9.0 Capex estimates for Optimization / De-bottlenecking is Rs. 1550 Lakh. This also includes thecost for Installation of SNCR system for controlling NOX and Replacement with high quality bags (Rs. 450 Lakh).

10.0 The mathematical Model ISCST-3, 1996 was used for predicting the GLCs. The worst case scenario was generated and possible emission scenario is predicted. It was observed that even in abnormal condition the increase in concentration was found to be low and insignificant. Sensors will be provided at shop floor of Plant which will give advanced warning / alarm for any possible emission. However, for any eventualities proper measures in terms of automatic shutdown of the plant will be in place. Hence the plant will be in operation considering standard operating procedures and adoption of these safety measures. There is no adverse situation envisaged.

11.0 Certificate of compliance of earlier EC was obtained from Regional Officer, Nagpur vide letter no. 5-60/2011ENV/3598 dated 5th May 2018.

Observations of the committee:

12.0 After detailed presentation, the Committee noted that the instant proposal is for amendment of environmental clearance issued in the year 2009 for the capacity of 3 MTPA clinkers; 10 MTPA cement; 4.8 MTPA limestone mining and 20 MW CPP; 1,98 MTPA clinkers; 5 MTPA cement; 8 MW WHRB; 4.8 MTPA limestone mining. The existing environmental clearance was valid upto 12th May 2019. Therefore, the instant proposal is treated as construed the capacities within granted environmental clearance capacity.

Recommendations of the committee:

13.0 In view of the above, after detailed deliberations, the Committee recommended for amendment in the environmental clearance subject to following specific conditions:

i) An amount of 15.5 lakhs shall be spent towards corporate environmental responsibility as per office Memorundum of the Ministry dated 30th May 2018 by the end of 2019.

ii) The air pollution control devices should be upgraded to meet the requirements of additional pollution load and shall meet the standards.

iii) The proposed configuration of the plant shall be commissioned within the valid period of environmental clearance.

33.6. Proposed Installation of Ferro Alloys Plant at Village: Hat-Asuria and Basudebpur (North), Mouza: Basudebpur (North) and Hat-Asuria, P.O. Hat-Asuria, P.S. Barjora, District Bankura, West Bengal by M/s Maithan Alloys Limited [Online proposal No. IA/WB/IND/75552/2018; MoEFCC File No. IA-J-11011/212/2018-IA-II(I)] – Terms of Reference.

1.0 **M/s Maithan Alloys Limited** made application vide online proposal no.**IA/WB/IND/75552/2018** dated 23rdJune 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. Maithan Alloys Ltd. proposes to install a new unit for production of 1,20,000 TPA Ferro Alloys (Ferro Chrome, Silico Manganese, Ferro Silicon & Ferro Manganese).It is proposed to set up the plant for production of ferro alloys by installation of 4 nos. 16.5 MVA Submerged Arc Furnaces.

3.0 The proposed Ferro Alloys plant project is a new project.

4.0 The proposed unit will be located at Village:Hat-Asuria and Basudebpur (North), Mouza: Basudebpur (North) and Hat-Asuria, P.O. Hat-Asuria, P.S. Barjora, District Bankura, West Bengal.

5.0 The land area required for the total plant is 16.19 Ha (40 acres) which is industrial in nature. No forest land involved. The entire land has been acquired for the project. Of the total area 5.34 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. Rs. 271 Crores. Proposed employment generation from proposed project will be 570 in total. 134 direct employment and 436 indirect employment.

8.0 The targeted production capacity of the Ferro Alloy plant is 1,20,000 TPA Ferro Alloys (Ferro Chrome, Silico Manganese, Ferro Silicon & Ferro Manganese). The ore details are presented below:

Sl. No.	Ores	Procured from	Linkages
Ferro Chrome Production:			
1.	Chrome Ore	Sukinda Valley in Jajpur district of Orissa	Road
Silico Manganese Production:			
2.	Manganese Ore	Imported from Australia / Africa and Barbil, Nagpur or Bellary sector	Imported to Haldia port and road

9.0 The proposed capacity for different products for new site area as below:

Name of Unit	No. of Unit	Capacity of each Unit	Production Capacity
Ferro Alloys plant	4	16.5 MVA Submerged Arc Furnace each	1,20,000 TPA ferro alloys (Ferro Chrome, Silico Manganese, Ferro Silicon & Ferro Manganese)

10.0 The electricity load of 64 MVA which will be procured from DVC (Damodar Valley Corporation) power supply system.

11.0 Proposed raw material and fuel requirement for major products of the project are as follows:

Sl. No.	Items	Requirement	Source
Ferro Chrome Production:			
1.	Chrome Ore	2600 kg/MT Fe-Cr	Sukinda Valley in Jajpur district of Orissa
2.	Coke	400 kg/MT Fe-Cr	Coke plants in Dhanbad
3.	Coal	180 kg/MT Fe-Cr	South-Eastern Coalfields of CIL in Chhattisgarh
4.	Quartz	20 kg/MT Fe-Cr	Keonjhar / Sundargarhdistrict of Orissa
5.	Dolomite	20 kg/MT Fe-Cr	Sundergarh District, Orissa
Silico Manganese Production:			
1.	Manganese Ore	1700 kg/MT Si-Mn	Imported from Australia / Africa and Barbil, Nagpur or Bellary sector
2.	Fe-Mn Slag	700 kg/MT Si-Mn	Company's plant at Kalyaneswari
3.	Coke	400 kg/MT Si-Mn	Coke plants in Dhanbad
4.	Coal	400 kg/MT Si-Mn	South-Eastern Coalfields of CIL in Chhattisgarh
5.	Quartz	200 kg/MT Si-Mn	Keonjhar / Sundargarhdistrict of Orissa

12.0 Water Consumption for the proposed project will be 650 kld (make-up water – 600 KLD, domestic water – 50 KLD). Domestic waste water will be treated in septic tank-soak pit system and industrial waste water generated will be treated in water treatment facility and reused completely.

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

14.0 EIA Consultant: Envirotech East Pvt. Ltd., NABET Accreditation as per QCI NABET list of 15thJune, 2018: Sl. No. 52, Page No.: 50, Sector No. 8, Metallurgical Industries (Ferrous & Non-ferrous) - both Primary & Secondary, Category-A.

Observations of the committee:

15.0 During the presentation, the Committee noted the following:

i) The CPCB has already brought out the "Zoning Atlas for Setting of Industries" for the District of Bankura in West Bengal where the project is proposed to be located. However, the project proponent could not provide the details of that zoning for ascertaining whether the proposed site is in the proper zone. The project proponent could not show the drainage pattern in that area and also could not specify sufficiently how the quality of water in these ponds would be maintained.

ii) Being a green field project, there was no alternative site proposed so that alternative site analysis could be discussed.

iii) There were three live village ponds in the vicinity of the proposed site and these ponds were being used by the local villagers.

iv) The waste silt recovery was not envisaged in the proposal.

v) The details of land under the possession of the proponent were not provided.

Recommendations of the Committee:

16.0 After detailed deliberations, the Committee recommended for returning the proposal in the present form and requested to submit a revised proposal addressing the issues mentioned above.

33.7. Proposed expansion & modernization of the existing Unit to produce Mild Steel Billets/Ingots and MS Bars/Sections (Capacity – 2,00,000 MTPA each) through augmentation in the existing Induction Furnaces capacity located at Narain Nagar Industrial Estate, Bazpur Road, Kashipur, District Udham Singh Nagar, Uttarakhand by M/s Kashi Vishwanath Steels Private Limited [Online proposal No. IA/UK/IND/75525/2018; MoEFCC File No. IA-J-11011/213/2018-IA-II(I)] – Terms of Reference.

1.0 **M/s Kashi Vishwanath Steels Private Limited** made application vide online proposal no.**IA/UK/IND/75525/2018** dated 22nd 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 "B" EIA Notification;

2006. General Conditions is applicable to the project as the proposed expansion project is located at 4 Km from the interstate boundary, 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 Kashi Vishwanath Steels Private Limited (KVS) proposes expansion of existing manufacturing unit to produce MS Billets/Ingots and MS Bars/Sections (Capacity – 2,00,000 MTPA each) through augmentation in the existing Induction Furnaces capacity & Utilities. It is proposed to expand /modify the plant for melting the mixture of sponge iron, scrap and ferro alloys through Induction furnace after reducing micro elements such a Sulphur and Phosphorous by a convertor then solidify the molten metal in Continuous Casting Machines and then direct feeding in rolling machinery to produce bars/sections with the help of conveyer system based on HOT CHARGING technology.

3.0 The company adopted the technology whereby steel billets produced from induction furnace are directly rolled in the rolling mill, thereby bypassing altogether the requirement of any fuel. This led to cleaner environment as there is no fuel consumption and therefore no emission and at the same time, this enabled the company to cut cost of manufacturing to remain a cost effective option for its consumers. Apart from reducing fuel consumption, refining of micro elements eventually increase the yield and quality of the finished products.

4.0 M/s KVS has taken CTE & CTO at all stages of expansion from respective Pollution Control Boards prior to application of the Environment Impact Assessment (EIA) notification number S.O.1533 dated 14th September, 2006. The last CTE expansion was obtained on dated 26.04.2006 for the total capacity of 245 MTPD and thereafter no increase in Production capacity was made, therefore environment clearance was not required as no expansion, modernization & change in product mix took place. Consent to Operate was accorded by Uttarakhand Environment Protection &pollution Control Board (UEPPCB) vide letter no. UEPPCB/HO/Con-K-8/2017/1169, which is valid up to 31.03.2018 and company, has applied for CTO Renewal for the Period up to 31.03.2019.

5.0 The existing unit is located at Narain Nagar Industrial Estate, notified by Uttarakhand Government, situated at Bazpur Road, Kashipur, District Udham Singh Nagar, Uttarakhand.

6.0 The land area already acquired for the existing plant is 14.78 Acres (59817.0 sqm). Vacant land (10896.0 Sqm) shall be used for proposed expansion activities. No forest land involved. The entire land has been acquired for the project. Out of this 19740.00 Sq m (i.e.33.0 % of total area) shall be developed as greenbelt and other forms of greenery by planting the native species. Approx. 20% of the area is already developed as Green Belt and being maintained. Additionally 13% of the area is also proposed to develop Green Belt.

7.0 The National Park (Jim Corbett National Park)is located at a distance of 24.05 km N 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.

8.0 Total project cost is approx. 10.0 Crore rupees. Proposed employment generation from proposed project will be 100 direct employments and 50 indirect employments.

9.0 The targeted production capacity of the MS Billets/Ingots and MS Bars/Sections is Capacity – 2,00,000 MTPA each. Primary raw materials are Sponge iron, iron scrap and coal. Sponge Iron is available from district Koenjhar of Orissa state and coal is currently available from Gujarat State (imported coal) The Raw materials transportation is being done through Road/Rail. The proposed capacity for different products for existing site area as below:

Products (Mild Steel)	Capacity (MTPA)		
	Existing	Proposed	Total
Mild Steel Billets/Ingots	57,600	1,42,400	2,00,000
Mild Steel Bars/Sections	88,200	1,11,800	2,00,000

Detail of the existing and proposed capacities						
Plant Facilities	Existing		Proposed		Total (after proposed expansion)	
	Unit	Capacity	Unit &IF Capacity	Capacity	Unit	Capacity
Induction Furnace	5 Tons (02 Nos.) and 4 Tons (02 Nos.)	57,600	Proposed: 6 Tons (03 Nos. – modify/replacement of existing IFs) and 10 Tons (01 no. replacement with existing 4 Ton furnace & 02 nos. new)	1,42,400	6 Tons (03 Nos.) and 10 Tons (03 Nos.)	2,00,000
Continuous Casting M/c (CCM)	2 Strand, 4/7 m radius	57,600	Modernization	1,42,400	2 Strand, 4/7 m radius	
Rolling Mill	1	88200	Modernization	1,11,800	--	2,00,000

10.0 After proposed expansion, the Unit at full capacity will demand 26.5 MW of power, which shall be supplied through Grid (UPCL). Existing power demand is 16.5 MW. Company has also proposed to install Green insulated DG Set of 685 KVA (125, 160 & 400 KVA). Existing DG Set is 63 KVA capacity, which shall be replaced by proposed DG Set.

11.0 Proposed raw material are Sponge iron, Pig Iron and Ferro-alloys and fuel requirement for project are Coal (imported), LPG and HSD (for DG set). Fuel consumption will be mainly Coal (imported): 20.0 MT/ day, LPG: 3.33 KG/ day and HSD: 112 LIT/ hr.Annual requirement of Raw Material with source of supply For making of MS Billets/Ingots (Melting Division) is as follows:

S. No	**Raw Materials**	**Ratio**	**Quantity (Tons/annum)**			**Source of Supply**
			Existing	**Additional**	**Total**	
1.	Sponge Iron	77.0	47935.64	118507.56	166443.20	Koenjhar, Orissa

2.	Iron Scrap/ Pig Iron	22.50	14007.17	34628.83	48636.00	Delhi & UP
4.	Ferro-Alloys	0.50	311.27	769.53	1080.80	Raipur & UP
Total		**100**	**62254.08**	**153905.92**	**216160.0**	

For making of MS Bars/Section (Rolling Division)

S. No	Raw Materials	Quantity (Tons/annum)			Source of Supply
		Existing	Additional	Total	
1.	MS Billets/Ingots	89543.0	113502.54	203045.68	Open Market/Captive

12.0 Initially total water demand is 136.0 KLD and recycled water is 81.5 KLD. Fresh Water required for Production of Mild Steel Billets/Ingots and Bars/Sections will be 54.5 KLD after proposed expansion and No waste water generation from industrial process except Cooling Tower & Softener Plant Bleed (1.5KLD) which shall be reused in the green belt development & Dust Suppression respectively after sedimentation followed by neutralization.

13.0 Domestic waste water (18.0 KLD) will be treated through proposed STP (Capacity - 25.0 KLD & reuse in green belt for irrigation purpose.). Zero discharge will be achieved.

14.0 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:

15.0 During the presentation, the following issues were noted:

i) The Project proponent has not yet engaged any Consultant. The Committee felt that the Consultant should be engaged right from the stage of ToR.

ii) The Project was under implementation under a concept "Consent to Operate" given by the State Pollution Control Board. Under this CTO, a condition for green belt was imposed. The project proponent could not specify that they have taken sufficient action to comply these conditions.

iii) The lay out plan indicated that the expansion is likely to create more congestion in the premise and the Project proponents were not able to satisfy the Committee that the expansion could be feasible within the existing premise.

iv) The expansion is likely to create additional traffic and the demand of parking area, storage area, etc. would increase even if all the facilities are created within the existing sheds. The Committee felt that there is a need for examining the feasibility of expansion within existing premise.

v) The project proponent has proposed coal fire furnace and there is a need to change for the cleaner technology by oil fire furnace.

Recommendations of the Committee:

16.0 In view of the above, the Committee recommended that the project proponent should submit revised proposal covering the above-mentioned points. The Committee also desired that the plantation of green belt as envisaged under the conditions imposed by the State Pollution Control Board under the CTO and the action taken along with relevant figures should be submitted along with the revised proposal. Therefore, the present proposal is returned in the present format and the project proponents are advised to submit a revised proposal.

33.8. Modernization cum expansion of Induction Furnace (2,05,000 TPA to 6,00,000 TPA) and Rolling Mill (3, 69,000 TPA to 6,00,000 TPA) at Sy. No. 158 (part) 159 (part), 166, 170, village Chetlagoraram Mandal Toopran, District Medak, Telangana by M/s Agarwal Foundries Pvt. Ltd.,[Online proposal No. IA/TG/IND/75409/2018; MoEFCC File No. IA-J-11011/214/2018-IA-II(I)] – Terms of Reference

1.0 M/s Agarwal Foundries Private Limited made application vide online proposal no.**IA/TG/IND/75409/2018** dated 14th 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 "B" EIA Notification; 2006. Due to non-constitution of SEIAA in the state of Telangana at present, 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. Agarwal Foundries (P) Ltd. has a steel Plant located at Sy. No. 158 (part), 159 (part), 166-170, village- Chetlagoraram, Mandal- Toopran, District- Medak, Telangana State. The company's existing units are for Induction Furnace with production capacity 205000 TPA and rolling mill Production 369000 TPA at located at Sy. No. 158 (part) 159 (part), 166-170, village- Chetlagoraram, Mandal- Toopran, District- Medak, Telangana state. Now, company is proposing to remove the existing old furnaces with 6 x 30 TPH Induction furnaces. After expansion total induction furnace production capacity will be 600000 TPA and rolling mill production capacity will be 600000 TPA.

3.0 The existing project was accorded environmental clearance vide order.no. SEIAA/TS/MDK-05/2015 dated 6th February 2018.Consent to Operate was accorded by TelanganaState Pollution Control Board vide consent no. TSPCB/SRD/HO/CFO/2016-2087 dated 21.11.2016 validity of CTO is up to 30thSeptember, 2021.

4.0 The proposed unit will be located at Sy. No. 158 (part) 159 (part), 166-170, village-Chetlagoraram, Mandal- Toopran, District- Medak, Telangana state Sy. No. 158 (part) 159 (part), 166-170, village- Chetlagoraram, Mandal- Toopran, District- Medak, Telangana state.

5.0 The land area acquired for the proposed plant is 32.0 Acres. 100% land is industrial land (land use conversion completed). No /forestland involved. The entire land has been acquired for the project. Of the total area 10.56 Acres (33%) land will be used for green belt development.

Area	Existing Area (Acres)	Proposed Area (Acres)	Total Area (Acres)
Plant Area	11.0	6.0	17.0
Road Area	3.0	-	3.0
Open and Future Expansion Area	7.44	-	1.44
Greenbelt Area	10.56	-	10.56
Total	**32.0**		**32.0**

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 approx40.0 Crore rupees. Proposed employment generation from proposed project will be 350 direct employment and 700 indirect employment.

8.0 The targeted production capacity of the MS Billets - 6,00,000 TPA and MS Bars – 6,00,000 TPA. The ore for the plant will be procured from open market. transportation will be done through road The proposed capacity for different products for new site area as below:

Sr. No.	Particular	Existing (TPA)	Proposed (TPA)	Total (TPA)
1	**MS Billets**	205000	395000	600000
2	**MS Bars**	369000	231000	600000

9.0 The electricity load of 56500kVA will be procured from Telangana State Southern Power Distribution Company Limited.

Sr. No.	Particular	Existing (kVA)	Proposed (kVA)	Total (kVA)
1	Power Requirement	25,000	31,500	56,500

10.0 Proposed raw material and fuel requirement for project are sponge, pig iron, scrap which would be procured by open market.

11.0 Water Consumption for the proposed project will be 395 KLD and waste water generation will be zero. Domestic waste water will be treated Septic Tank followed by soak Pit and industrial waste water generated will be recycled for cooling.

Item	Water Requirement in KLD (Existing)	Water Requirement in KLD (Proposed)	Total Water Requirement (KLD)
Cooling Purpose	60	220	280
Scrubber	25	40	65
Domestic Purpose	10	10	20
Dust Suppression			
Green Belt	30		30
Total	**125**	**270**	**395**

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: Sri Sai Manasa Nature Tech Pvt. Ltd., Hyderabad

Observations of the committee:

14.0 During the presentation, the Committee noted that the project proponent will be using about 600 m of village road which is used by other villagers also. At present, the traffic load due their operations is about 84 trucks per day which would increase to about 120 trucks a day. It was felt that present village road cannot take this additional burden of additional traffic. The project proponent, after deliberation agreed to have a dedicated road connecting the main road to the project site

Recommendations of the Committee:

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

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 earlier EC from the Regional officer of the MoEFCC shall be submitted along with EIA/EMP.

5. The PP shall plan for laying of a dedicated road connecting the main road to the site. This should be included in the EIA Report.

33.9. Proposed installation of Induction Furnace and Enhancement of production capacity of TMT Bars, Structure (Angel Channel), Slabs, Bloom, Missrolls, and allied products from 1,05,000 TPA to 5,05,000 TPA by M/s Regency Ispat Pvt. Ltd. [Online proposal No. IA/MH/IND/75315/2018; MoEFCC File No. IA-J-11011/215/2018-IA-II(I)] – Terms of Reference.

The project proponent has made application withdrawal of the Online proposal No. **IA/MH/IND/75315/2018,** therefore the committee recommended to return the application**.**

33.10. Expansion of Cement Plant production capacity from existing 30,000 TPA (100 TPD) to 1, 20,000 TPA (400 TPD) located at Plot no. 5A-5B, Khasra No. 931/125 and 941/125, Village-Tikawada, Kishangarh, Ajmer, Rajastan by M/s Banshiwala Cements LLP. [Online proposal No. IA/RJ/IND/75243/2018; MoEFCCFile No. IA-J-11011 /210/2018-IA-II(I)]– Terms of Reference.

1.0 **M/s Banshiwala Cements LLP** made application vide online proposal no. **IA/RJ/IND/75243/2018** dated 1st 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(b) Cement Plants under Category "B" EIA Notification; 2006. Due to non-constitution of SEIAA in the state of Rajastan at present, the proposal of expansion is submitted and appraised at Central Level, 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. Banshiwala Cements LLP., Kishangarh proposed expansion of existing Cement manufacturing unit for 30, 000 TPA (100 TPD) Ordinary Portland Cement (OPC) / Portland Pozzolana Cement PPC. It is proposed to set up the plant for 1, 20,000TPA (400 TPD) of either OPC/ PPC based on ball mill clinker grinding technology.

3.0 The existing project was accorded environmental clearance vide lr.no. F1 (4)/SEIAA/SEAC-Raj/Sectt/Project/Cat 3 (b) B1/(513)/13-14 dated 27 .12.2013. Consent to Operate was accorded by Rajasthan State pollution Control Board vide lr. no. F(CPM)/Ajmer (Kishangarh)/ validity of CtO is up to 30.11.2021.

4.0 The unit is located at Plot nos.: 5A-5B (existing); 5, 4 & 4A (proposed) Khasra Nos. 931/125 and 941/125, 837/167 Village: Tikawada, Taluka: Kishangarh, District: Ajmer, State Rajasthan.

5.0 The land area acquired for the proposed plant is 0.98 Ha (existing: 0.52 ha. + proposed: 0.45 ha.) No forestland involved. The entire land has been acquired for the project. Of the total area 0.98 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 Rs. 4.87 Crore (existing: Rs. 3.47 Crore + proposed: Rs. 1.40 Crore).

8.0 Proposed employment generation from proposed expansion project will be 15 persons (existing 12 nos. + proposed 3 nos.); 2 direct employment and 1 indirect employment.

9.0 The targeted production capacity of the clinker grinding unit is 1,20,000 TPA. The proposed capacity for different products for new site area as below:

Name of unit	**No. of units**	**Capacity of each Unit**	**Production Capacity**		
			Existing	**Proposed**	**Total**
Banshiwala Cements LLP	1	-	30,000 TPA	90,000 TPA	1, 20,000 TPA

10.0 The electricity load of 820 KW (existing: 373 KW + proposed: 447 KW) will be procured from AVVNL. The existing unit has power backup from 1 DG set of capacity 30 kVA. One more DG set of 62.5 kVA is proposed to be installed for the proposed expansion.

11.0 Raw material and fuel requirement for the proposed expansion project are given below (Table No. 1 & 2). The requirement would be fulfilled by Road. Fuel consumption will be mainly HSD.

Table No. 1: Raw Material

S. No.	Raw material	Quantity					
		OPC			PPC		
		Existing	Proposed	Total	Existing	Proposed	Total
1.	Clinker	29,100	87,300	1,16,400	21,600	64,800	86,400
2.	Gypsum	900	2,700	3,600	900	2,700	3,600
3.	Fly Ash	0	0	0	7,500	22,500	30,000
Total		30,000	90,000	1,20,000	30,000	90,000	1,20,000

Table No. 2: Fuel Requirement

Fuel	Existing	Proposed	Total
HSD	4.8 lt/hr	10 lt/hr	14.8 lt/hr

12.0 Water Consumption for the proposed project will be 3 KLD and waste water generation will be 0.8 KLD. Domestic waste water will be handled through septic tank and soak pit. No industrial waste water will be generated.

13.0 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:

14.0 During the presentation by the project proponent, the Committee noted that the project proponent had not created green belt as prescribed by the State level SEIAA while granting environment clearance on 27.12.2013. The Committee noted the following:

i) The proposed lay out plan for the expansion project has indicated that the green belt would be confined in two directions only largely. It was felt that the green belt should be all around the site.

ii) In the proposed lay out, the parking area is proposed to be very deep in the project site whereas it can be easily located in the beginning near the gate itself.

Recommendations of the committee:

15.0 After detailed deliberations, the Committee recommended that the project proponent should revise their lay out plan in terms of the location of the parking area and also the location of green belt. The project proponent should also immediately complete all the pending green belt target as per the conditions imposed by the State level SEIAA in their environment clearance order dated 27.12.2013. The proposal was deferred for additional information and compliance as mentioned above.

33.11. Proposed Iron Ore Pellets Project of Capacity 0.27 MTPA Village Raika, Dist Kendujhar, Odisha by M/s Narayani Pellets Private Limited [Online proposal No.IA/OR/IND/75241/2018; MoEFCC File No. IA-J-11011/205/2018-IA-II(I)] – Terms of Reference.

1.0 **M/s Narayani Pellets Private Limited** made application vide online proposal no. **IA/OR/IND/75241/2018** dated 1st 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 Narayani Pellets Private Limited proposed to install a new Iron Ore Pellet Plant. It is proposed to set up the plant for manufacturing of Iron Ore Pellets based on Vertical kill technology.

3.0 The proposed unit will be located at Village – Raika, P.O-Serenda, P.S-Barbil, Dist-Kendujhar, Odisha.

4.0 The land area acquired for the proposed plant is 1.89 hectares (4.69 Acre). No forestland is involved. The entire land has been acquired for the project. Out Of the total area 0.62hac (33 %) land will be used for green belt development.

5.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported 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. Rs.16Crores. Proposed employment generation from proposed project will be 25 direct employment and 100 indirect employment.

7.0 The targeted production capacity of the Iron Ore Pellets Plant is 0.27MTPA. The ore for the plant would be procured from Local Market,Private Mines of Odhisa.The ore transportation will be done through Road.

8.0 The electricity load of 300 KVA will be procured from Damodar Valley Corporation Company has also proposed to install 1x400 KVA DG Set for emergency use

9.0 Proposed raw material and fuel requirement for project are major raw material constitutes are Iron Ore, Bentonite/molasis/resine, Lime Stone/Dolomite, Coke breeze, F.O & Coal. The requirement would be fulfilled by purchase from local market as well as from private mines located in Odisha& Jharkhand. Diesel will be used for running the DG sets.

10.0 Water consumption for the proposed project will be 15-16 m^3/day and waste water generation will be nil during the process.

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 EIA Consultant: M/s Grass Roots Research & Creation India (P) Ltd., Noida, U.P.Sl. No in NABET List: 78 (As on 5th June 2018).

Observations of the committee:

13.0 During the presentation made by the project proponent, the Committee noted that the proposed site is not well-connected to the main road by any permanent road. They proposed to use about 4 km of katcha road which could generate a lot of particulate matter in the air. The Committee felt that this is not acceptable from the environmental point of view. To this, the project proponent agreed to have a 4 km approach road converted into pucca road at their own cost.

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. As agreed by the project proponent, shall convert 4 km approach road into pucca road at their own cost.

5. The proposal will be considered for environmental clearance subject to road side avenue plantation will be done at their own cost.

33.12. Expansion of Integrated Cement Project - Clinker (9.5 MTPA to 13 MTPA), Cement (12 MTPA to 16 MTPA), & WHRB (30 MW to 45 MW) near Villages Sangaria, Borakheri, Peerkhera and Rasulpura, Tehsil Nimbahera, District Chittorgarh, Rajasthan by M/s Wonder Cement Limited [Online proposal No. IA/RJ/IND/75170/2018; MoEFCC File No. J-11011/298/2012-IA-II(I)] – Terms of Reference

1.0 M/s Wonder Cement Limited made application vide online proposal no.IA/RJ/IND/75170/2018 dated 26th May 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. Wonder Cement Limited proposed for expansion of cement plant with enhancement of production capacity of Clinker (9.5 MTPA to 13 MTPA), Cement (12 MTPA to 16 MTPA), & WHRB

(30 MW to 45 MW). It is proposed to set up the expansion plant units for cement manufacturing based on dry process technology.

3.0 The existing project was accorded environmental clearance for Integrated Cement Projectfor Line-I, Line II and Line III vide Letter No.: J-11011/506/2007-1A II(I) dated 12th June, 2008, J-11011/298/2012-IA.II(I) dated 21st February, 2014 and expansion vide even letter number dated 17th March 2016 respectively. Consent to operate has been granted by Rajasthan Pollution Control Board for existing plant Line I and plant Line II vide letter no. 2016-2017/CPM/4768 dated 31-1-2017 with validity of CTO up to 31-1-2022 and letter no. 2015-2016/CPM/3355 dated 18-9-2015 with validity of CTO up to 31-8-2018 respectively. CTE of plant Line III was granted vide letter no. 2018-2019/CPM/5157 dated 12-4-2018 with validity up to 31-12-2022.

4.0 The proposed unit will be located in the premises of existing cement plantnear Villages Sangaria, Borakheri, Peerkhera and Rasulpura,Nimbahera Tehsil, Chittorgarh District, Rajasthan.

5.0 The total area of land of existing plant is 191.064 ha; no additional land is required for the proposed expansion as the same will be done within the existing plant premises by installation of new Line-IV. Existing area is under the possession of WCL. Out of the total area of 191.064 ha, 37 % land i.e. 71 ha will be used for green belt development. Break up of plant area is given below:

Details	**Area (ha)**		**Total**
	Existing	**Proposed**	
Plant Area	60.984	8.0	68.984
CPP	13.541	Nil	13.541
WHRB	0.4008	0.2000	0.6008
Colony	17.6298	Nil	17.6298
Approach Road	7.605	Nil	7.605
TOTAL	100.1606	8.20	108.3606
Greenbelt /Plantation			71
Open area for further use			11.7034
Total			191.064

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 approximately Rs. 1500 Crore. Proposed employment generation from proposed project will be 256 both direct employment and indirect employment.

8.0 The total targeted production capacity of clinker is 13 MTPA, Cement is 16 MTPA and WHRB 45 MW after expansion. The limestone for the cement plant would be procured from the adjoining captive limestone mine of Wonder Cement Ltd. The limestone transportation will be donethrough road and conveyor belt. The proposed capacity for different products for existing and new plant is as below:

S. N	Units	Line I	Line II	Line III (Under construction)	Line IV Proposed New Line	Total Capacity after Expansion
		EC Granted	EC Granted	EC Granted	EC sought	
1	**Clinker (MTPA)**					
i	EC Granted/ EC sought	3.0	3.0	3.5	3.5	13.0
ii	Plant installed	3.0	3.0	-	-	13.0
2	**Cement (MTPA)**					
i	EC Granted/ EC sought	4.0	4.0	4.0	4.0	16.0
ii	Plant installed	4.0	4.0	-	4.0	12.0
3	**Captive Power Plant (MW)**					
i	EC Granted/ EC sought	40.0	40.0	60.0	Nil	140
ii	Plant installed	40.0	-	30	-	70
4	**WHRB (MW)**					
i	EC Granted/ EC sought	9	9	12	15	45
ii	Plant installed	9	9	12	15	45
5	**D.G. Set (MW)**					
i	EC Granted/ EC sought	2	5	Nil	Nil	7
ii	Plant installed	2	Nil	-	-	2

9.0 The electricity load of expansion plant is 48 MW and will be procured from existing and proposed Captive Thermal Power Plant (40+30 =70 MW), WHRB (9+9+12+15 = 45 MW), Captive Solar Power Plant-2 MW, Captive Wind Power Plant 1.5 x 10 MW) and rest 25.6 MW from state grid of AVVNL (Ajmer Vidyut Vitran Nigam Ltd.) & D.G Set (for emergency).

10.0 Proposed raw material and fuel requirement for project are limestone, red ochre, laterite, gypsum, fly ash, coal/petcoke/lignite. The requirement would be fulfilled by captive limestone mines and from other materials from nearby areas. Fuel consumption will be mainly fuel oil, coal/petcoke/lignite.

11.0 Water Consumption for the proposed project will be 845 KLD and waste water generated will be 135 KLD. The waste water generated from the office toilet and staff colony will be treated in existing Sewage Treatment Plant (STP) of 450 m3/ day. Treated water of plant and colony will be reused/ recycled in the operation the captive thermal power plant for cooling purpose. No wastewater will be discharged outside plant premises and zero liquid discharge status will be maintained.

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 presentation about the ToR proposal was made by the project proponent. During the presentation, the Committee noted that the project proponent had not completely complied with the condition imposed in the environment clearance granted to them in 2008 as regards the formation of the green belt. They were still short of creation of green belt as stipulated under these conditions.

Recommendations of the Committee

14.0 After detailed deliberations, the Committee recommended that they should complete the unachieved target of green belt during this monsoon itself. Their application for ToR would be considered after receipt of their report regarding compliance

10th July 2018

33.13. Proposed expansion in production of Ferro Alloys Unit located at plot no. 368, APIIC Growth Centre, Bobbili Vizianagaram District, Andhra Pradesh of **M/s Berry Alloys Limited** [Online Proposal No. IA/AP/IND/75307/2017; MoEFCC File No. J-11011/1129/2007- IA-II(I)] – **Environmental Clearance.**

1.0 The proponent has made online application vide proposal no. IA/AP/IND/75307/2017dated 6thJune 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 of the proposal as per the submission of the project proponent:

2.0 The expansion of M/s Berry Alloys Limited (BAL) located in Village Bobbili, Vizianagaram District; Andhra Pradesh was initially received in the Ministry on 29th Dec 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 28thmeeting held on 5-7 February 2018 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 27thFebruary, 2018 vide Ltr. No. J-1101/1129/2007-IA.II(I).

3.0 The project of M/s Berry Alloys Limited (BAL) located in Bobbili village, Vizianagaram District, Andhra Pradesh State is for setting up of a new 2x9 MVA Submerged Electric Arc Furnace for production of additional 43200 TPA Ferro Manganese or 36000 TPA Silico Manganese after expansion the total capacity of plant will be 6 x9 MVA with a production of 1,29,600 TPA Ferro Manganese or 1,08,000 TPA Silico Manganese. The existing project was accorded environmental clearance vide lr.no. F. No. J-11011/1129/2007-IA.II(I) on dated 07.06.2017. The Status of compliance of earlier EC was obtained from Regional Office, Chennai vide Lr. No EP /12.1/697/AP/0074 dated 12.01.17.There are no non-compliances reported by Regional officer. The proposed capacity for different products for new site area as below:

Facility	**Existing configuration**	**Proposed Configuration**	**Configuration after expansion**
Electric Arc Furnace	4 X 9 MVA	2 X 9 MVA	6 X 9 MVA
Product	**Existing quantity**	**Proposed quantity**	**Quantity of after expansion**
Ferro Manganese	86400 TPA or	43200 TPA or	129600 TPA or
Silico Manganese	72000 TPA or	36000 TPA	108000 TPA or
Ferro Silica	25200 TPA or	--	25200 TPA or

Ferro Chrome	36000 TPA	--	36000 TPA

4.0 The proposed unit will be located at Plot No. 368, APIIC Growth Center (notified industrial Area) Village: Bobbili, Taluka: Bobbili, District: Vizianagaram State: Andhra Pradesh. The topography of the area is slightly undulating (flat/undulated) and reported to fall between 18°32'15" North Latitude and 83°20'63" East Longitude in Survey of India Topo Sheet No. 65 N/6, at an elevation of 135 m AMSL.

5.0 The land area acquired for the proposed plant is 13.42 Ha. Total land is the Government land. No forestland involved. The entire land has been acquired. Of the total area 4.44 ha (33%) land will be used for green belt development.

S No	Particular	Existing (Acres)	Proposed (Acres)	After Expansion (Acres)
1	Plant Area	7.6	1.38	8.98
2	Greenbelt	4.44	-	4.44
3	Future Expansion	1.38	-	-
	Total	**13.42**	**1.38**	**13.42**

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

8.0 The targeted production capacity of the 6x9 MVA Submerged Electric Arc Furnace is 1,29,600 TPA Ferro Manganese or 1,08,000 TPA Silico Manganese. The raw Material transportation will be done through road. The ore transportation will be done through road.

9.0 Water Consumption for the proposed project will be 30 KLD and waste water generation will be nil from process. Domestic waste water will be treated Septic tank followed by Soak pit.

Item	Water Requirement in KLD (4 x 9 MVA)	Water Requirement in KLD (2 x 9 MVA)	Total Water Requirement (KLD)
Cooling Purpose	50	25	75

Domestic Purpose	10	5	15
Dust Suppression			
Greenbelt			
Total	**60**	**30**	**90**

10.0 The power requirement of the project is estimated as 45000 KVA, out of which 45000 KVA will be obtained from the Eastern Power Distribution Company of Andhra Pradesh Limited.

11.0 Baseline Environmental Studies were conducted during winter season i.e. from December 2016 to February 2017. Ambient air quality monitoring has been carried out at 8 locations during December to February and the data submitted indicated that Particulate matter (PM_{10}) ranges from 37.2 to 67.3 $\mu g/m^3$; Particulate matter ($PM_{2.5}$) ranges from 14.2 to 28.2 $\mu g/m^3$; Sulphur dioxide (SO_2) is 9.3 to 12.3 $\mu g/m^3$; Oxides of Nitrogen (NO_x) are 12.1 to 15.0 $\mu g/m^3$. The results of the modelling study indicate that the maximum increase of GLC for the proposed project is 3.04 $\mu g/m^3$ with respect to the PM10 and 6.17 $\mu g/m^3$ with respect to the NOx.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.25 to7.88., Total Hardness: 313.1 to 858.5 mg/l, Chlorides: 33.5 to 694.78 mg/L, Fluoride: 0.41 to 0.92 mg/L. Heavy metals are within the limits. Surface water samples were analysed from 04 locations. pH: 7.77 to 8.11; DO: 5.2 to 5.4 mg/l and BOD: 2.59 to 3.5mg/L. COD from 10 to14 mg/L.

13.0 Noise levels are in the range of 45.9 to 68.4 dB(A) for daytime and 40.9 to 63.0 dB(A) for night time.

14.0 It has been reported that there are 170203 people in the core zone of the project. No/ R&R is involved. It has been envisaged that no families to be rehabilitated, which will be provided compensation and preference in the employment.

15.0 The estimated main solid waste generated from this proposed plant is Slag and Dust from bag filters. About 270 TPD of slag from process and 2.5 TPD of Dust will be collected in the proposed Bag Filters and this dust will be disposed to brick manufacturing units, where this dust will be used as 10% substitute for cement. The details of solid waste generated and it's management is as follows:

Item	Existing (TPD)	Proposed (TPD)	Total (TPD)	Management
Slag	180	90	270	Sold to Brick Manufacturing
Dust from Bag filter	1.5	1.0	2.5	Used in Process

16.0 It has been reported that the Consent to Operate from the Andhra Pradesh State Pollution Control Board obtained vide Lr. No APPCB/VSP/VZM/160/HO/CFO/2015-3602dated 05.08.2015 and consent is valid up to 31st August 2018.

17.0 The Public hearing of the project was held on 26/04/2018 at M/s. Berry Alloys Limited, APIIC, Plot No.368, Growth Center (Industrial Estate), Bobbili (V) & (M), Vizianagaram District, Andhra Pradesh State under the chairmanship of Joint Collector (designation) for production of 1,29,600 TPA Ferro Manganese or 1,08,000 TPA Silico Manganese setting up of 6 x 9 MVA plant.

The issues raised during public hearing are Local Person Employment and Water Facility. An amount of 30 Lakhs (2.5% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues.

18.0 The capital cost of the project is Rs 12.0 Crores and the capital cost for environmental protection measures is proposed as Rs 50.0 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 18.1 Lakhs. The detailed CSR plan has been provided in the EMP in its chapter No. CH10 -12.The employment generation from the proposed expansion is 50 nos.

Item	Existing (INR)	Proposed (INR)	Total (INR)
Proposed EMP Cost	50 Lakhs	50 Lakhs	100 Lakhs
CER Cost	50 Lakhs	30 Lakhs	80 Lakhs

19.0 Greenbelt will be developed in 4.44 acres 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 4500 saplings will be planted.

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

21.0 EIA Consultant: Sri Sai Manasa Nature Tech Pvt. Ltd., Hyderabad

Observations of the committee:

21.0 After detailed presentation by the project proponent, the Committee noted that environmental clearance for expansion of 2x9 MVA Electrical Arc Furnace on 7th June, 2017. The project proponent informed that this` expansion is under implementation meanwhile, it was proposed to install another 2x9 MVA electric arc furnaces. Therefore, the total configuration after proposed expansion will be 6x9 MVA electric arc furnace.

Recommendations of the committee:

22.0 After detailed deliberation, the Committee noted for environmental clearance subjected to following conditions:

1. An amount of Rs 80 Lakhs (existing provision and proposed provision) towards Corporate Environment Responsibility (CER) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

2. Green belt shall be developed in an area of 4.44 acres equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

3. The Capital cost Rs. 100 Lakhs and annual recurring cost Rs. 18.1 towards the environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.

4. The project proponent shall (Air Quality Monitoring):

   a. install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

   b. monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

   c. Install system 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 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;

   d. submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring for calibrations of CEMS and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

5. The project proponent shall (Water Quality Monitoring):

   d) install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time;

   e) 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; and

   f) submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

6. The project proponent shall (Air Pollution Control):

   a) provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources;

b) provide sufficient number of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs regularly;

c) recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration;

d) use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin;

e) provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc;

f) provide primary and secondary fume extraction system at all melting furnaces;

7. The project proponent shall (Water Pollution Control):

d) adhere to 'zero liquid discharge';

e) provide Sewage Treatment Plant for domestic wastewater; and

f) provide the ETP for effluents to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 as amended from time to time.

8. The project proponent shall (Water Conservation):

c) practice rainwater harvesting to maximum possible extent; and

d) make efforts to minimise water consumption by segregation of used water, practicing cascade use and by recycling treated water.

9. The project proponent shall (Energy Conservation):

f) provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.

g) practice hot charging of slabs and billets/blooms as far as possible;

h) ensure installation of regenerative type burners on all reheating furnaces;

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; and

j) Provide the project proponent for LED lights in their offices and residential areas.

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

11. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

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

13. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

14. The project proponent shall adhere to the corporate environmental policy and system of the reporting of any infringements/ non-compliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF&CC as a part of six-monthly report.

15. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Induction/ Electric Arc Furnace and Rolling Mills shall be implemented.

16. A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of the organization.

17. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.

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

19. 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).

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

21. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dB(A) during day time and 70 dB(A) during night time.

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

23. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.

24. The project proponent shall (Post-EC monitoring):

    a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;

b. put on the clearance letter on the web site of the company for access to the public.

c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http:/envfor.nic.in.

d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;

e. 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;

f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;

g. 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;

h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

33.14. Proposed expansion of Cement Production (capacity from 7,87,000 TPA to 9,00,000 TPA) located at located at Village(s) Mithapur & Surajkaradi, Taluka Dwarka, District Dwarka, Gujarat by **M/s. Tata Chemicals Ltd.** [Online proposal No. **IA/GJ/IND/58896/2016**; MoEFCC File No. J-11011/66/1999-IA.II(I)] **– Environmental Clearance.**

1.0 The proponent has made online application vide proposal no. **IA/GJ/IND/58896/2016** dated 8th June 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 proposed project for expansion of cement production capacity of M/s. Tata Chemicals Ltd. located in Villages: Mithapur and Surajkaradi, Tehsil:Dwarka, District: Devbhumi Dwarka, State Gujarat was initially received in the Ministry on 12thSept., 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 11thmeeting held on 26thSept., 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 10thJanuary, 2017 vide letter no.J-11011/66/1999-IA.II(I).

3.0 The project of M/s. Tata Chemicals Ltd. located in Mithapur and Surajkaradi Villages, Dwarka Tehsil, Devbhumi Dwarka District, Gujarat State is for enhancement of production of cement from 0.787 to 0.9 million tonnes per annum (million TPA). The existing project was accorded environmental clearance vide letter no. J-11011/66/99-IA-II (I) dated 20th Nov., 2000; amended on 17th Jan., 2001. The Status of compliance of earlier EC was obtained from Regional Office, Bhopal vide Letter No. 5-13/2000(ENV)/138 dated 23rd May, 2018. There are no non-compliances reported by Regional Officer. The proposed capacity for different products for new site area as below:

Name of Unit	No. of Unit (Existing Capacity)	Capacity of Each Unit (Proposed Additional Capacity)	Production Capacity (Total Capacity after expansion)
Clinker (TPA)	8,25,000	Nil	8,25,000
Cement (TPA)	7,87,000	1,13,000	9,00,000

4.0 The total land area for the project is 231 ha (existing complex). No forest land/agricultural land/ grazing land/ others Government Land involved. There is no additional land required for the project. 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 more or less flat and reported to lies between 22° 23' 41.8" N to 22° 25' 04.3" N Latitude and 69° 00' 16.3" E to 69° 01' 19.1" E Longitude in Survey of India topo sheet No. 41 F/3 and 41B/15 at an elevation of 5 to 20 m AMSL. The ground water table reported to ranges between 1.9m to 5.2 m below the land surface during the post-monsoon season and 3.9 to 7.2 m below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the stage of groundwater development is reported to be 67.11 % and thereby, these are designated as safe areas.

6.0 Marine National Park (~2.81 km in NW direction) and Gulf of Kutch Marine Sanctuary (~2.19 km in East direction) are located within 10 km radius of the plant site. The area also does not report to form corridor for Schedule-I fauna. The list of flora and fauna provided through the Primary survey and Secondary data reports the presence of Schedule-I fauna in the 10 km study area (Chapter 3, Pg. No. 128 - 144 of Final EIA/EMP Report). The project proponent has mentioned that the proposed project site is outside of Eco-Sensitive Zone notified by MoEFCC. The project proponent prepared conservation plan and approved by Chief Wildlife Warden, Gujarat State.

7.0 From clinker silo, clinker is fed to cement mill, where in clinker along with fly ash and gypsum, in required proportion, is ground to form cement. No waste will be generated during Cement manufacturing process.

8.0 The targeted production capacity of the Cement is 0.9millionTPA. Existing clinker production capacities will meet the requirements. The clinker will be fed to cement mill through conveyor.

9.0 The water requirement of the project is estimated as 1942 m^3/day, out of which 822 m^3/day of raw water requirement will be obtained from Existing Sea water Desalination Units and the remaining requirement of 1120 m^3/day sea water will be met from existing sea water intake system.

10.0 The power requirement for the project is estimated as 14.28 MW which will be obtained from the Captive Co-generation Power Plant.

11.0 Baseline Environmental Studies were conducted during Post Monsoon Season from October to December, 2016. Ambient air quality monitoring has been carried out at 9 locations during 01stOct to 31st Dec., 2016 and the data submitted indicated: PM_{10} (36.52 to 74.21 µg/m^3), $PM_{2.5}$ (8.71 to 27.13 µg/m^3), SO_2 (4.63 to 12.40 µg/m^3) and NO_2 (6.55 to 15.21µg/m^3**).** The results of the modeling study indicates that the maximum increase of GLC for the proposed project is1.56µg/m^3 with respect to the PM, 4.19µg/m^{3}with respect to the SO2, 1.39µg/m3 with respect to the NOx.

12. Ground water quality has been monitored in 8 locations in the study area and analyzed. pH (7.23 to 7.96), Total Hardness (154.32 to 294.56 mg/l), Chlorides (95.94 to 328.09 mg/l), Fluoride (0.05 to 0.19 mg/l). Heavy metals are within the limits. Surface water samples were analyzed from 2 locations. pH – (7.45to 7.82), DO (5.90 to 6.80 mg/l), BOD (3.54 to 4.52 mg/l), COD (10.32 to 14.60 mg/l).

13.0 Noise levels are in the range of 44.42 to 66.91LeqdB(A) for day time and 36.04 to 60.25 Leq dB(A) for night time.

14.0 It has been reported that there is no population exist in the core zone of the project as the proposed expansion will be done on the existing project site. No R&R is involved.

15.0 No solid waste will be generated from the cement manufacturing process. Dust collected from various air pollution control equipments will be totally recycled into the process. Existing greenbelt area is 95 ha and additional 36 ha area will be developed under green belt/ plantation 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 Consolidated Consent and Authorization from Gujarat Pollution Control Board has been obtained vide Letter No. AWH- 91133 dated 12th Feb., 2018 and consent is valid up to 13th Feb., 2023.

17.0 The Public hearing of the project was held on 17th Feb., 2018 at Sabras Bhavan opposite Ashapura Mandir, Village: Mithapur, Taluka: Dwarka, District: Devbhoomi Dwarka, Gujarat under the chairmanship of Shri R.R. Raval, IAS, (Collector & District Magistrate, Devbhumi Dwarka) for Expansion in Cement Production Capacity from 0.787 million TPA to 0.9million TPA. The issues raised during public hearing are Local Employment, Environment, Health and Education. An amount of 338 Lakhs (2.5 % of total project cost i.eRs. 13,340Lakhs) has been earmarked for Enterprise Social Commitment based on public hearing issues.

18.0 The capital cost of the project is Rs. 133.40 Crores and the capital cost for environmental protection measures is proposed as Rs. 29.50 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 12.50 Crores / annum. The detailed CSR plan has been provided in the EMP in its page no. 241 to 242. The employment generation from the expansion project is 129persons.

19. Approx. 95 ha area has already been developed under greenbelt/plantation and additional 36 ha area will also be developed under green belt/ plantation which is about 33 % of the total project area.

Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 90,000 saplings will be planted and nurtured in 36hectares in 10 years.

20. No, there is no litigation pending against the proposed project or the land on which proposed project would be set up. However, the proposed project is going to use same channel for discharge of the waste water which is located on the land for which dispute is pending for its pre- existence rights, before the Hon'ble High Court of Gujarat. The Company has filed Special Civil Application no. 26530 of 2006 before the High Court of Gujarat to recognize its pre-existing rights over the land on which waste water discharge channel is situated. The Hon'ble Court has directed to maintain status quo by way of an interim relief till the final disposal of the case. In view of the same, Company is carrying out operations smoothly and using the channel to discharge the treated waste water into the sea. No, there is no litigation pending against the proposed project or the land on which proposed project would be set up. However, a complaint has been filed before Sub Divisional Magistrate, Dwarka (SDM) by resident of village Devpara alleging pollution from the Cement Plant bearing criminal case no. 1119 of 2015. There has been no order or direction by the SDM till date. The Company has submitted its interim reply and objections to the Complaint contending inter alia that the Gujarat Pollution Control Board (GPCB) has cleared all the activities of the Company at its plant and hence the complaint filed by the Complainant is false and frivolous and devoid of any substance. Company has submitted compliance reports/ action plans to the regulatory authorities within timelines for notices/ directions issued under the Environment (Protection) Act, Air and Water Acts.

21.0 EIA Consultant: J.M. EnviroNet Private Limited, Gurugoan.

Observations and recommendations of the Committee:

22.0 The following additional information need to be submitted by the project proponent for further consideration of the proposal:

i) The project proponent has mentioned that there are two wildlife protected areas within 10 kms of the project site. However, they have clarified regarding their distance from the eco sensitive zone about one protected area only. This needs to be clarified.

ii) The project proponents have shown the distance of the project area from one of the wildlife protected area which shows that the protected area falls outside the eco sensitive zone of the concerned wildlife area. However on scrutinizing the Eco Sensitive Zone Notification issued by the MoEF&CC, it was noted that the ESZ also extends in an area of 250 mtrs of either side of 31 rivers in that area. The project proponent has not made any clarification whether the project site falls in the eco sensitive zone with respect to the 31 rivers. This needs to be clarified.

iii) The impact of the proposed expansion and the area of the Marine National Parka and Marine Sanctuary and its ESZ should be presented.

iv) There are a number of Archeological sites in this area including Bed-Dwarka. The project proponent should make a presentation on the likely impact of project activities on the nearby sites.

v) The project proponent should submit a plan for setting up of a monitoring system in collaboration with the State Forest Department for monitoring the air and sea water quality from the point of view of conserving marine biodiversity.

vi) The project proponent shall revise action plan related to the issues raised during the public hearing.

33.15. Expansion of Sponge Iron from 300 TPD to 500 TPD and installation of new Induction Furnace - 2 x 500 TPD, Rolling mill - 1000 TPD, Ferro Alloys- 9 MVA, Pellet Plant – 600 TPD & Power plant - 20 MW (WHRB – 10 MW & FBC – 10 MW located at Nasthipur&Mangapur Villages Hatnoora Mandal Sangareddy District Telangana by M/s Jeevaka Industries Private Limited [Online Proposal No. IA/TG/IND/75185/2018; MoEFCC File No. J-11011/145/2006-IA II (I)] – Terms of Reference.

1.0 **M/s Jeevaka Industries Private Limited** made application vide online proposal no.**IA/TG/IND/75185/2018** dated 29th May 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 proposal submitted by the Project Proponent:

2.0 M/s. Jeevaka Industries Pvt. Ltd. proposed to enhance the capacity of existing Sponge Iron plant by installing additional DRI Kilns (Sponge Iron from 300 TPD (99,000 TPA) to 500 TPD (1,65,000 TPA), and install new Induction Furnace (MS Billets – 1000 TPD (3,30,000 TPA)), new Rolling Mill (TMT bars / Structural steels – 1000 TPD (330,000 TPA)), new Ferro Alloys unit (Ferro manganese – 100 TPD (33,00 TPA) / Silico manganese – 70 TPD (23,100 TPA) /Ferro chrome – 70 TPD (23,100 TPA) / Ferro silicon – 40 TPD (13,200 TPA)), new WHRB based Power Plant (10 MW), new AFBC based Power Plant from 10 MW and New Pellet Plant (600 TPD (1,98,000 TPA)). 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 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
- Producing Pellets through Pellet plant

3.0 The existing plant was accorded Environment Clearance vide F.No. J-11011/145/2006-IA.II(I) dated 14thJuly, 2008 (valid up to July, 2018). Consent to Operate was accorded by Telangana State Pollution Control Board vide order No. TSPCB/CFO/SRD/HO/2017-2283, Date: 28-10-2017 for 2 x 100 TPD Sponge Iron unit. The company is in the process of obtaining CFO for another 100 TPD Sponge Iron unit. We have applied CFO through OCMMS vide Application No: 1426824, Dated : 30-06-2018.

4.0 The existing unit is located at Nasthipur&Mangapur Villages, Hatnoora Mandal, Sangareddy (earlier Medak) District, Telangana.

5.0 Existing plant is located in 55 acres / 22.26 Ha. of land. Proposed expansion will be taken up partially in the Existing plant (i.e. 55 acres / 22.26 Ha.) and partially in the land adjacent to the

existing plant (i.e. 30.58 acres / 12.38 Ha.). Total land after proposed expansion will be 85.58 acres / 34.63 Ha. Out of the total area, 30 Ac. / 12.14 Ha. (35%) land is allocated for greenbelt developed. No Forest land involved.

6.0 Narsapuram RF (3.4 Kms) Nallagutta RF (6 Kms), Naguwaram RF (6.3 Kms), Rustumpet RF (4.6 Kms), Narayanpur RF (6.5 Kms) are within 10 Kms. Radius of the plant site. Manjira river is flowing at a distance of 7.8 Kms from 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. 292.5 Crores. Proposed employment generation from proposed project will be 600 nos. direct employment and 1000 nos. indirect employment.

8.0 The targeted production capacity of the total plant is 1000 TPD. The iron ore for the plant would be procured from Bellary and Indian coal from Singareni Collieries. 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.	Name of the Product	Existing	Proposed expansion	After proposed expansion
1.	Sponge Iron	300 TPD (99,000 TPA) (3x100 TPD)	200 TPD (66,000 TPA) (2 x 100 TPD)	500 TPD (1,65,000 TPA) (5 x 100 TPD)
2.	Pellet Plant	---	600 TPD (1,98,000 TPA)	600 TPD (1,98,000 TPA)
3.	M.S. Billets	---	1000 TPD (3,30,000 TPA) (2 x 40 TPH Induction furnace)	1000 TPD (3,30,000 TPA)
4.	TMT Bars/Structural Steels	--	1000 TPD ((3,30,000 TPA)	1000 TPD (3,30,000 TPA)
5.	Ferro alloys (1 x 9 MVA furnace)			
6.	Ferro Manganese	--	100 TPD (33,000 TPA)	100 TPD (33,000 TPA)
	or			
	Silico Manganese	--	70 TPD (23,100 TPA)	70 TPD (23,100 TPA)
	or			
	Ferro Chrome	--	70 TPD (23,100 TPA)	70 TPD (23,100 TPA)
	or			
	Ferro silicon	--	42 TPD (13,860 TPA)	42 TPD (13,860 TPA)

	Power generation			
7.	Captive Power plant	--	WHRB – 10 MW & FBC – 10 MW	WHRB – 10 MW & FBC – 10 MW

9.0 The electricity load of 63.25 MW for operating existing & expansion projects will be met from proposed captive WHRB, FBC based power plant & remaining will be supplied from TSSPDCL. 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, Iron Ore fines, Pellets, Mn ore, Dolomite, Scrap etc., Requirement would be fulfill by external purchase / in house. Fuel Consumption will be mainly Coal & Furnace Oil / Pulverized coal.

Raw Material		Quantity (TPD)	Sources	Mode of Transport
For DRI Kilns (Sponge Iron) – 500 TPD (1,65,000 TPA)				
Iron ore		800 (2,64,000 TPA)	Bellary	By rail & road (through covered trucks)
Coal	Indian	650 (2,14,500 TPA)	Singarenicolleries	By rail & road (through covered trucks)
	Imported	500 (1,65,000 TPA)	Indonesia / South Africa / Australia	Through sea route, rail route & by road
Limestone		20 (6,600 TPA)	Local area	By road (through covered trucks)
For Pellet Plant – 600 TPD (1,98,000 TPA)				
Iron Ore Fines		600 (1,98,000 TPA)	In plant generation / NMDC Limited	Through covered trucks by Road
Imported Coal / Indian coal		20 (6,600 TPA)	Indonesia / South Africa / Australia / Singareni colleries	Through sea route, rail route & by road
Bentonite		6.5 (2,145 TPA)	Gujarat	By road (through covered trucks)
Lime Stone		8 (2,640 TPA)	Kadapa / Kurnool	By road (through covered trucks)
Furnace oil		8 KL (2,640 KL/annum)	Local market	Through road
For Induction Furnace (MS Billets) – 1000 TPD (3,30,000 TPA)				
Sponge Iron		900 (2,97,000 TPA)	In plant generation/Local Market	By Conveyor
Scrap		200 (66,000 TPA)	Local area	By road (through covered trucks)
Ferro Alloys		10	In plant	By road

Raw Material	Quantity (TPD)	Sources	Mode of Transport
	(3,300 TPA)	generation/Local area	(through covered trucks)
For Rolling Mill (TMT bars & Structural Steel) – 1000 TPD (3,30,000 TPA)			
M.S. Ingots / Steel billets	1,066 (3,51,780 TPA)	In plant generation	through conveyors
Furnace oil	35 (11,550 TPA)	HPCL/IOCL depots	Tankers
	or		
Pulverized coal	100 (33,000 TPA)	Indian Coal / Imported	By road (through covered trucks)
Ferro alloys			
Manganese ore	240 (79,200 TPA)	Imported / indigenous from Karnataka / Orissa / Madhya Pradesh / Andhra Pradesh	Through sea route, rail route & by road
Quartz	84 (27,720 TPA)	Telangana	By road (through covered trucks)
Chrome ore	161 (53,130 TPA)	Imported / indigenous from Karnataka / Orissa / Madhya Pradesh / Andhra Pradesh	Through sea route, rail route & by road
Coke	40 (13,200 TPA)	Imported / Indigenous / Singareni Colleries /	Through sea route, rail route & by road
Coal	60 (19,800 TPA)	Imported / Indigenous / Singareni Colleries /	Through sea route, rail route & by road
Dolomite	40 (13,200 TPA)	Andhra pradesh	By road (through covered trucks)
EC paste	4 (1,320 TPA)	Andhra pradesh	By road (through covered trucks)
Ferro manganese slag	28 (9,240 TPA)	In plant generation	through covered conveyors
Magnesite	4.2 (1,386 TPA)	Andhra Pradesh	By road (through covered trucks)
Mill scale	17 (5,610 TPA)	In plant Generation	through covered conveyors
For FBC Boiler (Power Generation 10 MW)			

Raw Material		Quantity (TPD)	Sources	Mode of Transport
Dolochar		150 (49,500 TPA)	In plant generation From Existing plant	through covered conveyors
Coal	Indian	110 (36,300 TPA)	Singarenicolleries	By rail & road (through covered trucks)
	Imported	78 (25,740 TPA)	Indonesia / South Africa / Australia	Through sea route / rail route / by road

11.0 Water consumption for the proposed expansion project will be 613 KLD and waste water generation from the proposed expansion project will be 70 KLD (54 KLD from Power plant & 16 KLD from Domestic). Domestic waste water will be treated Septic tank followed by sub-surface dispersion and there will be no wastewater generation from the Pellet Plant, 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. 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 earlier EC from the Regional officer of the MoEFCC shall be submitted along with EIA/EMP

33.16. Capacity expansion of Hot Strip Mill from 1.6 MTPA to 3.2 MTPA and installation for 0.3 MTPA Cold Rolling Mill located at Kalinganagar Industrial Complex (KNIC), Dangadi in Jajpur district of Odisha by **M/s Jindal United Steel Limited (JUSL)**[Online proposal

IA/OR/IND/20365/2007; MoEFCC File No. IA-J-11011/110/2018-IA.II(I)] – **Terms of Reference.**

1.0 **M/s Jindal United Steel Limited** made application vide online proposal no.**IA/OR/IND/20365/2007** dated 29th May 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 proposal submitted by the Project Proponent:

2.0 M/s Jindal United Steel Limited (JUSL), a new company formed with post demerger of Jindal Steel Limited(JSL) and existing EC of JSL was demerged by MoEFCC, New Delhi vide File F.No J-11011/281/2007-IA-II (I) on 17thMay, 2018 and new EC has been issued in the name of JUSL vide letter no. F.No J-11011/110/2018-IA-II (I) on 25thMay, 2018. Post demerger JUSL owns the Hot Strip Mill whereas JSL owns the rest of the facilities except coke ovens which is owned by JCL.

3.0 Now, M/s JUSL proposed to expand hot rolling production capacity from 1.6 MTPA to 3.2 MTPA and set up a new Cold Rolling Mill of 0.3 MTPA.

4.0 The proposed unit will be located in Kalinganagar Industrial Complex, Jajpur district of Odisha. The project would be situated within the existing premises of JSL comprising of 154.66 Ha (382.02 acre) of land. Of the total area 51.04 Ha (126.06 acres) (33%) land will be used for green belt development

5.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported 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 approxRs. 700 Crore. Both direct and indirect employment generation is envisaged from the proposed project.

7.0 The targeted production capacity is 3.2 MTPA hot rolled stainless steel and 0.3 MTPA cold rolled product. The proposed capacity for different production units would be as follows:

Sl. No.	Unit	Facility		
		Existing	**Proposed**	**Final**
1	Hot Strip Mill	1.6 MTPA	1.6 MTPA	3.2 MTPA rolling facilities
2	Cold Rolling Mill - Bright Annealing Line - Pickling Line - 20 Hi Mill		0.3 MTPA 2 x 0.05 MTPA+ 2 x 0.10 MTPA 0.3 MTPA 2 x 0.15 MTPA	0.3 MTPA 2 x 0.05 MTPA+ 2 x 0.10 MTPA 0.3 MTPA 2 x 0.15 MTPA

8.0 The combined electrical load of JSL & JUSL for the expansion will be 965 Million KWh, which will be sourced from existing captive generation and Grid Power supply. DG sets of adequate

capacities are proposed for the plant units as well as CPP auxiliaries to cater to the requirement of safe shutdown and safety of personnel when power supplies to plant network from both the sources have failed.

9.0 Proposed raw material for project will be slabs from JSL and purchased from outside.

10.0 The total water required for the expansion of JSL & JUSL will be approximately 1170 cu m/hr which would be extracted from the existing source. i.e. River Brahmani. Industrial wastewater will be treated and reused as make-up water.

11.0 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

12.0 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 earlier EC from the Regional officer of the MoEFCC shall be submitted along with EIA/EMP

33.17. Capacity expansion of Crude Stainless Steel production from 0.8 MTPA to 2.2 MTPA Steel and Cold Rolling Mill from 0.8 MTPA to 1.6 MTPA located at Kalinganagar Industrial Complex (KNIC), Dangadi in Jajpur district of Odisha by **M/s Jindal Stainless Limited** [Online proposal No. **IA/OR/IND/75194/2018**; MoEFCC File No. J-11011/281/2007-IA.II(I)] – **Terms of Reference.**

1.0 **M/s Jindal Stainless Limited** made application vide online proposal no.IA/OR/IND/75194/2018 dated 29th May 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 proposal submitted by the Project Proponent:

2.0 M/s JSL operating a steel plant producing 0.8 MTPA crude stainless steel & 1.6 MTPA hot rolled coil in Kalinganagar Industrial complex, Odisha. JSL demerged into JUSL, JSL and JCL and the existing EC was demerged vide File F.No J-11011/281/2007-IA-II (I) on 17th May, 2018. Post demerger JUSL owns the Hot Strip Mill whereas JSL owns the rest of the facilities except coke ovens which is owned by JCL.

3.0 Now, JSL proposed to expand crude stainless Steel production from 0.8 MTPA to 2.2 MTPA Steel and Cold Rolling Mill from 0.8 MTPA to 1.6 MTPA through increase in capacity of individual units and installation of new units in the existing plant site.

4.0 The proposed unit will be located in Kalinganagar Industrial Complex, Jajpur district of Odisha. The project would be situated within the existing premises of JSL comprising of 318 Ha (785.52 acre) of land. Of the total area 105 Ha (259.2 acres) (33%) land will be used for green belt development.

5.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported 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 Rs. 1,444 Crore. Both direct and indirect employment generation is envisaged from the proposed project.

7.0 The targeted production capacity is 2.2 MTPA crude stainless steel. The ore transportation would be carried out by rail/road. The proposed capacity for different production units would be as follows:

Sl. No.	Unit	Facility		
		Existing	**Proposed**	**Final**
1	SMS	2 x 100 t EAF	2 x 150 t EAF (upgradation of existing 100 t converters) 2x 6 t + 1x 200 Kg Testing Induction Furnace 1x30 t Holding Induction Furnace	2 x 150 t EAF 2x 6 t + 1x 200 kg Testing Induction Furnace* 1x30 t Holding Induction Furnace*
2	Secondary Refining	1 x 120 t LF 1 x 120 t AOD	1 x 150 t LF (upgradation of existing 120 t) 1 x 150 t LF (New) 1 x 150 t AOD (upgradation of existing 120 t) 1 x 150 t AOD (New)	2 x 150 t LF 2 x 150 t AOD
3	Caster Shop	1 x 1 - Strand slab caster	1 x 1 – Strand slab caster (New)	2 x 1 - Strand slab caster
4	CRM	HAPL – 1 x 0.8 MTPA CAPL – 1 x 0.45 MTPA	HAPL – 1 x 0.8 MTPA (New) CAPL – 1 x 0.45 MTPA (New) Finishing Lines (Slitting, Cut to length, Skin pass mill etc.)	HAPL - 2 x 0.8 MTPA CAPL - 2 x 0.45 MTPA Finishing Lines (Slitting, Cut to length, Skin pass

		Finishing Lines (Slitting, Cut to length, Skin pass mill etc.)	(New)	mill etc.)
5	Air Separation Plant	1 x 425 TPD	1 x 425 TPD (New) (BOO Basis)	2 x 425 TPD (BOO Basis)
6	Ferro Alloy Plant	0.25 MTPA (2 x 60 MVA + 3 X 27.6 MVA); 13 MW WHRB; 50 TPH AFBC Boiler; Briquette Plant-126 TPH	Capacity expansion of Briquette Plant up to 180TPH(including existing)	0.25 MTPA(2 x 60 MVA + 3 X 27.6 MVA); 13 MW WHRB with 50 TPH AFBC Boiler; Briquette Plant - 180TPH
7	Lime/Dolo Calcining Plant	-	1x450 TPD+ 1x600 TPD (Lime &Dolo) + 200 TPD Hydrated Lime Plant (New) (BOO Basis)	1x450 TPD+ 1x600 TPD (Lime &Dolo) + 200 TPD Hydrated Lime Plant (New) (BOO Basis)
8	Metal recovery Plant	-	1x 50 TPH 1x80 TPH (BOO Basis)	1x 50 TPH 1x80 TPH (BOO Basis)
9	CRMHS	Installed – Matching the production facilities	Matching the production facilities (New)	Matching the production facilities

**For testing and R&D purposes only*

8.0 The combined electrical load of JSL & JUSL for the expansion will be 965 Million KWh, which will be sourced from existing captive generation and Grid Power supply. DG sets of adequate capacities are proposed for the plant units as well as CPP auxiliaries to cater to the requirement of safe shutdown and safety of personnel when power supplies to plant network from both the sources have failed.

9.0 Proposed raw material for project are steel scrap, ferro-alloys, limestone, dolomite and other additives, all of which will be acquired from existing sources.

10.0 The total water required for the expansion of JSL & JUSL will be approximately 1170 cu m/hr which would be extracted from the existing source. i.e., River Brahmani. Industrial wastewater will be treated and reused as make-up water.

11.0 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

12.0 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. 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 earlier EC from the Regional officer of the MoEFCC shall be submitted along with EIA/EMP

33.18. Expansion and Modification of 1.4 MTPA Integrated Steel project located at Pandoloi, in Sambalpur district of Odisha by **M/s Shyam Metalics & Energy Limited** [Online proposal No. **IA/OR/IND/75198/2018**; MoEFCC File No. J-11011/495/2006-IA.II(I)] – **Terms of Reference.**

1.0 **M/s Shyam Metalics & Energy Limited** made application vide online proposal no.**IA/OR/IND/75198/2018** dated 29th May 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 The company was initially having DRI Kilns, IFs and rolling mill and proposed expansion and granted prior EC to setup1) 4x500 TPD DRI kilns, 2) 2x450m3 MBF, 3)3 Lakh TPA Pellet Plant, 4)1x96m2 Sinter Plant, 5)4x8T, 4x12T IFs, 2x80/90T EAF, 6)6Lakh TPA Rolling Mill, 7)2x6, 2x9 & 3x11 MVA Ferroalloy plant, 8)5Lakh 50 thousand Coke Oven Plant, 9)15Lakh TPA Coal washery, 10) 60,000 TPA Lime Plant, 11)3,53,500 TPA Bloom Caster and 12) 200 MW Power Plant.

3.0 The company started production installing some of the facilities approved under EC within its validity period and has taken validity extended vide F.No. J-11011/495/2006- IA II (I)of MoEFCC, dated 2nd December, 2016. The company mean while intents to setup additional 10 Lakh TPA Iron Ore Pellet Plant with existing approved 3Lakh TPA pellet plant, and to reduce Power generation by 50 MW (from approved EC quantity of 225 MW to 175 MW).Consent to Operate was accorded by Odisha State pollution Control Board vide letter. no.4050/IND-I-CON-5335/31.03.2018 validity of CTO is up to 31.03 2019.

4.0 The Proposed expansion cum modification project is a brown field primary metallurgical (ferrous) project, in which the capacity of Pellet Plant will be enhanced to 1200000 TPA from 300000 TPA, total CPP capacity will be reduced from 225 MW to 175 MW along with reduction in Coal Washery throughput from 1500000 TPA to 1000000 TPA. Along the same line, considering the market potential. The details of existing facilities, proposed and total facilities after expansion is given below:

Facilities	Configurations Prior to EC	Configurations Approved in EC	Present Operation status with CTO	Facilities Yet To be commissioned as per EC	Changes to EC Configuration Proposed	Additional Unit Configuration	Final Configuration	Final capacity In TPA
DRI Kilns	2x350 TPD + 2x100 TPD	4x500 TPD	2x350 TPD+ 2x100 TPD + 2x500 TPD	2x500 TPD	No Change	Nil	(2 x 350 TPD, 2 x 100 TPD, 4 x 500 TPD)	8,00,000
MBF	Nil	2x450m3	Nil	2x450m3	No Change	Nil	2x450m3	7,42,500
I/O Pelletization	Nil	3 Lakh TPA	3 Lakh TPA	Nil	Capacity Enhancement of 3 Lakh TPA to 6 Lakh TPA	6Lakh TPA	12 Lakh TPA	12,00,000
Sinter	Nil	1x96m2	Nil	1x96m2	No change	Nil	1x96m2	8,82,000
S M S	4x18T IF	4x8T + 4x12T IF 2x80/90 T EAF with matching LRF	4x18T + 4x8T + 2x12T IF	2x12T IF 2x80/90 T EAF with matching LRF	Change in EAF from 2 x 80/90 T to 1 x 80 T	11 x 18 T IF	(15x18T + 8x8T + 4x12T) along with 1 x 80 EAF with matching LRF	14,44,286
C C M	Nil	1x6 strand & 1x2 strand	1x3 & 1x2 strand	1x3 strand	No Change	Nil	Nil	6,60,000 TPA
Rolling Mill	60,000 TPA	6 Lakh TPA	60,000 TPA	6 Lakh TPA	No change in production capacity, but Wire rods, structural, Pipe flats & HR Coils are to be introduced. TMT 100000 TPA; Structural Mill 60000 TPA; Pipe Mill 30000	Nil	TMT 1 100000 TPA; Structural Mill 60000 TPA; Pipe Mill 30000 TPA; WRM1 & 2 400000 TPA and TMT 2 Bar 70000 TPA	

Ferro alloy plants	Nil	2x6, 2x9 & 3x11 MVA	2x6, 2x9 & 3x11 MVA	Nil	No Change	Nil	Nil	2,50,000
Coke oven	Nil	5 Lakh 50 thousand TPA	Nil	5 Lakh 50 thousand TPA	No Change	Nil	Nil	5,50,000
Coal washery	3 Lakh TPA	15 Lakh TPA	3 Lakh TPA	7Lakh TPA	Reduced throughput with introduction of Foreign Coal as substitute	Nil	10,00,000 TPA Capacity	10,00,000
Lime Plant	Nil	60,000 TPA	Nil	60,000 TPA	No Change	Nil	Nil	60,000
Bloom caster	Nil	3,53,500 TPA	Nil	3,53,500 TPA	No Change	Nil	Nil	3,53,500 TPA
CSP	15 MW(WHRB) 10 MW (FBC)	200 MW	37 MW(WHRB) 70 MW(FBC)	68 MW (FBC)	No more additional Power Plant & reduction id AFBC Power by 50 MW	Nil	WHRB 58 MW + FBC 117 MW = 175 MW	175 MW

5.0 The proposed unit will be located at Village: Pandoloi, Taluka: Rengali, District: Sambalpur, State: Odisha. The project site is at latitude 21° 40' 50.43'' N and longitude 84° 02' 30.63'' E, MSL 208m. The project is located on state Highway joining Sambalpur- Rourkela, NH-6 and 42 exist at a distance of about 25km from the site. SH-10 is passing by the side of the project. The project is by the side of Railway line of Sambalpur Jharsuguda section. The nearest railway station Rengali is 8 km away from project site.

6.0 The land area acquired for the proposed plant is 294.84 ha out of which 127.05 ha is Industrial land. 50.43 ha Forestland involved. The entire land has not been acquired for the project. Of the total area 294.84 ha (36.6.% ≈ 107.98 ha) land will be used for green belt development.

7.0 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.

8.0 Total estimated project cost as per EC is Rs 3868 Crore rupees. With reduction in Power Plant and addition of Pelletization unit (modernization of existing capacity to 6 MTPA and addition of another unit of 6 MTPA), the adjusting cost will be additional 25 Crores with proposed employment generation from proposed project as 3060. Out of which direct employment will be 3060 and 1500 as indirect employments.

9.0 The targeted production capacity of the modernized project is 1.44 million TPA (same as the EC Capacity). The ore for the plant would be procured from (Indian Market and Import for Coal). The

ore transportation will be done through Rail and Road. The proposed capacity for different products for new site area as below:

Raw Materials (TPA)	Total Raw Material in present EC Conditions	Total Raw Material in Proposed Conditions	Mode of Transportation
Coking Coal	774,648	774,648	By Rail
Chromite Ore	612,500	612,500	By Rail
Iron Ore Fines	803,660	1,838,660	By Rail
Iron Ore Lumps	818,923	168,923	By Rail
Coke Fines	50,772	57,500	By Rail
Indian Coal	2,238,075	1,066,825	By Rail
Imported Coal	38,175	559,052	By Rail
Total Quantity By Rail	5,336,753	5,078,107	
Iron Scrap	72,941	107,368	By Road
Lime	3,450	13,800	By Road
Dolomite	180,685	180,685	By Road
Quartz / Quartzite	141,460	141,460	By Road
Magnesite	25,000	25,000	By Road
Bentonite	2,243	8,970	By Road
Total Quantity By Road	425,779	477,283	

10.0 The electricity load of 216 MW will be procured as 175 MW from CPP and 41 MW from State Power grid. Company has also proposed to install 2 X 1000 KVA DG Set.

11.0 Proposed raw material and fuel requirement for project are as mentioned in Point No. 7. The requirement would be fulfilled by National procurement as well as Import. Fuel consumption will be mainly Coal (Both Indian and Imported).

12.0 Water Consumption for the proposed project will be 33913 KLD, out of which 32135 KLD will be drawn from Hirakud Reservoir and 1778 KLD will be used from the Rain Water Harvesting Pond and the waste water generation will be 3810 KLD, which is 100% recycled. Domestic waste water will be treated in STP and industrial waste water generated will be treated in WWTP and reused in various units.

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

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 earlier EC from the Regional officer of the MoEFCC shall be submitted along with EIA/EMP

33.19. Proposed capacity enhancement of Sponge Iron manufacturing and Induction Furnace with new Hot Rolling Mill located at Sanguem Municipal Council, Sangueum, Goa by **M/s Goa Sponge and Power Limited** [Online proposal No. **IA/GA/IND/75297/2018**; MoEFCC File No. J-11011/317/2008-IA II (I)] – **Terms of reference.**

1.0 M/s Goa Sponge and Power Limited made application vide online proposal no.**IA/GA/IND/75297/2018** dated 4th 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.Goa Sponge& Power Ltd. proposes capacity enhancement of existing manufacturing unit for Sponge Iron, Steel Billets on its plot located on Sy.no. 58/59/60 of Santona Village, Taluka Sanguem, State Goa. The existing set up of the plant for Sponge Iron unit is based on Coal based DRI technology.

3.0 The existing project wasinitiated prior to 16thSeptember, 2006 the sponge iron manufacturing caped at 90,000 TPA and Induction Furnaces of total capacity 90,000 TPA capacity of production. Consent to Operate was accorded by Goa State Pollution Control Board vide lr. no. 5/2240/02-PCB/CI-3946 validity of CTO is up to 30.05.2019.

4.0 The proposed unit is located at Sy.no.58/59/60 Village: Santona, Taluka: Sanguem, District: South Goa State: Goa.

5.0 The land area under industrial zone is 5Ha. No forestland involved. The entire land has falls under industrial zone for the project. Of the total area 0.7ha 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.30 Crore rupees. Proposed employment generation from proposed project will be 50nos. direct employment and indirect employment.

8.0 The targeted production capacity of the sponge Iron is 1, 25,000 TPA, 425 TPD MS Billets, Captive power plant 12.5 MW and new Direct charging hot rolling mill 425 TPD. The ore for the plant would be procured imported from South Africa, 6 – 30mm size which is crushed and screened to get required size of 4 – 20mm. In case of non-availability of iron ore, pellets are procured from Karnataka region. The raw material transportation will be donethrough Road. The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Existing			
Sponge Iron Manufacturing	90,000 TPA	35,000 TPA	1,25,000 TPA
Induction furnace and Billet caster	12 T X 2nos = 300 TPD (90,000 TPA)	15 T X 1 no. by replacing one of the 12 T Induction furnace = 125 TPD	425 TPD (12 T & 15 T Induction furnace)
Captive power plant	8MW: WHRB + 4MW: FBC = 12 MW	0.5 MW	12.5 MW
Proposed expansion			
Direct charging hot rolling mill	--	425 TPD	425 TPD

9.0 GSPL has Power generation capacity of 12.0 MW of which 10.0 MW is consumed in-house for steel making and Sponge iron unit and the balance power of 1 -2 MW is exported to Goa Electricity Grid. Company has also existing 2nos of DG Set of capacity 1250KVA for power back up.

10.0 Proposed raw material for project areas below:

Finished product: Sponge Iron Manufacturing			
Material	Existing quantity required	Quantity estimated after proposed expansion	Mode of transportation
Iron Ore	500 TPD	550 TPD	By road. It is proposed to import iron ore for future manufacturing through sea to Mormugao Port Trust and then by road to the site
Coal	250 TPD	300 TPD	By road. It is proposed to import iron ore for future manufacturing through sea to Mormugao Port Trust and then by road to the site
Dolomite	12.5 TPD	18 TPD	By road
Finished product: Steel Billets Manufacturing			
Sponge iron	As per the ratio of carbon required for manufacture of steel billets	Available within the plot premises. Pig iron is brought by trucks	
Scrap			

Pig iron			
Finished product: Hot rolling mill			
Steel billets	Nil	As per the requirement of product	Available within the plot premises.

11.0 Water Consumption for the proposed project will be 1450 KLD. No waste water generation from the industrial process and Domestic waste water generation will be 32KLDwhich will be treated/ disposed off through septic tank followed by soak pit within plant premises.

12.0 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:

13**.0** After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed **at Annexure I read with additional ToRs at Annexure-2:**

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 earlier EC from the Regional officer of the MoEFCC shall be submitted along with EIA/EMP

33.20. Expansion of Integrated Steel Plant (16 MTPA to 18 MTPA) and captive power Plant 1490 MW Located at Vijayanagar Works Toranagallu Village Ballari District, Karnataka by M/s JSW Steel Limited [Online proposal No. IA/KA/IND/75530/2018; MoEFCC File No. J-11011/489/2009-IA.II(I)] – Terms of Reference.

1.0 M/s.JSW Steel Limited, Vijayanagar Works, Ballari made an application vide online proposal no. **IA/KA/IND/75530/2018**dated 22nd 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 submitted by the project proponent:

2.0 M/s.JSW Steel Limited, Vijayanagar Works, Ballari proposes to expand existing manufacturing unit for Steel. It is proposed to expand the production capacity of its Integrated Steel manufacturing Plant from 16 MTPA to 18 MTPA based on technology BF- BOF/ EAF Route.

3.0 The existing project was accorded environmental clearance vide Fl.no. J-11011/489/2009-IA.II(1) dated 1/10/2015 and subsequent amendments 9.6.2016,22.01.2018 and 29.05.2018 Consent to Operate was accorded by Karnataka State Pollution Control Board vide Combined Consent Order No. 126/PCB/MIN/CFO/2016-17/OB/318 dated 20 June 2016 validity of CTO is up to 30th June 2021.

4.0 The proposed unit will be located at Village:Toranagallu, Taluka: Sandur , District: Ballari , State: Karnataka.

5.0 The land area is an industrial land and is currently in ownership of JSW Steel. The total land area is about 3091.8 ha (7640 acres) and the proposed expansion is located over an area of about 182.1ha (450 acres) within the overall plant area, utilizing the existing infrastructure and utilities. No additional land was acquired for the proposed plant. No forest land is involved. The entire land has been acquired for the project. Of the total area 1020 ha (33%) land is being used for green belt development.

6.0 The Daroji Bear Sanctuary is located within a distance of 10Km from the site. No National Park/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 19621 Crore rupees. Proposed employment generation from proposed project will be 1200 direct employment and 1200-1500 indirect employment.

8.0 The targeted production capacity of the Steel Plant is18 million TPA. The ore for the plant would be procured from JSW captive mines and other sources through e-auction. (linkages). The ore transportation will be done through Rail, Road, Pipe Conveyor. The proposed capacity for different products for new site area as below:

List of facilities as existing now after amendments and those proposed in the expansion to 18 MTPA								
Sl no	**Name of the Unit**	**Facilities at various stages of expansion in MTPA**				**Total Capacity (at 16 MTPA)**	**Facilities Proposed (at 18 MTPA)**	**Total Capacity (at 18 MTPA)**
		4 - MTPA	**4-10 - MTPA**	**10-16 - MTPA**	**At 16 MTPA**			
1	Ore beneficiation Plant - product	OBP-1 1 X 4.5	OBP-2 1X 2.5 , 1X 5.0 & 1 X 7.5,	Nil	1 X 4.5 1X 2.5 1X 5.0 1 X 7.5	19.5	**OBP-1 facilities to be Relocated to OBP-2**	19.5
2	Pellet Plants	PP1- 1-5.0	PP-2- 5.0	Nil	PP 1 & 2 2 X 5 .0	10	**PP-3 6.8**	16.8
3	Sinter Plants	SP1	SP 2 -2.3 SP 3- 7.5	SP4 -2.3 SP5 - 1.75 SP6 - 5.75	SP1-6 3X 2.3 2 X 5.75 1 X 1.75	20.15	**SP-5: 2.3 SP-6: deferred in lieu of PP-3**	14.95
4	Coke Oven – NR	CO 1 &2 2 X0.64 1.28	Nil	Dismantling of Existing	0	0	No addition	0

				NR Coke Oven				
5	Coke Oven – Recovery type	Nil	Coke 3 - 1.5	CO 1&2 -1.5	CO 1-5 2X1.5 1X2.0 1X3.0	8.0	No addition	8.0
6	Hot metal – Corex	Corex 1 &2 2X0.8	Nil	Nil	Corex 1- 2 2 X 0.8	1.6	No addition	1.6
7	Hot metal-Blast Furnace	BF-1-2.5 BF-2-2.17	BF 3 & 4 2 X 3.0	BF-3-4.4 BF-5-3.0	BF 1 -5 1X 2.5 1X 2.17 1X4.4 2X 3.0	15.07	**BF-5 of 3.0 MTPA to be built as 4.5 MTPA**	16.57
Sl no	**Name of the Unit**	**Facilities at various stages of expansion in MTPA**				**Total Capacity (at 16 MTPA)**	**Facilities Proposed (at 18 MTPA)**	**Total Capacity (at 18 MTPA)**
		4 - MTPA	**4-10 - MTPA**	**10-16 - MTPA**	**At 16 MTPA**			
8	Pig Casting Machines (TPD)	1200	7200	3600	12000	12000	MGP-5000 tpd	17000
9	Crude steel - BOF, EAF & auxiliaries	SMS1 3.80	SMS2 6.0	SMS2 - 6.4 SMS 3 & 4- 5.6 2X200T BOF +2X1.2 EAF	SMS1-4 1X3.8 1X6.4 1X3.0 1X2.6	15.8	**SMS-3: In place of 1 EAF, 1 ZPF is considered SMS-4 will be changed from 2 x 200T to 2 x 350T & will operate at 4.8 mtpa**	18
10	Lime Kiln (TPD)	LCP-1 4x300	LCP-2 4X300 ,4X600	LCP-3 4 x 600	LCP 1- 4 8 X 300 8 X 600	7200	No addition	7200
11	Slab Caster	3.2	6.4	SMS-3-1 X1.6 SMS-4-1X3.6	Slab Caster 1-4 14.8	14.8	SMS-4 slab caster changed from 1 x 3.6 mtpa to 2 x 2.5 mtpa	16.2
12	Billet caster	Nil	SMS-2 1.5	SMS-3 3.0	4.5	4.5		4.5
13	HSM	HSM 1 1X4.0	HSM-2 1X5.2	HSM-3 1X3.6	HSM1-3 12.8	12.8	**HSM-3 upgraded to 5.0**	14.2
14	Plate Mill	Nil	Nil	Nil	Nil	Nil	No addition	Nil
15	Pipe Mill	Nil	0.4	Nil	1X 0.4	0.4	No addition	0.4
16	Wire rod mill	Nil	WRM-1 1x0.6	WRM-2 1.2	WRM 1-2 1X0.6, 1X1.2	1.8	No addition	1.8
17	Rebar & Section mill	Nil	BRM-1 1X1.0	Nil	BRM-1 1.0	1	**New BRM-2 of 1.2 MTPA**	2.2

Sl no	**Name of the Unit**	**Facilities at various stages of expansion in MTPA**	**Total Capacity**	**Facilities Proposed**	**Total Capacity**

		4 -MTPA	**4-10 - MTPA**	**10-16 - MTPA**	**At 16 MTPA**	**(at 16 MTPA)**	**(at 18 MTPA)**	**(at 18 MTPA)**
18	Cold Rolling Mill Complex		CRM-1-1.8 CRM-2-2.3	Nil	CRM1&2 4.1	4.1	**CRM-3 of 2.3 MTPA**	6.4
19	Galvanizing Lines	Nil	Nil	CGL-1-4X0.25 CGL-2-2X0.45 -	CGL 1&2 4X0.25 2X0.45	1.9	No addition	1.9
20	Color Coating Line	Nil-	0.5	Nil	0.5	0.5	No addition	0.5
21	Power Plant and process steam boilers in MW	CPP 1X100 CPP-2 1X130 all gas	CPP 3 &4 2X300 gas+coal	CPP5-1X660 coal	CPP 1-5 1X100, 1X130, 2X300,1X660	1490	No addition	1490
22	Incinerator (kg/hr)	Nil	2 X 250kg/h	250kg/h	2 X 250kg/h	1000kg/h	No addition	1000kg/h
23	Slag Grinding and mixing unit	CP-1 1X 0.2	Nil	CP-2 1X2.0	CP-1&2 1X0.2 1X2.0	2.2	No addition	2.2
24	Oxygen Plant (Out sourced)	1x2500 TPD=2500 TPD	2x1800 TPD + 1X900 TPD	2X1800 TPD	1 X 2500 TPD 4 X1800 TPD 1 X 900 TPD	10600 TPD	**1 x 2060(TP) 2 x 2200**	14860 TPD
25	Township (nos)	2 Units	2 Units	2 units	6 units	6 units	**1 unit**	7 units

9.0 The existing power requirements of various units including utilities and auxiliary facilities for the plant at 18 MTPA is 1412 MW. The available power from captive and from JSW EL is 1735 MW. Thus there is adequate availability of power for the steel plant operation at 18 MTPA stage. DG sets adequate capacities are proposed for the plant units as well as CPP, auxiliaries to cater to the requirement of safe shut down and safety of personnel during total back-out condition when power supplies to the plant network from both the sources viz. Grid and CPP have failed.

10.0 Proposed raw material and fuel requirement for project are given in the table below. The estimated annual requirements of major raw materials at 18.0 Mtpa is presented below.

Sl. No.	Major Raw materials	Estimated Quantity, tons
1	Iron ore (Lump)	7,310,000
2	Iron ore fines (Medium grade)	24, 100,000
3	Iron ore fines(High grade)	1,500,000
4	Limestone	6,350,000
5	Dolomite	3,500,000
6	Bentonite	150,000
7	Quartzite	370,000
Sl. No	Major Fuel	Estimated Quantity, tons
1	Coking Coal	8,340,000
2	PCI coal	3,320,000
3	Steam coal	1,500,000

4	Pet Coke for Coke ovens	900,000

The requirement would be fulfilled by indigenous as well as imported sources.

11.0. Water Consumption for the proposed expansion project will be 3,01,000 m3/d and the waste water generation will be 24000m3/ day. The existing water allocation 330000m3/day is sufficient to meet the expansion up to 18 MTPA stage. No fresh allocation is called for. Domestic waste water will be treated in Sewage treatment plants and industrial waste water will be treated in BOD plant of Coke ovens and two RO plants .The permeates recovered from the RO Plants will be reused as make up water replacement while the RO rejects will be reused in slag quenching and dust suppression in RMHS. The treated STP water will be reused 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.

Recommendations of the committee:

13.0 The project proponent desired to make a number of changes in the production system for which the environment clearance was granted in 2015. The suggested changes were too many and appeared to be quite complex. The Committee, therefore, felt that this needs to be understood through a site visit of sub-Committee. In view of this, the Committee recommends that the decision on the application would be considered after a site visit by a sub-committee of the EAC.

33.21. Expansion of Pig Iron Plant (from 188000 TPA to 224000 TPA) at Gopalpur, Durgapur, District Burdwan, West Bengal by M/s NEO METALIKS LIMITED [Online proposal No. IA/WB/IND/75316/2018; MoEFCC File No. J-11011/779/2007-IA.II (I)] – Environmental Clearance for expansion under 7(ii) of EIA Notification, 2006.

1.0 M/s Neo Metalis Limited made application vide online proposal no. IA/WB/IND/75316/2018 dated 7th June, 2018 seeking expansion of Pig Iron Plant (from 188000 TPA to 224000 TPA) at Gopalpur, Durgapur, District Burdwan, West Bengal under clause 7(ii) of EIA Notification, 2006.

The details submitted by the project proponent:

2.0 The project of M/s Neo Metaliks Limited located in Gopalpur Village Panchayat, KanskaTehsil , Burdwan District,West Bengal State is for enhancement of production of PIG IRON from 188000 TPA to 224000 TPA. The existing project was accorded environmental clearance vide Lr.no J-11011/779/2007-IA.II (I) dated 4-1-2008. The Status of compliance of earlier EC was obtained from Regional Office, Bhubaneshwar vide Lr. No. 102-221/EPA, dated 21-2-2018.

3.0 The certified compliance report was obtained from Regional Office, Bhubaneshwar vide Lr. No. 102-221/EPA, dated 25-4-2018. Some non-compliances and partial non-compliances are reported by Regional Officer, which is being complied. The main non-compliances reported by Regional Officer is related to installation of RECUPERATOR in Blast Furnace without MOEF permission. The Recuperator was installed to comply with point xi of EC –implementation of CREP Recommendation (Energy Conservation & Resource Optimization) and after intimating the WBPCB on 26-11-2017.

3.0 The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each unit	Production capacity
Mini Blast Furnace	1	215 m^3	Existing - 188000 TPA Proposed – 224000 TPA

4.0 The existing project is located on 94 acres land, and there will be no change in plant area and plant layout for the proposed production enhancement.

5.0 The topography of the area is flat and reported to lie between 23°49'77.51"& 87°38'31.39", 23°50'10.43" & 87°37'92.13", 23°49'20.40" & 87°37'80.00", 23°49'29.18" & 87°37'64.39", in Survey of India Topo Sheet No. F45D6 at an elevation of 65 m AMSL.

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 Mass Balance of 1,88,000 TPA and 2,24,000 TPA Production:

INPUT (Name and Quantity in TPA)			OUTPUT (Name and Quantity in TPA)		
Name	Quantity for 188000 TPA	Quantity for 224000 TPA	Name	Quantity for 188000 TPA	Quantity for 224000 TPA
Iron ore (60-64% Fe)	319600	147180	Pig Iron	188000	224000
Coke	141000	145600	Slag	56400	78400
Limestone	18800	-	Dust	3300	2395
Dolomite	13160	2160	GCP Sludge	1650	990
Quartzite	5640	3240	Losses	250730	293415
Manganese Ore	1880	2200			
Sinter 50-55% Fe	-	298820			
Total	500080	599200		500080	599200

8.0 The targeted production capacity of the MBF is 0.224 million TPA. The ore for the plant is procured from open market. The ore transportation is done through Road. (Additional iron ore, coke, limestone, dolomite, quartzite, Mn ore will not be required for the production enhancement).

9.0 The water requirement of the existing project is 990 m3/day, which is supplied by ADDA. Permission is available from Asansol Durgapur Development Authority vide letter No. ED/CN-79/04-05/1428 dated 19-7-2005 for supply of 2090.10 m3/day water. The permission for drawl of 320 m3/day groundwateris obtained from SWID – District Level Groundwater Resources Development Authority vide Certificate No. P-1558 (066711), P-1559 (066712), P-11560 (066713) & P-1561 (066714) dated 13-5-2016. (There will be no increase in ground water requirement for the proposed production enhancement).

10.0 The power requirement of the BF is 3.5 MW, which is obtained from the CPP.(There will be no increase in power requirement for the proposed production enhancement).

11.0 Baseline Environmental Studies were conducted during winter season i.e. January and March 2018. Ambient air quality monitoring has been carried out at 4 locations during January 2018 and the data submitted indicated: PM_{10} (60.2to 86.0µg/m^3),$PM_{2.5}$ (28.2 to 40.3 µg/m^3), SO_2 (9.7 to 10.6 µg/m^3) and NO_x (40 to 41.1 µg/m^3). Ambient air quality monitoring has been carried out at 4 locations during March 2018 and the data submitted indicated: PM_{10} (77 to 91 µg/m^3), $PM_{2.5}$ (43 to 53 µg/m^3), SO_2 (7.3 to 8.8 µg/m^3) and NO_x (32.4 to 38.2 µg/m^3). Modeling study not required because there will be no increase in the air pollution load (PM, SO2 and NOx).

12.0 Ground water quality has been monitored in 1 location in the study area and analysed. pH: 8.1 Total Hardness: 172 mg/l, Chlorides: 121 mg/l, Fluoride: 0.2 mg/l. Heavy metals (There is no river flowing near the plant site.

13.0 Noise levels are in the range of 67.1 to62.7 dBA for daytime and 58.3 to 56.9 dBA for nighttime.

14.0 It has been reported that a total of 2395 TPA of Dust waste will be generated due to the project, out of which 100% will be reused in sinter plant. 100% slag will be granulated as sold. There is no dump yard. It has been envisaged that an area of 31 acres 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.

15.0 It has been reported that the Consent to Consent to Operate from the West Bengal State Pollution Control Board obtained vide Lr. No907-7/WBPCB/2809/6 dated 20-4-2017 and consent is valid up to 30-4-2022.

16.0 The capital cost of the BF project was approx. Rs 93 Crores and the capital cost for environmental protection measures spent is Rs 5.05 crores. The annual recurring cost towards the environmental protection measures is approximately Rs. 3.18 crores. The CSR spending in last 3 years (2015-16 to 2017-18) is 10.66 Lakhs. The employment generation in the existing plant is 275 regular and 277 on contractbasis. Employment generation from proposed production enhancement is NIL. (There will be no increase in capital cost due to production enhancement).

17.0 Greenbelt is being developed in 31 acres which is about 33% of the total acquired area. A 3-10m wide greenbelt, consisting of at least 3 tiers around plant boundary is being developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species were planted with a density of 600 trees per acre. Total saplingsthat will be planted and nurtured in next 3-4 years is about 19000. (3288 trees already planted till June 2018. 2500 sapling already purchased in July 2018 and plantation is under progress).

18.0 The proponent has mentioned that there is no court case. However, show-cause notice under section 5 of Environment (Protetion) Act, 1986 was issued by MoEF&CC No. J-11013/44/2018-IA-I(M) dated 27-6-2018 and received on 4-7-2018 regarding the Non-Compliance of EC Conditions. The PP submitted response to MoEF&CC by email on 6-7-2018 (Copy submitted to MS - IA-Industry 1 and all EAC Members).

Observations and recommendations of the committee:

19.0 The Committee noted that a show cause notice has been issued by the MoEF&CC under Section (5) of the Environment (Protection) Act, 1986 for non-compliance of earlier environmental clearance conditions. The project proponent informed that they have already filed a reply to this notice. However, MoEF&CC have yet to decide about accepting their reply. The Committee was of the opinion that there application could be considered after the final decision of the MoEF&CC regarding the non-compliance for which the aforesaid notice has been issued to the project proponent. Therefore, the present proposal is returned.

33.22. Expansion of existing Steel Plant along with installation of Cement Grinding Unit of M/s Shyam Sel & Power Ltd. at Village Dasna, Jamuria, P.O. Bahadurpur, PS. Jamuria, District Burdwan, West Bengal [Online proposal No. IA/WB/IND/20395/2013; MoEF&CC File No. IA-J-11011/327/2013-IA-II(I)] – Environmental Clearance for expansion– Further consideration based on reply to ADS.

1.0 M/s Shyam Sel & Power Limited has made online application vide proposal no. **IA/WB/IND/20395/2013** dated 25th September 2017 along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

2.0 The Proposed expansion of existing steel plant along with installation of cement grinding unit of M/s Shyam Sel & Power Ltd., located at Village Dhasna, Jamuria, P.O. Bahadurpur, District Burdwan, West Bengalwas initially received in the Ministry on 5thOctober, 2013 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 14thmeeting held on 19th December, 2013 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 17th February, 2014 vide Letter No J-1011/327/2013-IA-II (I). Extension of validity of ToR was granted vide letter even number dated 28th April 2017 with a validity upto 16th February 2018.

3.0 The project of M/sShyamSel& Power Ltd.located at Village Dhasna, Jamuria, P.O. Bahadurpur, District Burdwan, West Bengal is for setting up of a new units like Pellet Plant, Cold Rolling Mill with Continuous Galvanising Line & Corrugation unit along with Cement Grinding Unit for production of 1.2 MTPA pellet, 0.35 MTPA CR Coils/Sheets from HR Coils, 0.3 MTPA Galvanised CR Coils, 0.3 MTPA Corrugated Sheet, 75,000 Nm^3/Hour Producer Gas and 1.2 MTPA Portland Slag Cement & Portland Pozzolona Cement. The existing project was accorded environmental clearance vide letter no. J-11011/887/2007- IA.II(I) dated18thMarch, 2009.The Status of compliance of earlier EC was obtained from Regional Office, Bhubaneshwar vide Letter No. 102-222/EPE dated 09.08.2017. The proposed units with their capacities for different products are as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Pellet Plant	2	0.6 MTPA	1.2 MTPA
Cold Rolling Mill	1	0.35 MTPA	0.35 MTPA

Unit			
Continuous Galvanising Line	1	0.30 MTPA	0.30 MTPA
Corrugation Unit	1	0.30 MTPA	0.30 MTPA
Producer Gas Plant	1	480 TPD ($75,000\ Nm^3$/hour)	480 TPD ($75,000\ Nm^3$/hour)
Cement Grinding Unit	1	1.20 MTPA	1.20 MTPA

4.0 The total land required for the project is 445.15 ha. No forestland involved. The entire land has been acquired for the project. 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 Latitude 23°41'37.04"N and Longitude 87°7'13.55"E at an elevation of 106.68 m AMSL. The water level in existing open wells range from 2.1 m to 16.5 m and 6.7 m to 9.0 m below ground level in pre and post-monsoon respectively.

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

7.0 The major raw materials, which will be handled, consist of Concentrate Iron Ore, Bentonite, Limestone and Coal for the Pellet Plant and Clinker, Gypsum, Fly Ash & Slag for the Cement Grinding Unit. Raw materials will be received at plant site by rail/road. The annual requirement of raw materials, which will be required for the proposed project, is presented below:

Raw Materials	Annual Requirement (in MT)	Source
A) Pellet Plant (1.2 MTPA)		
Iron Ore Fines	12,60,000	Barbil, Orissa
Coal Fines	12,000	Local Market
Bentonite	6,000	Kauch, Orissa
Coke	1,800	Local Market
Limestone	7,200	Birmitrapur, Orissa
B) Cement Grinding Unit (1.2 MTPA)		
i) Portland Pozzolana Cement		
Clinker	3,90,000	Satna, Meghalaya (Star Cement), Madhya Pradesh (JP Cement, Prism Cement, Orient Cement)
Gypsum	18,000	Bikaner/ Nagaur region, Rajasthan and Tata Chemicals, Paradeep

Raw Materials	Annual Requirement (in MT)	Source
		(IFCO & PPL), Haldia
Fly ash	1,92,000	Power Plant of DVC, Andal
ii) Portland Slag Cement		
Clinker	2,52,000	Satna, Meghalaya (Star Cement), Madhya Pradesh (JP Cement, Prism Cement, Orient Cement)
Gypsum	18,000	Bikaner/ Nagaur region, Rajasthan and Tata Chemicals, Paradeep (IFCO & PPL), Haldia
Slag (15% Moisture)	3,90,000	In-house & Durgapur Steel Plant, Neo Metallic, Durgapur, Tata Steel, Jamshedpur, Tata Metallic, Kharagpur and local steel plants

8.0 Solid waste generation and its disposal from the different units are given below:

Sl. No.	Type	Quantity in TPA	Utilization
1.	Coal ash from Producer Gas Plant	43,200	To be used for Brick making/ PPC Cement manufacturing/ internal road making etc.
2.	Tar from Producer Gas Plant	10,800	To be stored in drums & will be sold to the vender registered with WBPCB.

9.0 The targeted production capacity of the proposed Pellet Plant is 1.2 million TPA. The iron ore for the plant would be procured from Barbil, Orissa. The iron ore transportation will be done through Rail/Road.

10.0 The water requirement of the project is estimated at 520 m^3 /day, which will be sourced from Ajay River.

11.0 The power requirement of the project is estimated as 87 MW, which will be sourced from Captive Power Plant.

12.0 Baseline Environmental Studies were conducted during summer season i.e., from 1st March, 2014 to 31stMay, 2014. Ambient air quality monitoring has been carried out at 8 locations during 1stMarch, 2014 to 31stMay, 2014 and the data submitted indicated: PM_{10} (50 µg/m^3 to 109 µg/m^3), $PM_{2.5}$ (17 to 48 µg/m^3), SO2 (4 to 18 µg/m^3) and NOx (8 to 29 µg/m^3). The results of the modeling study indicated that the maximum increase of GLC for the proposed project is 1.8 µg/m^3 with respect to the PM_{10} and3.45 µg/m^3 with respect to the NOx.

13.0 Ground water quality has been monitored in 9 locations in the study area and analysed. pH: 6.5 to 7.5; Total Hardness: 302 to 416 mg/l; Chlorides: 107 to 164 mg/l; and Fluoride: 0.4 to 0.8 mg/l. Heavy metals are within the limits.

14.0 Surface water samples were analysed from 10 locations, eight (8) locations for Pond water samples, one (1) location at Damodar River, one (1) location at Ajay River. For pond water: pH:6.8 to 7.4;DO:5.2 to 6.1mg/l; and BOD:4 to 9 mg/l. For River Damodar water: pH:7.5; DO: 6.4mg/l; and BOD:3 mg/l. For Ajay River water: pH:7.7; DO:6.5mg/l; and BOD:4 mg/l.

15.0 The equivalent Noise levels are in the range of 55.6 - 68.8 dB(A) for day time and 47.6 - 60.4dB(A) for night time.

16.0 As per 2011 census, the total population in the 10 km radius area is 4,32,229. No R&R is involved in the project.

17.0 It has been reported that a total of 43,200 TPA of Coal ash from Producer Gas Plant will be generated due to the project, which will be used for used for Brick making/ PPC Cement manufacturing/ internal road making etc. 10,800 TPA of Tar from Producer Gas Plant will be stored in drums & will be sold to the vender registered with WBPCB.

18.0 Out of the total plant area of 445.15 hectares (1100 acres), around 146.9 hectares (363 acres) i.e., 33% of the total plant area has been earmarked for green belt development.

19.0 It has been reported that the Consent to Operate from the West Bengal Pollution Control Board is valid up to 31-07-2018.

20.0 The Public Hearing was conducted on 14thAugust, 2015 at Panchayat Samity Meeting Hall, P.S. Jamuria, District Burdwanin West Bengal. An amount of 36.75 Crores (2.5% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues.

21.0 The capital cost of the project is Rs. 1469.54 Crores and the capital cost for environmental protection measures is proposed as Rs. 73 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 8.5 Crores. The detailed CSR plan has been provided in the EMP. The employment generation from the proposed expansion project is 469 persons.

22.0 Greenbelt will be developed in 146.9 Ha which is about 33% of the total acquired area. A 20 m wide greenbelt around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 1500 trees per hectare. Total no. of 2,20,350 saplings will be planted.

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

23.0 After detailed deliberations the committee observed the following:

i. PP has changed the configuration of the plant without prior approval of the ministry. This PP has clarified that their EC is still valid and they have already applied for the amendment.

ii. The EIA prepared for the expansion project does not include these changes in the configurations. Hence the base status of the status is not clear;

iii. BLD is of more than 3 year old

iv. ToR numbers 28, 34, 37(i to xi), 42, 46, 47, 49, 61 were not complied

v. Structure of the EIA/EMP is not as per the generic structure envisaged EIA Notification and the contents are generic and not project specific.

24.0 Therefore, the revised EIA/EMP to be submitted after validating the BLD with fresh data for one month to be collected henceforth and incorporating reply to all aforesaid observations.

Observations of the committee:

25.0 After presentation of the project proponent, the committee noted following:

1. The configuration and facilities envisaged in the Terms of Reference and facilities for which EC sought are not matching.

2. The configuration and facilities envisaged in the earlier EMP and Revised EMP were not matching.

3. The configuration and facilities envisaged in the revised EMP (uploaded on the website) and presentation during the meeting were not matching.

4. The revised EIA/EMP is not satisfactory, as several ToR points were not properly addressed.

Recommendations of the committee:

25.0 After detailed deliberations, the committee recommended for rejection of the proposal.

33.23. Setting up of Cement Plant (600 TPD) located at Village Solnaran Saturmarg Khrew, 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.

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

11th July 2018

33.24. Proposed cement manufacturing unit of 200 TPD of M/s Zaffron Enterprises Pvt. Ltd. at Village Khonmoh, Tehsil & District Srinagar, Jammu & Kashmir [Online Proposal No. IA/JK/IND/51327/2016; MoEFCC File No. J-11011/106/2016IA-II(I)] – Environmental Clearance – Further consideration based on reply to ADS.

1.0 M/s Zaffron Enterprises Private limited made online application vide proposal no. IA/JK/IND/51327/2016 dated 31st March 2018 along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category

"B" of EIA Notification, 2006. As the project attracts the general condition of the Schedule of EIA Notification, 2006, the proposal is appraised at Central level.

Details of the project as per the submissions of project proponent:

2.0 The Proposed Cement Manufacturing of M/s Zaffron Enterprises Pvt. Ltd located in Village Khonmoh, Tehsil & District – Srinagar, State- Jammu & Kashmir initially received in the ministry on 9th March 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 5th meeting held on 30th March 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 ToR's to the project on 19th May 2016 vide Lr. No. J-11011/106/2016-IA.II(I).

3.0 The project of M/s. Zaffron Enterprises Pvt. Ltd located in Village Khonmoh, Tehsil & District – Srinagar, State- Jammu & Kashmir is for setting up of a new cement manufacturing unit for production of 0.066 million tones per annum (66000 TPA).

4.0 The total land required for the project is 2.5084 ha, out of which 0.0 Ha is an agricultural Land, 0.0 Ha is grazing land and 2.5084 ha is others (barren Private Land. No /forest land involved. The entire land has been acquired for the project. 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 undulated and reported Geographical location is bounded between latitudes of 34 o 04' 33.2" N to 34 o 04' 38.5" N and longitudes of 74o 58' 56.3" E to 74o 59' 03.0" E in Survey of India topo sheet No. 43J/16, 43N/4, 43 O/1& 43K/13 at an elevation of 2438 meter m AMSL. The ground water table reported to ranges between 1.5-4.0 m. below land surface during the post-monsoon season and 1.5-2.5 below the land surface during the 2.0-3.0 pre-monsoon seasons. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be negligible. Further, the stage of groundwater development is reported to be 66.67% and 100 % in core and buffer zone respectively and thereby these are designated as safe areas.

6.0 The National Park is located at a distance of 3.5 KM from the site. Dachigam National Park reported to be located in the core and buffer zone of the project. Schedule-I i.e. Hangul, Common Leopard & Asiatic Black Bear etc. have been reported in the Dachigam National Park during the study period. The authenticated list of Flora & Fauna provided through the Deputy Conservator of Forest (WildLife) reporting presence of schedule-I fauna in the study area. (Enclosed with the summary).

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. (Refer Chapter-2)

8.0 The targeted production capacity of the 66000 TPA. The ore for the plant would be procured from (local market). The ore transportation will be done through Road.

9.0 The water requirement estimated about 35 m3/ Day and will be meet out from ground water after obtaining requisite NOC from concern state govt. authority. The CGWA does not issue NOC for Ground water with drawl in the J & K state.

10.0 The power requirement of the project is estimated as 1.5MW, which will be supply by the J&K Power dept.

11.0 Baseline Environmental Studies were conducted during summer season i.e. from April to June 2016. Ambient air quality monitoring has been carried out at 8 locations during April to June 2016 and the data submitted indicated: PM10 (31.1 µg/m3 to 56.20 µg/m3), PM2.5 (15.5 to 27.8 µg/m3), SO2 (5.5 to 13.90 µg/m3) and NOx (11.5 to 23.10 µg/m3). The results of the modeling study indicate that the maximum Increase of GLC for the proposed project is 11.30 µg/m3 with respect to the PM10 2.44 µg/m3 with respect to the SO2 3.26 µg/m3 with respect to the NOx.

12.0 Ground water quality has been monitored in 8 locations in the study area and analyzed. pH: 6.98 to7.27, Total Hardness: 158 to 189 mg/l, Chlorides: 37.11 to 58.08 mg/l, Fluoride:0.17 to 0.27 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 2 locations. pH: 7.25 to 7.39; DO: 6.7 to 6.8mg/l and BOD: <5.0mg/l. COD from 9. 6 to 12.8mg/l

13.0 Noise levels are in the range of 46.4 to 50.2 dB(A) for daytime and 38.4 to 43.4 dB(A) for nighttime. Reported that the all baseline parameters are within prescribe norms.

14.0 It has been reported that there are no people in the core zone of the project. No/ R&R is involved. It has been envisaged that no families to be rehabilitated, which will be provided compensation and preference in the employment.

15.0 It has been reported that a 19.5 Kg/day of solid waste will be generated due to the project, which will be sold to the authorized recyclers. It has been envisaged that an area of 0.82772 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 them NIL State Pollution Control Board / Pollution Control Committee obtained vide Lr. No NIL. Dated NIL and consent is valid up to NIL.

17.0 The Public hearing of the project was held on 28th December 2017 at Village-Khonmoh, State –J&K. under the chairmanship of Mr. Syed SajadQadri, Additional District Magistrate Srinagar and Dr. Syed Nadeem Hussain, IFS, Regional director J&K State Pollution Control Board, Kashmir for production of 66000 TPA cement manufacturing plant by M/s Zaffron Enterprises Pvt Ltd. At earmarked area. The issues raised during public hearing are mention in page no. 124-127. An amount of 35 Lakhs has been earmarked for Enterprise Social Commitment to public hearing issues.

18.0 The capital cost of the project is Rs 35.44 Crore and the capital cost for environmental protection measures is proposed as Rs 324.38 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 32.0 Lakhs .The detailed CSR plan has been provided in the EMP in its page No. 114 to 115. The employment generation from the proposed project is 250.

19.0 Greenbelt will be developed in 0.82772 Ha which is about 33 % of the total project area. A 100 Mtr 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 960 trees per hectare. Saplings will be planted and nurtured in 0.82772 hectares in 4 years.

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

21.0 Consultant Details: Enviro Concept (I) Pvt. Ltd., 1/3 A, Yudhister Marg, C-Scheme, Jaipur NABET/EIA/396/IA-021 Dated 21st August 2015 and listed at S.No.10 of NABET updated list-2.

22.0 After detailed deliberations, the committee sought the following additional information

1. Proof of ownership of project land in certified translated document in English
2. Proof of permission for change of land use from the revenue department
3. Endorsement of Wildlife conservation by the CWLW
4. Clarification of clearance by the CWLW in respect of the Conservation Reserve in the vicinity of the proposed project site.
5. Revised Corporate Environment Responsibility based on the issues emerged during PH along with time bound action plan and budgetary provision as per revised CER norms.
6. Proof of application for drawl of groundwater
7. Revised Corporate Environment Policy inter alia including standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions; hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions; and system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large.

23.0 The reply to ADS submitted by the project proponent was deliberated by the committee in detail and the committee recommended for environmental clearance subject to following specific and general conditions.

A. **Specific conditions**:

1. The project proponent shall obtain clearance from the National Board for Wildlife.
2. The project proponent shall implement the recommendations of the chief wildlife warden regarding conservation of schedule-I species in consultation with State forest department.
3. The project proponent shall obtain necessary permission from the competent authority for drawal of required quantity of the ground water.

4.0 The particulate emission from the slag shall be less than 30 mg/Nm^3

B. General Conditions:

1. An amount of Rs 70 Lakhs proposed towards Corporate Environment Responsibility shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

2. Green belt shall be developed in 0.83 Ha equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

3. The Capital cost Rs. 324.38 Lakhs and annual recurring cost Rs. 32.0 Lakhs towards the environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.

4. The project proponent shall (Air Quality Monitoring):

   a. install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R. No. 612 (E) dated 25th August, 2014 and subsequent amendment dated 9th May, 2016 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

   b. monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

   c. Install system 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;

   d. submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emission to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

5. The project proponent shall (Water Quality Monitoring):

   a) install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 and subsequent amendment dated 9th May, 2016 as amended from time to time;

   b) 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; and

   c) submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

6. The project proponent shall (Air Pollution Control):

   a) provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

   b) provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags;

   c) provide pollution control system in the cement plant as per the CREP Guidelines of CPCB;

   d) provide sufficient number of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs regularly;

   e) recycle and reuse lime fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after agglomeration;

   f) ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;

   g) Provide wind shelter fence and chemical spraying on the raw material stock piles;

   h) provide Low NO_X burners as primary measures and SCR /NSCR technologies as secondary measure to control NO_X emissions. Have separate truck parking area and monitor vehicular emissions at regular interval.

7. The project proponent shall (Water Pollution Control):

   a) adhere to 'zero liquid discharge';

   b) provide Sewage Treatment Plant for domestic wastewater; and

   c) provide garland drains and collection pits for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

8. The project proponent shall (Water Conservation);

   a) practice rainwater harvesting to maximum possible extent;

   b) provide water meters at the inlet to all unit processes in the cement plants; and

   c) make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

9. The project proponent shall (Energy Conservation):

   a) provide Waste heat recovery system for kiln and cooler;

b) make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker;

c) 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;

d) provide the project proponent for LED lights in their offices and residential areas;

e) maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards; and

f) maximize utilization of alternate fuels and Co-processing to achieve best practice norms.

10. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land.

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

12. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

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

14. The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

15. The PP shall adhere to the corporate environmental policy and system of the reporting of any infringements/ non-compliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF&CC as a part of six-monthly report.

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

17. A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of the organization.

18. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.

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

20. 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).

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

22. The storage of NH_3 and other hazardous chemicals at the site shall be as per the provisions of Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended from time to time.

23. 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.

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

25. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.

26. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.

27. The project proponent shall (post-EC Monitoring):
    a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
    b. put on the clearance letter on the web site of the company for access to the public.
    c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http:/envfor.nic.in.
    d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
    e. monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;
    f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
    g. 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;

h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

33.25. Expansion of Ore Beneficiation Plant from 0.6 MTPA to 1.5 MTPA within the exiting premises by M/s Thakur Industries located at Village Hirebagnal, Talul& District Koppal, Karnataka [Online Proposal No. IA/KA/IND/70331/2016; MoEFCC File No. J-11011/208/2016-IA.II(I)] –Environmental Clearance – Further consideration based on reply to ADS.

1.0 M/s Thakur Industries made an application vide online proposal no. **IA/KA/IND/70331/2016** dated **12th December 2017** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 2(b) Mineral beneficiation under Category "A" of EIA Notification, 2006 and the proposal is appraised at Central level.

2.0 The proposed expansion of Ore Beneficiation Plant of M/s. Thakur Industries located in Village Hirebaganl, Tehsil Koppal District Koppal State Karnataka was initially received in the Ministry on 19th September 2016 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 9th meeting held on 27th – 29th July 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 19th September 2016 vide Lr. No. F. No. J-11011/208/2016-IA.II (I).

3.0 The project of M/s. Thakur Industries located in Hirebaganal Village, Koppal Tehsil, Koppal District, Karnataka State is for enhancement of production of Ore Beneficiation Plant capacity from 0.6 MTPA to 1.5 MTPA. The existing project was accorded environmental clearance vide lr. no. F. No. J-11015/257/2010-IA.II (M). dated 19thApril 2012. The Status of compliance of earlier EC was obtained from Regional Office, Bangalore vide Lr. No. F. No. EP/12.1/3/2010-11/Karnataka. There are no non-compliances reported by Regional officer. The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Ore Beneficiation Plant	1	1.5 MTPA(throughput)	1.5 MTPA(throughput)

4.0 The total land required for the project is **7.08** ha. The entire land has been acquired for the project. It has been reported that no water body/water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lies between 15°19′0.64″N Latitude and 76°14′9.68″E Longitude in Survey of India toposheet No. 57A/3, at an elevation of 520m AMSL. The ground water table reported to ranges between 25m below the land surface during the post-monsoon season and 20m below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will zero. Further, the stage of groundwater development is reported to be 0 % and 0 % in core and buffer zone respectively and thereby these are designated as safe.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule - I fauna. The authenticated list of flora and fauna provided through the Bio-diversity reporting presence of no /schedule - I fauna in the study area (Annexure XI of EIA).

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 Beneficiation Plant is1.5 million TPA. 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 3150 m^3/day, out of which 900 m^3 /day of fresh water requirement will be obtained from the Borewell and the remaining requirement of 3000 m^3/day will be met from the recycling from the process. The permission for drawl of water is under process.

10.0 The power requirement of the project is estimated as 900 KVA, out of which 900 KVA will be obtained from the GESCOM.

11.0 Baseline Environmental Studies were conducted during post-monsoon 2016 season i.e. from September 2016 to November 2016. Ambient air quality monitoring has been carried out at 8 locations during September 2016 to November 2016 and the data submitted indicated: PM_{10} (55.5 µg/m^3 to 63.4 µg/m^3), $PM_{2.5}$ (18.3 to 21.6 µg/m^3), SO_2 (22.8 to 25.4 µg/m^3) and NOx (23.2 to 24.2 µg/m^3). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 42.0 µg/m^3 with respect to the PM_{10}, 24.8 µg/m^3 with respect to the SO_2, 24.7 µg/m^3 with respect to the NOx.

12.0 Ground water quality has been monitored in 3(Three) locations in the study area and analysed. PH: 7.2 to7.5,Total Hardness:235 to 268mg/l, Chlorides:48 to 69mg/l, Fluoride: 0.3 to 0.75mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 2 (Two) locations .PH:7.8 to8.2.

13.0 Noise levels are in the range of 43.5 to 79.4dBA.

14.0 It has been reported that there are none people in the core zone of the project No/R&R is involved. It has been envisaged that None families to be rehabilitated, which will be provided compensation and preference in the employment.

15.0 It has been reported that a total of tons/m^3 of waste will be generated due to the project, out of which NIL will be used in None and 0.8 MTPA will be dumped in the earmarked dump yard. It has been envisaged that an area of 33 % ha will be developed as green belt around the project site to attenuate the noise level sand 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 03/KSPCB/RO/KPL/SR/2014-15 dated 21st June 2014 and consent is valid up to 30th June 2019.

17.0 The Public hearing of the project was held on18th August 2017. At Project Site under the chairmanship of Deputy Commissioner (designation) for production of 1.5 million TPA of Ore/setting up of Beneficiation plant. The issues raised during public hearing are employment opportunities, plantation, pollution control, etc.

18.0 An amount of 3 0.00 Lakhs (2%ofProjectcost) has been earmarked for Enterprise Social Commitment.

19.0 The capital cost of the project is Rs. 220 Lakhs and the capital cost for environmental protection measures is proposed as Rs 75.48 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 9.50 Lakhs. The employment generation from the proposed project / expansion is 50. 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.	65.50	15.00
2	Plantation and After Care Measures	4.48	2.10
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 aid room and shelter)	4.00	3.50
6	Environmental Monitoring	Nil	9.50
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).	-	35.00
Total		**109.48**	**72.60**

20.0 Greenbelt will be developed in 4.74 Ha, which is about 33% of the total acquired area. 3 tier greenbelt around plant boundary will be developed 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 5000 saplings will be planted and nurtured in 2.50 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.

22.0 The Project proponent along with EIA Consultant M/s. Metamorphosis Project Consultants Private Limited (NABET/EIA/1518/RA 014 valid up to 30th November 2018) has made detailed presentation on the proposal.

23.0 The committee observed that the permission for withdrawal of ground water from the competent authority was not provided in the EIA/EMP Report, Issues raised by the public during the public hearing and commitment of the project proponent made on the issues were not clear; No details provided on the Enterprise Social Commitment (ESC); Corporate Environmental Policy as per the ToR Point 9 was not provided; Organizational setup for the environmental management was not provided in the EMP; Air quality modeling was carried taking into consideration of the boiler, where there is no proposal of the boiler in the instant proposal, noise monitoring was not carried as per the guidelines; BOD, COD and DO was not analysed in the surface water samples; solid waste management is not clear in the EMP Report; No interpretation of the baseline data including ecology & Biodiversity and socio-economic environment was provided in the EIA; etc.

24.0 The proposal was considered by the Expert Appraisal Committee (Industry-I) during its 27th meeting held on 3rd – 5th January, 2018. After detailed deliberations, the committee asked to submit revised EIA/EMP by complying all the terms stipulated to the project, *inter alia,* incorporating:

i. Revised time bound action plan along with fund provision on the issues raised during the PH social need assessment;

ii. Details of Enterprise Social Commitment (ESC) based on public hearing issues / need based assessment as capital expenditure in project mode and shall be completed in concurrence with the implementation of the expansion;

iii. Groundwater development in the study area and category of the area based on the GEC guidelines;

iv. Ground water permission letter translated in English;

v. Revised air quality modelling studies by considering fugitive emissions from the proposed plant;

vi. Revised noise monitoring as per the requirement of monitoring protocol;

vii. Detailed action plan for 100% utilization of solid waste management;

viii. Corporate Environmental Policy approved by its Board of Directors incorporating standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / condition and system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company;

ix. Interpretation of all the baseline data including Ecology & Biodiversity and socio-economic environment;

x. BOD, COD and DO for surface water;

xi. Revised Risk Assessment specific to proposed project;

xii. Impact prediction on the land, soil, biodiversity;

xiii. Revised green belt development plan with local broad-leaved tree species;

xiv. Justification for selection of AAQ monitoring locations.

25.0 Revised Corporate Environment responsibility is given as below:

Sr. No	Particulars	Description of Activities	Venue	No. of Program	No. of Beneficiaries
Health					
1.	Ambulance Provision	Provided Ambulance to take care of patients in emergency case under program area.	Hirebaganal Village	1	-
Education					
1.	Capacity building program	ITI training for welders, mechanics, electricians	Hirebaganal Village / Kunikere Village / Allanagar Village	1	25
Sustainable Livelihood Program					
1.	Tailoring	Sewing machines provision	Allanagar Village	3	15
Social issues					
1.	Swatch Bharath Abhiyan	Providing Toilets, conducting plantation programme, etc.,	Allanagar Village	3	300
Infrastructure development					
1.	Construction of school building	Additional class room	Hirebaganal Village	1	40
2.	Rain Water Harvesting	Construction of rain water harvesting structures at school	Hirebaganal Village & Allanagar Village	1	90

Recommendations of the committee:

26.0 After detailed deliberation, the Committee recommended for grant of environmental clearance subject to the following specific and general conditions:

A. Specific Conditions:

i) Dry tailings from the filter press shall be supplied to end users and no permanent dumping is allowed except for temporary storage.

ii) The green belt shall be developed within one year of issue of environment clearance.

iii) Maximum of the run-off water shall be collected and recharged.

B. General Conditions:

1. An amount of Rs. 19 lakhs towards Corporate Environment Responsibility shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

2. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

3. The Capital cost Rs. 75.48 Lakhs and annual recurring cost Rs. 9.50 Lkahs towards the environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.

4. The project proponent shall (Air Quality Monitoring):

    a. monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

    b. carryout 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^o each, covering upwind and downwind directions;

    c. submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emission to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

5. The project proponent shall (Water Quality Monitoring):

    a) install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

    b) 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; and

    c) submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

6. The project proponent shall (Air Pollution Control):

   a. provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

   b. provide sufficient number of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs regularly;

   c. use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin;

   d. provide wind shelter fence and chemical spraying on the raw material stock piles; and

   e. design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

7. The project proponent shall (Water Pollution Control):

   a) provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled;

   b) adhere to 'zero liquid discharge';

   c) provide Sewage Treatment Plant for domestic wastewater; and

   d) provide garland drains and collection pits for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

8. The project proponent shall (Water conservation):

   a) practice rainwater harvesting to maximum possible extent; and

   b) make efforts to minimise water consumption in the beneficiation plant by segregation of used water, practicing cascade use and by recycling treated water.

9. The project proponent shall (Energy Conservation):

   a) 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; and

   b) provide LED lights in their offices and residential areas.

10. The project proponent shall ensure that the concentration of the chemicals such as cyanides, dichromate, amines and polymers kept below the toxic limits.

11. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

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

13. The project proponent shall adhere to the corporate environmental policy and system of the reporting of any infringements/ non-compliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF&CC as a part of six-monthly report.

14. A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of the organization.

15. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.

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

17. 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).

18. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016. Coal tar sludge shall be recycled to coke ovens.

19. 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.

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

21. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.

22. The project proponent shall (Post-EC monitoring):
    a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
    b. put on the clearance letter on the web site of the company for access to the public.
    c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http:/envfor.nic.in.

d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;

e. 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;

f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;

g. 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;

h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work

33.26. Expansion from 1,20,000 TPA to 2,07,360 TPA MS Billets/Rolled products by replacement of existing 4 x 8 Tons Induction Furnaces with 4x12 Tons Induction Furnaces at Village Debipur, P.O. Kalyaneshwari, District Burdwan of West Bengal by M/s BMA Stainless Limited. [Online proposal No. IA/WB/IND/58221/2016; MoEFCC File No J-11011/192/2013-IA.II(I)] – Environmental Clearance– Further consideration based on reply to ADS

1.0 **M/s BMA Stainless Limited** has made online application vide proposal no. **IA/WB/IND/58221/2016** dated **22nd December 2017** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of EIA Notification, 2006 and the proposal is appraised at Central level.

Details of the project as per the submissions of project proponent:

2.0 The proposal of M/s BMA Stainless Limited for capacity expansion from 1,20,000 to 2,07,360 TPA rolled products by replacement of existing 4 nos. of 8 Ton capacity Induction Furnaces by 4 nos. of 12 Ton Induction Furnaces and modification of the existing Rolling Mill (increasing the speed of rollers),located in Village-Debipur, P.O.-Kalyaneshwari, District – Burdwan, State-West Bengal was initially received in the Ministry on 08th August 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 10th meeting held on 29th August 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 17th November 2016 vide Lr. No. J-11011/192/2013-IA.II (I).

3.0 The project of M/s. BMA Stainless Limited located in Debipur Village, Kalyaneshwari P.O., Burdwan District, West Bengal State is for capacity expansion by replacement of existing 4 nos. of 8 Ton capacity Induction Furnaces to 4 nos. of 12 Tons Induction Furnaces and increasing the speed of

existing Rolling Mill through modernization is for enhancement of production of Billed / TMT Bars from 0.12 to 0.207360 million tonnes per annum (million TPA). The existing project was accorded environmental clearance vide lr.no. J-11011/192/2013-IA II (I) dated 29th September 2014. The Status of compliance of earlier EC was obtained from Regional office of MoEFCC Bhubaneshwar vide Lr. No. 102-507/EPE/452 dated 17-10-17. There are certain non-compliances reported by Regional officer. The proposed capacity for different products for new site area as below:

Plant	Existing		Proposed		Total (after the proposed expansion)	
	Unit	Capacity	Unit	Capacity	Unit	Capacity
Induction Furnace	4x8 Tons	1,20,000 TPA	4×12 Tons (replacement of existing IFs)	4x12 Tons	4x12Tons	2,07,360 TPA
Continuous Casting (CCM)	2 Strand, 4/7 m radius	1,20,000 TPA	-	87,360 TPA	2 Strand, 4/7 m radius	2,07,360 TPA
Producer Gas plant	1	27,00,000 Nm^3 /month	-	-	-	27,00,000 Nm^3 /month
Rolling Mill	1	1,20,000 TPA	Modernization	87,360 TPA	-	2,07,360 TPA

4.0 Out of total 17.1 Acres, 5.7 Acres of area is already developed as green belt for the existing project. No additional land is required for the proposed expansion project. No forestland involved. The entire land has been acquired for the project. The Baraka river is at a distance of 1.3 Km in west direction from the project area. It has been reported that no water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lies between 23°46'59.63"N to23°46'57.16"N Latitude and 86°49'55.42"E to 86°50'5.43"E Longitude in Survey of India topo sheet Nos. 73 I/9, 73 I/10, 73 I/13/73 I/14 at an elevation of 128 m AMSL. The ground water table reported to ranges between 0.22 to 11.63m below the land surface during the post-monsoon season and 0.74 to 19.95m below the land surface during the pre-monsoon season.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported 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 in the study area is incorporated in EIA.

7.0 The existing 1,20,000 TPA Plant is having 4x8 MT Induction Furnace and 6/7 radius, 2 strand CCM, 20 TPH Rolling Mill with auxiliaries. The Raw Material likes Sponge Iron, Pig Iron & Ferro-Alloys are being melted in Induction Furnace and the refined liquid metal is cast into billets through continuous casting machine. Billets are rolled into rolled products in Rolling Mill. Reheating Furnace has been provided to reheat the billets, if required for rolling. Producer gas is used as fuel in the Reheating Furnace. The present proposal is for replacement of existing 4x8 Tons Induction Furnaces with 4x12 Tons Furnaces and increasing the output (speed) of existing Rolling Mill through

modernization. Downstream facilities like Continuous Casting Machine, Rolling Mill, Producer Gas plant doesn't require any change/modification as they have adequate capacity to meet the proposed production. In Rolling Mill motors with the Rollers shall be replaced with high speed motors to meet the annual production of 2,07,360 Tons of rolled product.

8.0 The targeted production capacity of the Billet/Rolled Product is 2,07,360 TPA.

9.0 The water requirement of the project is estimated as 212 m³/day (including 10 m³/day for domestic use). The requirement will be met from DVC, Borewell and Rain Water harvesting pond. Permission for the same has been obtained from the concerned authority. The permission for drawl of surface water is obtained from Central Water Commission-DVVR Unit vide Lr. No. MD/DVRR/W-6-116/2008/602-608 date 11th September 2008 and Ground water from Ground Water Resource Development Authority, Burdwan vide permit no. P02202401252000000 1TSE dated 7.2.17.

10.0 The power requirement of the project is estimated as 30 MW [Existing: 20 MW & Additional: 10 MW]. The power to the plant shall be brought from the Damodar Valley Corporation substation located near the plant.

11.0 Baseline Environmental Studies were conducted during Post monsoon season i.e. from 1st October to 31st December, 2016. Ambient air quality monitoring has been carried out at 8 locations during October to December, 2017and the data submitted indicated: PM10 (53.3 $\mu g/m^3$ to 95.3 $\mu g/m^3$), $PM_{2.5}$ (30.50 $\mu g/m^3$ to 55.40 $\mu g/m^3$), SO_2 (6.60 $\mu g/m^3$ to 14.70 $\mu g/m^3$ $\mu g/m^3$) and NOx (14.20 $\mu g/m^3$ to 34.50 $\mu g/m^3$). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 0.298 $\mu g/m^3$ with respect to the PM_{10}, 0.576 $\mu g/m^3$ with respect to the SO_2 and 0.810 $\mu g/m^3$ with respect to the NOx.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 6.86 to 8.13, Total Hardness: 210 to 326.53 mg/l, Chlorides: 63.04 to 112.06 mg/l, Fluoride: 0.59 to 0.89mg/l. Heavy metals are within the limits. Surface water samples were analysed from 3 locations. pH: 7.80 to 7.91; DO: 6.8 to7.8 mg/l and BOD: 5.00 to 5.80 mg/l. COD from 14.75 to18.22 mg/l.

13.0 Noise levels are in the range of 50.75 Leq dB(A) to 62.30 Leq dB(A) for daytime and 40.45 Leq dB(A) to 57.40 Leq dB(A) for night time.

14.0 No R&R is involved.

15.0 It has been reported that a total of 18,434 tons of waste will be generated due to the project, out of which 17,812 tons will be used in road/area/land development and 622 tons will be Recycled in the process. It has been envisaged that an area of 2.30 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 Operate from the West Bengal Pollution Control Board obtained vide Lr. No. C0107785302-WPBA/Red(Bwn)/cast(521)/06 dated 17.03.2017 and consent is valid up to 30.04.2022.

17.0 The Public hearing of the project was held on 21.07.2017 at Nandanik Hall of SalanpurPanchayet Samity P.O- Salanpur, District- Paschim Bardhaman, West Bengal under the

chairmanship of Sri Kaushik Mukherjee W.B.C.S. (Exe.), Dy. Magistrate and Dy. Collector, and O.C., Judicial Munshi Khana for production of 2,07,360 TPA of Billet/Rolled Product from the existing production of 1,20,000 TPA. The issues raised during public hearing, *inter alia*, are Employment to the local people; Renovation of Toilets in local schools; Development of roads; Medical / Ambulance facility for nearby villages; Implementation of effective pollution control measures.

18.0 An amount of 20 Lakhs (2.5% 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	Budget (Rs. Lakhs)					
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	Health Facility	1	1	1	1	1	5
2	Infrastructural Development	0.7	0.7	0.7	0.7	0.7	3.5
3	Educational Facility	0.7	0.7	0.7	0.7	0.7	3.5
4	Afforestation Programs	0.6	0.6	0.6	0.6	0.6	3.0
5	Community Welfare Activities	0.4	0.4	0.4	0.4	0.4	2.0
6	Community Water Conservation	0.3	0.3	0.3	0.3	0.3	1.5
7	Community Capacity Building	0.3	0.3	0.3	0.3	0.3	1.5
Total		20 Lakhs					

19.0 The capital cost of the project is Rs. 8.00 Crores and the capital cost for environmental protection measures is proposed as Rs. 64 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 10.40 Lakhs. The employment generation from the proposed project / expansion is 30 (direct).The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

S.No.	**Environmental Protection Measures**	**Capital Cost Rs. In lakhs**	**Recurring Cost Rs. In Lakhs / Yr.**
1	Air Pollution Control Measures	50.00	6.00
2	Water Pollution Control Measures	3.00	1.00
3.	Noise Pollution Control Measures	1.00	0.10
4	Greenbelt Development	5.00	2.00
5	Rain Water Harvesting	3.50	0.30
6	Occupational health and safety	1.50	1.00
TOTAL		**64.00**	**10.40**

20.0 Greenbelt will be developed in 2.30 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 7000 saplings will be planted and nurtured in 2.30 hectares in 5 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 The proponent has made presentation along with EIA Consultant M/s M/s VardanEnvironet, Gurgaon, Haryana.

Observations of the committee

23.0 The committee observed that the EIA/EMP submitted is not as per the generic structure specified in EIA Notification, 2006. The details of existing facilities, resources, control system and proposed expansion are not clearly defined. It is also observed that no interpretation of baseline data, expenditure on pollution control equipment, inadequate HIRA, corporate environmental policy did not address the reporting mechanism of reporting non-compliances.

Recommendations of the Committee:

24.0 The proposal was considered in the 28th meeting of EAC (Industry – 1) held during 05th – 6th February 2018. After detailed deliberations, the committee advised to submit revised EIA report incorporating the following additional information.

1. Revised water balance and rainwater harvesting scheme
2. Revised material balance
3. Revised greenbelt development plan to complete 2.3 ha as per the earlier Environmental Clearance
4. Complete details of raw material, source, mode of transport and distance from source
5. Scheme for 100% utilization of solid waste including hazardous waste generated from producer gas plant.
6. Revised table of issues raised during PH, commitment of PP, time bound action plan along with fund provision.
7. Revised ESC programme based on the issues emerged during PH and social impact assessment. The activity shall be for asset creation and capacity building in CAPEX mode.
8. Power supply arrangement details
9. Closure report on non-compliances reported by Regional Officer on earlier EC conditions from Regional officer of MoEFCC.
10. Hazardous waste generated in the existing and proposed expansion shall be clearly addressed.
11. The revised project and site-specific HIRA
12. Corporate Environmental Policy addressing the reporting mechanism of non-compliances to the board of directors directly.

25.0 Reply to the observations was submitted by PP on 22.06.2018 and the point-wise reply of the observations is as follows:

Sl	Observation	Reply
1.	Revised water balance and rainwater harvesting scheme.	Revised water balance given in the EIA Report in Chapter 2 in Figure 2.9 at Page No. 35. Revised rainwater harvesting scheme is given in Chapter 4 in Para No. 4.13 at Page No. 142.
2.	Revised material balance	Revised material balance given in EIA Report in Chapter 2 in Figure 2.6 at Page No. 33.
3.	Revised greenbelt development	An undertaking/commitment is given by PP on

Sl	Observation	Reply
	plan to complete 2.3 ha. as per the earlier Environmental Clearance.	02.04.2018 to complete the greenbelt development area of 2.3 ha. in six months' time. Greenbelt development plan is given in EIA report in Chapter 4 in Para No.4.12 and undertaking is enclosed as Annexure XI at page No. 335.
4.	Complete details of raw material, source, mode of transport and distance from source.	Complete details of raw material, source, mode of transport and distance from source are given in EIA report in chapter 2 in Para No. 2.7.2, table No. 2.3 at page No. 31.
5.	Scheme for 100% utilization of solid waste including hazardous waste generated from producer gas plant.	Scheme for 100 % utilization / disposal of Solid waste including hazardous waste generated from producer gas plant is given in the EIA Report in Chapter 4 at ParaNo.-4.8, Table 4.8 at Page No. 131.
6.	Revised table of issues raised during PH, commitment of PP, time bound action plan along with fund provision.	Action Plan of the issues raised during Public Hearing with commitment of PP and time bound action plan along with fund provision is enclosed in the EIA Report in chapter 7 in Table No. 7.2 at page no. 173.
7.	Revised ESC programme based on the issues emerged during PH and social impact assessment. The activity shall be for asset creation and capacity building in CAPEX mode.	Revised CER programme as per MoEF&CC O.M. dated 01.05.2018 is given in EIA Report in Chapter 7 at ParaNo.7.4 at Page No. 176-177.
8.	Power supply arrangement details	In this regards, the power assurance obtained from DVC vide letter no. Coml/CD/17-18/ Kalyaneswari/ BMA/601 dated 12.02.2018, for enhancement of power, is enclosed as Annexure V at page No. 249.
9.	Closure report on non-compliances reported by Regional Officer on earlier EC conditions from Regional officer of MoEFCC	Closure report on non-compliances with the conditions of the existing Environmental Clearance, earlier reported by Regional Officer, MoEF&CC, has been obtained and enclosed as Annexure XVII at Page No. 359 in the EIA Report.
10.	Hazardous waste generated in the existing and proposed expansion shall be clearly addressed.	No hazardous waste was/shall be generated from the process except the 'Used Oil'. Approximate quantity of 'Used Oil' generated from the proposed expansion will be approx. 35 KL per year and 'Used Oil' will be sold to the register recycler.
11.	The revised project and site-specific HIRA	Site specific HIRA is included in the EIA Report in Chapter 7 at table no. 7.5at page no. 185.
12.	Corporate Environmental Policy addressing the reporting mechanism of non-compliances to the board of directors directly.	Revised Corporate Environmental Policy is enclosed in the EIA Report as Annexure XIII at Page No. 337.

Recommendations of the committee:

After detailed deliberation, the Committee is not satisfied with the reply submitted and ADS by No. 3, 6 and 12 and advised the project proponent to comply with the ADS conditions including completion of green belt. Therefore, the projected is deferred.

33.27. Proposed Integrated Cement Plant with Captive Limestone Mine for production of Clinker (2.0 MTPA), Cement (2.5 MTPA) and Limestone (3.0 MTPA) at village Niduzuvvi, Mandal Yerraguntla, District Kadapa in Andhra Pradesh by M/s Teja Cement Limited [Online Proposal No. IA/AP/IND/3574/2011; MoEFCC File No. J-11011/234/2010-IA.II(I)] – Extension of validity of Environmental Clearance.

1.0 M/s. Teja Cement Limited made an application vide online proposal no. **IA/AP/IND/3574/2011** dated 14th May 2018 seeking extension of validity of the environmental clearance granted for the proposed integrated Cement Plant with Captive Limestone Mine for production of Clinker (2.0 MTPA), Cement (2.5 MTPA) and Limestone (3.0 MTPA) at village Niduzuvvi, Mandal Yerraguntla, District Kadapa in Andhra Pradesh vide MoEFCC File No. J-11011/234/2010-IA.II(I) dated 13th May 2011.

Details submitted by the Project Proponent:

2.0 Environmental Clearance was granted on 13th May 2011 for establishment of Greenfield Cement Plant along (60 Ha) with Captive Limestone Mines (267.20 Hectares) for the following capacities:

CLINKER	2.0 MTPA	Phase I:1.0 MTPA Phase II: 1.0 MTPA
CEMENT	2.5 MTPA	Phase I:1.25 MTPA Phase II: 1.25 MTPA
LIMESTONE	3.0 MTPA	Phase I:1.5 MTPA
		Phase II: 1.5 MTPA

3.0 The progress made so far as follows:

- Land leveling and clearing completed.
- Leveling work for approach road formation is ongoing.
- Site office & Guesthouse is operational.
- LOI awarded to KHD Humboldt Wedag for Rs.140 Crores, dt.20.04.2018 for Plant and Machinery
- LOI awarded to Galacon Infrastructure for Rs. 81 Crores for civil construction dt.20.04.2018.
- Contract awarded for Compound wall for Rs. 2.1 Crore the plant area dt.04.04.2018.
- Though this is a proved limestone terrain by virtue of cluster of cement industries India Cements Ltd. - Chilamkur towards North West, India Cements Ltd. – Yerraguntla towards North East, Zuari Cements (Heidelberg) towards South East, Bharathi Cements towards South East, in order to assess depth wise grade, a comprehensive Geological prospecting of the entire mining area has been completed as per UNFC specifications to assess the quality and quantity

of the limestone through NRDCS a reputed agency in geological prospecting.

4.0 The details of work completed and expenditure incurred so far is as follows:

Sno	Details	Cost incurred/Orders Raised (Rs in crores)
1	1. Land Acquisition 2. Land levelling and clearing completed 3. Site office & Guesthouse is operational	48
2	Contract awarded for Compound wall for the plant area dt.04.04.2018	2.1
3	LOI awarded to KHD Humboldt Wedag for Rs.140 Crores, dt.20.04.2018 for Plant and Machinery	140
4	LOI awarded to Galacon Infrastructure for 81 Crores for civil construction dt.20.04.2018.	81
5	Mining lease was executed	-
6	Mining Lease Dead Rents	0.225
7	Public hearing Advertisement expenses	0.009
8	APPCB Deposit	0.08
9	IBM Bank Guarantee	0.09
10	Holtec Consulting – DPR and Layout	0.17
11	Marketing Survey by Holtec Consulting	0.01
12	Prospecting Expenditure paid to NRDCS	0.075
13	Auditors Fee	0.018
14	Company Secretary Fee	0.02
15	Authorized Capital Fees to Registrar of Companies	0.15
16	ERCOM Engineers – DPR and Layout	0.086
17	Mine Lease Extension paid to Mines Department	0.01
18	Consultant for MOEF Extension - BS Envi-Tech Pvt. Ltd.	0.01
19	Miscellaneous Expenditure	0.08

5.0 TCL submitted that the project could not be implemented within the EC validity period due to delay of 6 Year 3 Months in alienation of Government Land for establishing the cement plant. Upon continuous persuasion since 02/05/2010, TCL could get 140.44 Acres of Government Land alienated on 13/08/2016. Further, TCL submitted that out of total extent of 800 acres, about 400 acres of this land has been in the name of the company and the remaining Patta Lands belong to the promoters and their close relatives which will be transferred in due course of time.

6.0 The delay in implementation of cement plant was neither willful nor wanton but due to the delay in alienation of Government land. Since then, TCL is moving the issues very fast and at no point of time there is delay from TCL side in actively taking steps for establishing cement unit.

7.0 TCL also informed that they are able to move the file with regard to getting term loan from Bank of Baroda. TCL submitted that a fresh Techno Economic Feasibility Report (TEFR) as desired by the bankers in December 2016 was prepared and submitted to the Bank of Baroda (BOB), who have referred it to BOB capital market (a Subsidiary of Bank of Baroda) for its appraisal for

sanctioning of the term loan. BOB capital market has already submitted its recommendations to Bank of Baroda, for the sanction for term loan. Now, it is under final stage of sanctioning of term loan.

8.0 TCL has informed that they have already identified highly competent and experienced technical Team to implement and operate the plant successfully and efficiently.

9.0 TCL informed that they have already obtained permission of State Government vide Government Memo No. 5295/M.111(1)/2015, Dated 20/02/2018, condoning the delay in commencing of the mining operations due to delay in cement plant erection. The Government also kind enough to extend the time for establishment of cement plant upto February, 2021 in appreciation of our genuine reasons It was informed that PIL (W.P No. 130 of 2018) has been filed against Teja Cement Ltd. in the Hon'ble High Court of Telangana and Andhra Pradesh after submitting our application for Extension of validity of Environmental Clearance.

Observations and recommendations of the committee:

10.0 The proposal was considered in the 32nd meeting of Expert Appraisal Committee held during 11th to 13th June, 2018. The committee learnt that a writ petition was filed against PP in the High Court of Hyderabad and Original Application under section 18(1) of NGT Act 2010 before Southern Bench of NGT at Chennai. The committee deliberated upon the issue. It was found that one of the matters appealed about pertaining to the land on which the proposed for the project for which EC was given earlier in 2011. Further there was request to conserve the water body by keeping safe buffer between the boundary of the project site and the water body. The committee felt that proper clarification from the PP regarding both issues is necessary along with supporting documents. In view of this the committee recommended that the PP shall submit detailed clarification on the issues raised in the aforesaid petition/application for further consideration of the proposal.

11.0 TCL submitted that that during the alienation of Government land, there is a minor change in few of the survey no.s, this is because part of the survey no.s being D.K.T lands which could not be transferable and therefore the government decided to exclude these survey numbers and granted other survey numbers in lieu of these D.K.T lands, keeping the total extent same.

12.0 TCL has also submitted that there is no significant change with regard to all the parameters worked out earlier within the zone of 10 Km radius from the central part of the plant area. Further, this area is contiguous to previously located plant site and also to the mining block. TCL has submitted the figures showing the details of original plant site and new plant site. Further TCL has submitted the following survey nos. with respect to shift in the plant site.List of Survey Numbers given below:

VILLAGE	SURVEY NO.S AS PER EC	SURVEY NUMBERS TO BE DELETED	SURVEY NUMBERS TO BE INCLUDED	SURVEY NUMBERS OF REVISED PLANT SITE
Nidizuvvii	794/1	-	821	794/1
	796		822	796
	797		823	797
	798		824	798
	799		825	799
	800		826	800

VILLAGE	SURVEY NO.S AS PER EC	SURVEY NUMBERS TO BE DELETED	SURVEY NUMBERS TO BE INCLUDED	SURVEY NUMBERS OF REVISED PLANT SITE
	801		827	801
	816		828	816
	817		Part of 829	817
	818		Part of 834	818
	819			819
	820			820
	1036			1036
	1037			1037
	1038			1038
	1039/1			1039/1
	1040/1			1040/1
	1042			1042
				821
				822
				823
				824
				825
				826
				827
				828
				Part of 829
				Part of 834
Chilamakur	673	673	-	
	672/1, 672/2	672/1, 672/2		
	671	671		
	670	670		
	669	669		
	674	674		

No change in the extent of the area

13.0 Further, TCL has submitted that there is no change in study area as the Environmental clearance is obtained as integrated proposal with mine site also as part of study area in either case. TCL has submitted the drawing showing 10 km radius of the study area with original plant site and revised plant site.

14.0 Regarding the NGT Application (which is yet to be Admitted) and PIL (Notice before Admission), TCL has given detailed para wise explanation which is as follows:

Allegation	Submission of TCL
The KummaraKunta is	The allegation that "KummaraKunta" is in the middle of Plant area & is

Levelled, Falling in the middle of Plant area and Not included in EC	totally levelled is false and misleading based on the Tahsildar report to the Collector dated 22.05.2018 and Tahsildar Endorsement letter addressed to the proponent dated 23.06.2018 (which is on a much later date after the filling of PIL and Original Application in NGT) along with the maps and Photographs.
Change of Location of Plant	The state government has alienated the land after a long delay of 6 years with few new Survey Nos replacing earlier Survey Nos due to the presence of D.K.T lands and this fact was informed by the proponent and requested for amendment along with the request for extension of Validity of EC vide application Dated 19.04.2018 (much before the proponent received the notice of PIL on 09.06.2018 and Application in NGT which the proponent came to know only through MoEF on 13.06.2018).
Ownership of Land prior to EC	As per MOEF Notification S.O.1533 dated 14th September 2006, project proponent need not own the Plant land before applying for EC. The allegation is that the proponent should own the land for the plant before applying EC is baseless.
CFE Granted without considering change of location	The proponent applied for extension of CFE enclosing land alienation Order M.S No. 273Dated 02.07.2016. Extension of CFE vide Ref. No. 182/APPCB/CFE/RO-TPT/HO/2011 Dated 26.08.2016 was approved incorporating the above said land alienation Order. The allegation that the Pollution control board was not informed is baseless.
Mining Lease was granted without EC or CFE	Mining lease was granted on 24.02.2012 after obtaining EC (Dated 13.05.2011) & CFE (Dated 15.10.2011). The allegation that Mining lease was granted without EC & CFE is baseless.
Mining Lease was Granted without prospecting	Teja Cement is surrounded by cluster of cement manufacturing plants, after proper justification and due diligence the Mining plan was granted. Hence the allegation that mining lease is granted without prospecting is baseless.
EC Granted without approval of Mining Plan	After submission of EC and Mining plan and after due diligence the state government has granted mining lease. The allegation that the procedure is not followed is baseless. At the time of appraisal for granting EC, Mining Plan was in advanced stage of approval. The mining Plan was submitted in June 2010 and was approved on 29th November 2011. The IBM process took longer than expected. Meanwhile, EC was issued on 13.5.2011.
Mining lease located within 500 meters from Niduzuvvi village	The nearest habitation is 50 meters, however, the mining will be restricted to more than 300 m from the village, as per the Director General of Mine Safety Regulations, the mining is to be carried out in the proximity, special permission from DGMS will be obtained.
Survey no. 470/3 and 470/4 are in Mining lease but not in EC or CFE	Though the survey no. 470/3 and 470/4 were finding in the subject matter of G.O. M.S No. 46 dated 24.02.2012 the same were not present in the list of survey no.s for which mining lease was granted. The survey no.s 470/3 and 470/4 though applied initially were deleted as they were overlapping with India Cements Limited and the same survey

	no.s were not deleted in the subject matter and this is only a clerical error. Even in the EC list also the given survey numbers do not figure.
Prospecting Without Prospecting License	The next contention of the petitioner is that the project proponent has carried prospecting operations without obtaining prospecting license. The govt. vide memo no. 16297/M.III(1)/2019-1 dated 27.03.2010 directed proponent to submit approved mining plan under rule 24(2) of 1960 which is to be approved by IBM within a period of 6 months. For approval of mining plan, proponent need to submit basic data on depth of limestone available by way of core drilling. This is all done by virtue of the orders of government who is competent to grant a prospecting license. Therefore, proponent did not violate the rules.

Observations of the Committee:

15.0 The project proponent has made a detailed presentation on issues raised in the NGT application and PIL. As informed by the project proponent, the case is yet to be admitted in the NGT and there is no direction regarding the case from NGT and the Hon'ble High Court as of now. The project proponent clarified on each point of petition. They made point-wise clarification regarding different issued raised in the petition against them.

16.0 The project proponent also informed that the original land envisaged by them for the project is not available to them as per some local rules and therefore, they had slightly shifted the plot by about 200 mtrs. Both the plots were shown to the Committee. The Committee agreed that because of the shifting, there is no significant change in the impact on the environment and, therefore, the conditions of the earlier environment clearance would remain valid.

Recommendations of the committee:

17.0 After detailed deliberations, the Committee recommended for extension of validity by another additional period of three years, i.e. up to 12th May 2021. This extension in the validity would be subjected to outcome of the aforesaid petition in NGT as well as in Hon'ble High Court.

18.0 The Committee also recommended for the minor shift of site location by 200 m as proposed by the project proponent

33.28. 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 J-11011/394/2010-IA.II(I)] – Extension of Validity of EC.

1.0 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.

33.29. Proposed Cement Griding Unit of 1.5 MTPA Capacity at Village Osara, Tehsil Bhanpura in District Madsaur in Madya Pradesh by M/s Ambuja Cements Limited [Online Proposal No. IA/MP/IND/3903/2011; MoEFCC File No. J-11011/276/2010-IA.II(I)] – Extension of Validity of EC

1.0 M/s Ambuja Cements Limited made application vide online proposal no. **IA/MP/IND/3903/2011**dated 19th June 2018 seeking extension of validity of environmental clearance granted for the proposed Cement Griding Unit of 1.5 MTPACapacity at Village Osara, Tehsil Bhanpura in District Madsaur in Madya Pradesh vide F. No. J-11011/276/2010-IA.II(I) dated 21st June 2011.

Details of the proposal submitted by PP:

2.0 M/s Ambuja Cements Limited has proposed for Cement Grinding Unit of 1.5 MTPA Capacity at village Osara, Tehsil Bhanpura, District Mandsaur in Madhya Pradesh. Total land requirement of the project is 109.156 ha which is already in possession of the company. The total cost of the project is Rs. 300 Crores. Rs. 41 Crores and Rs1.0 Crore have been earmarked towards Capital and recurring cost for EMP measures respectively.

3.0 The standalone grinding units are covered under Category B as per para 3(b) of the schedule of the EIA notification 2006, but due to presence of interstate boundary of Madhya Pradesh – Rajasthan within 10 km from the proposed unit, the proposal was appraised by the Expert Appraisal Committee in the MoEF&CC.

4.0 It was submitted that due to unavoidable circumstances the company has not been able to commission aforesaid plant within 7 years of EC validity. As mentioned during EC process in 2011, clinker was to be sourced from the proposed Integrated Cement Project of the M/s Ambuja Cements Limited located in Marwar Mundwa, District Nagaur (Rajasthan) for which MoEF&CC granted the EC vide letter J-11011/394/2010-IA-II (I) dated 05.05.2011. Due to certain reasons beyond control of the company, Marwar Mundwa integrated cement project got delayed which is now scheduled to be commissioned by June 2020.

5.0 The company already made direct capital investment of total approx. Rs 52.0 Crores, out of the total project cost of Rs 300 Cores, which includes cost of 220/132 kVA substation, cost of land, construction of boundary wall on the plant land, installation of fly ash collecting & loading system at Kalisindh Thermal Power Plant of state government. Apart from this, company is paying regularly land taxes and lease rentals to the State govt. since inception. All the required statutory clearances / permits for the project including approval of private railway siding from Railway Department were obtained. Target project completion date is January-2020.

6.0 Therefore, it was requested for extension of validity of the EC for another 3 years i.e. upto 20.06.2021.

Recommendations of the committee:

7.0 After detailed deliberations, the committee recommended for extension of validity of the environmental clearance for further period of 3 years i.e. up to 20.06.2021.

33.30. Expansion of Tannery Unit (Raw hide to Finished Leather) from 60 hides/day to 1000 hides/day (raw hide to finished leather) at village AkrampurTehsil & Dist. Unnao, Uttar Pradesh of M/s A.K.I India Private Limited [Online proposal No. IA/UP/IND/25434/2013; MoEFCC File No. J-11011/128/2013-IA.II(I)]– Amendment in Environmental Clearance regarding.

1.0 M/s AKI India Limited made an application vide online proposal no. IA/UP/IND/25434/2013 dated 27th April, 2018 seeking corrigendum to the environmental clearance granted for the proposed expansion of Tannery Unit (Raw hide to Finished Leather) from 60 hides/day to 1000 hides/day (raw hide to finished leather) at village Akrampur Tehsil & Dist. Unnao, Uttar Pradesh vide F. No. J-11011/128/2013-IA.II(I) dated 12th April, 2018.

2.0 The following amendments in the EC letter was sought

Sr. No.	Detail as per Environmental clearance granted	Proposed Detail	Conclusion
1.	At page no. 1, table of point no.-3, it is mentioned that the proposed capacity is 1000 hides/skins per day (Raw hide to wet blue leather) (Average weight 20 kg/hide).	In the application & presentation given, it was mentioned that the proposed capacity after expansion is 1000 hides/skins per day (Raw hide to finished leather) (Average weight 20 kg/hide for product).	Thus, instead of "proposed capacity" it should be "proposed capacity after expansion" & instead of "Raw hide to wet blue leather" it should be "Raw hide to finished leather". There should be insertion of Average weight 20 kg/hide for product)
2.	In specific conditions no. v, it is mentioned that wastewater generated shall be properly treated in ETP and after meeting the norms shall be sent to CETP for further treatment.	In the application & presentation given, it was mentioned that excess treated water of 225 KLD shall be disposed off in the drain of the area which had also been approved at the time of EAC meeting. This is to inform you that our tannery is a standalone one &is outside the industrial area and hence, there is no CETP connected with our tannery unit. Earlier also when Environmental clearance was recommended to us through minutes of 29th EAC meeting dated 12-12-14, there was same mistake in the specific conditions given and we had requested corrigendum in minutes earlier also vide letter submitted dated 16-01-2015.	Thus, we request to allow the excess treated water of 225 KLD be discharged into the nearby drain.
3.	In Specific Conditions iii, it is mentioned that the project proponent shall undertake 24x7 Ambient Air quality (AAQ) monitoring as per CPCB guidelines.	In specific condition there is no mention of Water quality monitoring system. This is to inform you that as the tannery industry is water polluting intensive industry instead of air polluting, we have already installed continuous online Water quality monitoring system in our industry.	Thus, we request for mention of installation of online Water quality monitoring system and Ambient Air quality monitoring twice a year instead of 24x7 Ambient Air quality monitoring.

4.	The Environmental Clearance has been granted to M/s A.K.I. India Pvt. Ltd.	The Legal status of the company has been changed from 'Private Limited' to 'Limited'. Now the company will be A.K.I. India Ltd. Instead of M/s A.K.I. India Pvt. Ltd.	Thus, we request to issue Corrigendum in Environmental Clearance in name of A.K.I. India Ltd. Instead of M/s A.K.I. India Pvt. Ltd.

3.0 After detailed deliberations, the committee recommended as follows:

Sr. No.	Reference	Request	Recommendation
1.	At page no. 1, table of point no.-3, it is mentioned that the proposed capacity is 1000 hides/skins per day (Raw hide to wet blue leather) (Average weight 20 kg/hide).	In the application & presentation given, it was mentioned that the proposed capacity after expansion is 1000 hides/skins per day (Raw hide to finished leather) (Average weight 20 kg/hide for product). Thus, instead of "proposed capacity" it should be "proposed capacity after expansion" & instead of "Raw hide to wet blue leather" it should be "Raw hide to finished leather". There should be insertion of Average weight 20 kg/hide for product)	Agreed
2.	In specific conditions no. v, it is mentioned that wastewater generated shall be properly treated in ETP and after meeting the norms shall be sent to CETP for further treatment.	In the application & presentation given, it was mentioned that excess treated water of 225 KLD shall be disposed off in the drain of the area which had also been approved at the time of EAC meeting. This is to inform you that our tannery is a standalone one &is outside the industrial area and hence, there is no CETP connected with our tannery unit. Earlier also when Environmental clearance was recommended to us through minutes of 29th EAC meeting dated 12-12-14, there was same mistake in the specific conditions given and we had requested corrigendum in minutes earlier also vide letter submitted dated 16-01-2015. Thus, we request to allow the excess treated water of 225 KLD be discharged into the nearby drain.	The effluent shall be treated properly in the ETP. No treated or untreated effluent shall discharge directly or indirectly into the river ganga or tributaries.

3.	In Specific Conditions iii, it is mentioned that the project proponent shall undertake 24x7 Ambient Air Quality (AAQ) monitoring as per CPCB guidelines.	In specific condition there is no mention of Water quality monitoring system. This is to inform you that as the tannery industry is water polluting intensive industry instead of air polluting, we have already installed continuous online Water quality monitoring system in our industry.	Not agreed.
4.	The Environmental Clearance has been granted to M/s A.K.I. India Pvt. Ltd.	The Legal status of the company has been changed from 'Private Limited' to 'Limited'. Now the company will be A.K.I. India Ltd. Instead of M/s A.K.I. India Pvt. Ltd. Thus, we request to issue Corrigendum in Environmental Clearance in name of A.K.I. India Ltd. Instead of M/s A.K.I. India Pvt. Ltd.	May be considered based on the requisite documents by the ministry.

33.31. Enhancement of Production capacity of existing Pellet Plant from 0.6 Million TPA to 0.8 Page 5 of 12 Million TPA along with Upgradation of Existing 0.7 Million TPA Iron Ore Grinding Unit to 1.0 Million TPA Iron Ore Grinding & Beneficiation Plant and 1.2 Million TPA Integrated Steel Plant & 260 MW (110 MW WHRB + 150 M1W Thermal) Power Plant by **M/s Sarda Energy and Minerals Limited** located at Phase1 of Siltara Industrial Growth Center,Villag–Mandhar, Tehsil – Dharsiwa, Chhattisgarh [Online proposal No. IA/CG/IND/71247/2017; MoEFCC File No. J-11011/45/2012-IA-II(I)] **- Corrigendum to Terms of Reference for expansion issued on 16.01.2018.**

1.0 **M/s Sarda Energy and Minerals Limited** made an application vide online proposal no. **IA/CG/IND/71247/2017** dated 2nd June 2018 seeking corrigendum to the Terms of Reference issued vide even letter number dated 16th January 2018.

2.0 It was informed that Iron ore Pellet plant in Phase-I and Iron Ore beneficiation of 2000000 TPA was missed in the table at para 3 of the letter, though these were part of the application. Therefore, requested to issue the corrigendum as follows:

The table at para 3 of page 1 of ToR issued vide F.No. J-11011/45/2012- IA-II(I) dated 16th January 2018 is substituted as:

S. No.	Project Details	Existing Capacity (TPA)	Capacity Enhancement Upgradation/Proposed Capacity (TPA)		Total (TPA)
			Phase-I	Phase II	
A	Enhancement of Production Capacity				
1	Iron Ore Pellet Plant with Coal Gasifiers Plant	6,00,000	2,00,000 (Capacity Enhancement)		8,00,000
B	Upgradation				

2	Iron Ore Grinding Unit	7,00,000			
	To Iron Ore Grinding & Beneficiation Plant		10,00,000 (Upgradation)		10,00,000
C	Expansion				
3	Iron Ore Pellet Plant		12,00,000	-	12,00,000
4.	Coal Gasifiers Plant (20 Nos)		54092 Nm^3/Hr	-	54092 Nm^3/Hr
5.	Iron Ore Grinding &Beneficiation Plant		20,00,000	-	20,00,000
6.	Coke Oven		2,70,000	2,70,000	5,40,000
7.	Sinter Plant		3,25,000 ($1x15m^2$)	3,25,000 ($1x15m^2$)	6,50,000
8.	Blast Furnace		6,00,000 ($1x650m^3$)	6,00,000 ($1x650m^3$)	12,00,000
9.	Electric Arc Furnace		6,00,000 (1x90T)	6,00,000 (1x90T)	12,00,000
10.	CCM-Cast Billets		5,82,500 (2x3 Strand)	5,82,500 (1x4Strand)	11,65,000
11.	Rolling Mill (TMT, Wire Road, Section & other long products)		5,00,000	5,00,000	10,00,000
12.	Sponge Iron Plant		3,00,000 (2x500 TPD)	3,00,000 (2x500 TPD)	6,00,000
13.	WHRB Power Plant (WHRB) based on coke oven & BF gases		1x35 MW	1x35 MW	70 MW
14.	WHRB Power Plant (Waste Heat from Sponge Iron Kilns)		20 MW	20 MW	40 MW
15.	Thermal Power Plant		-	150 MW	150MW
16.	Oxygen Plant		1x150 TPD	1x150 TPD	300 TPD
17.	Ductile pipe with induction furnace		2,00,000 (2x15 Ton)	2,00,000 (2x15 Ton)	4,00,000

3.0 After verification of the Form-1 and pre-feasibility report, the committee recommended for corrigendum as requested.

33.32. Power Plant (60 MW) of **M/s Gulbarga Power Private Limited** to Existing Clinker Plant (4.0 MTPA), Cement Plant (5.5 MTPA), Lime Stone Mine (6.0 MTPA, 725 ha) of **M/s Kalburgi Cement Pvt Ltd– Merger of Two ECs.**

1.0 The project proponent has made application for transfer Environmental Clearance of Power Plant (60 MW) from M/s Gulbarga Power Private Limited to M/s Kalburgi Cement Private Limited

2.0 Aforesaid Power Plant (60 MW) was part of Environmental Clearance of Cement Plant issued to M/s Vicat Sagar Cement Private Limited vide letter J-11011/457/2008 dated 10th June 2009 for

setting up of Clinker Plant (4.0 MTPA), Cement Plant (5.5 MTPA), Lime Stone Mine (6.0 MTPA, 725 ha) including Captive Power Plant (60 MW).

3.0 Part of the Environmental Clearance for the Captive Power Plant (60MW) was transferred to M/s Gulbarga Power Private Limited vide letter No. J-11011/457/2008-IA.II(I) dated 2nd May, 2012.

4.0 Later on, the name of the company, M/s Vicat Sagar Cement Private Limited, has been changed as M/s Kalburgi Cement Private Limited. Accordingly, the Environmental Clearance was transferred to M/s Kalburgi Cement Private Limited vide letter J-11011/457/2008 -IA.II(I) dated 24th February, 2017.

5.0 Now, M/s Gulbarga Power Private Limited has been amalgamated with M/s Kalburgi Cement Private Limited. The PP made application for transfer Environmental Clearance of Power Plant (60 MW) to M/s Kalburgi Cement Private Limited.

6.0 The National Company Law Tribunal (NCLT), Hyderabad bench in its hearing on 24th March 2017, approved the Scheme of Amalgamation between M/s Gulbarga Power Private Limited (Transferor) and M/s Kalburgi Cement Private Limited (Transferee) with effect from appointed date as 1st April 2016.

7.0 Further, the PP has submitted the following the documents for transfer of Environmental Clearance.

i. Undertaking of M/s Kalburgi Cement Private Limited (on Affidavit on non-judicial stamp paper) for complying all the conditions stipulated in the Environmental Clearance issued in the name of M/s Gulbarga Cement Private Limited.

ii. A copy of Board resolution, i.e., Extracts of Minutes of Meeting of the Board of Directors of M/s Kalburgi Cement Private Limited held on 17th August 2016.

iii. A copy of Order of the National Company Law Tribunal, Hyderabad in the matter of the scheme of amalgamation and arrangement of M/s Gulbarga Power Private Limited and M/s Kalburgi Cement Private Ltd and Other Respective Shareholders & Creditors.

8.0 In this context, it was noted that the parent company (M/s Vicat Sagar Cement Private Limited) transferred the Power Plant to other company (M/s Gulbarga Power Private Limited), i.e., partial transfer of Environmental Clearance. Later on, name of the parent company was changed to M/s Kalburgi Cement Private Limited. After construction and implementation of 60 MW Power Plant, M/s Gulbarga Power Private Limited has been amalgamated with M/s Kalburgi Cement Private Limited. Consequently, the ownership on the Power Plant (60 MW) was changed to M/s Kalburgi Cement Private Limited.

9.0 However, the power plant is situated in the complex of the Cement Plant of M/s Kalburgi Cement Private Limited for which the Environmental Clarence was granted vide F.No. J-11011/457/2008-IA.II(I) dated 10th June 2009 combindly and later on it was transferred.

10.0 In view of the above, the matter was referred to the Expert Appraisal Committee.

11.0 The proposal for merging was presented by the representatives of both the parties. After detailed deliberations, the Committee recommends the merger of the two environmental clearances given to the project proponents individually with the following additional conditions:

a) The new integrated environment clearance will have all the conditions imposed by individual environment clearances.

b) The project proponents informed that they already have a green belt over an area of 43 per cent by a project site. It was decided with mutual consent that the green belt would be increased from 43 per cent to 45 per cent within a period of 2 years.

c) The project proponents have agreed to reduce the heat rate of the boiler from the present level of 3148kcal/kwh to atlest by 2.5 %.

d) The project proponent would install air cooled condensers in place of water cooled condensers to save water.

33.33. Expansion of sponge iron plant (6X100 TPD- 1,80,000 TPA Sponge iron) and installation of Ferro Alloy Plant (2x9 MVA-36,960 TPA of Ferro Manganese) and Captive power plant (2X4 MW WHRB and 2x6 MW pf AFBC Boiler – Total 20 MW) at village Gajasimul, P.O. Jhagram, Dist West Midanpur, West Bengal by **M/s Rashmi Ispat Limited** [Online Proposal No. IA/WB/IND/4876/2011; MoEFCC File No. J-11011/414/2008-IA.II(I)]– Extension of validity of EC.

1.0 **M/s Rashmi Ispat Limited** made an application vide online proposal no. IA/WB/IND/4876/2011 dated 27th June 2018 seeking extension of validity of environmental clearance for the proposed expansion of sponge iron plant (6X100 TPD- 1,80,000 TPA Sponge iron) and installation of Ferro Alloy Plant (2x9 MVA-36,960 TPA of Ferro Manganese) and Captive power plant (2X4 MW WHRB and 2x6 MW pf AFBC Boiler – Total 20 MW) at village Gajasimul, P.O. Jhagram, Dist West Midanpur, West Bengal vide F.No. J-11011/414/2008-IA.II(I) dated 28th June, 2011 and amendment in Environmental clearance for installation of induction furnace in place of electrical arc furnace.

Details submitted by the PP:

2.0 Rashmi Ispat Limited (RIL) was promoted in the year 1992 and a 100 TPD sponge iron manufacturing plant was set up in 2001. In 2003, another 100 TPD sponge iron plant was commissioned followed by another 100 TPD sponge iron plant in 2006 taking total plant capacity to 3 X 100 TPD at village Village: Gajasimul, P.O: Jhargram, District: West Midnapore, West Bengal.

3.0 The Environment Clearance (EC) was granted for the Expansion of Sponge Iron Plant (6 x 100 TPD- 1,80,000 TPA of Sponge Iron) and installation of Ferro Alloy Plant (2 x 9 MVA-36,960 TPA of Ferro manganese) and Captive Power Plant (2 x 4 MW of WHRB and 2 x 6 MW of AFBC Boiler - 20 MW of captive power generation) at Village Gajasimul, P.O. Jhargram, District West Midnapore in West Bengal in the name of M/s. Rashmi Ispat Ltd. by the MoEFCC, New Delhi vide letter no. J-11011/414/2008-IA-II (I) dated 28thJune 2011.

4.0 Consent to Establish has been obtained from West Bengal State Pollution Control Board vide memo no. 6o-2N-117/2008(E) dated 13.02.2007 and so far, completed 75% of the work. Remaining work will be in operation within a year.

5.0 It was also proposed for change in technology of Ferro Alloy Plant from 2 x 9 MVA Ferromanganese Furnaces to 2 x 12 MT Induction Furnaces. The details of existing EC, proposed changes, final configuration after modification is as follows:

Plant Name	Unit Name	As per EC dated 28th June, 2011		Proposed Revised Configuration		Remark
		No. & Capacity	Total Production	No. & Capacity	Total Production	
Sponge Iron	DRI Kiln	6 x 100 TPD	1,80,000 TPA	6 x 100 TPD	1,80,000 TPA	No change
Power Plant	WHRB Boiler	2 x 4 MW	8 MW	2 x 6 MW	12 MW	-
	AFBC Boiler	2 x 6 MW	12 MW	2 x 6 MW	12 MW	No change
Ferro Alloy Plant	Submerged Arc Furnace	2 x 9 MVA	36,960 TPA	-	-	Change in technology from Submerged Arc Furnace to Induction Furnace
Steel Melting Shop & Continuous Casting Machine	Induction Furnace	-	-	2 x 12 MT	36,720 TPA	Final Product will be MS Billet

6.0 A brief comparison for 2 x 9 MVA Ferromanganese Furnace to 2 x 12 MT Induction Furnace is given below:

Sl. No	Item	No. 2 X 9 Ferromanganese furnace (Electric Arc Furnaces)	2 X 12 Induction Furnace
1	Raw Material	Manganese ore, coke, & fluxes (such as limestone, dolomitic limestone and quartzite)	Sponge Iron, scrap & limestone/dolomite.
2	Land Area (ha)	5 Acre (~2.02 ha)	5 Acre (~2.02 ha)
3	Water Requirement (KLD)	20	1
4	Power requirement (MW)	18 MW	8 MW
5	Specific Power Consumption, KWh/ton	2174 KWH/TON	680 – 720 KWH/TON
6	Solid Hazardous Waste generation	8-10% of total charge mix	1-2% of total charge mix (90% Sponge Iron and 10% scrap)

7	Impact on Ambient Air Quality	Gaseous emissions are there such as Carbon Monoxide.	Negligible gaseous emission are there

Recommendation of the committee:

7.0 After detailed deliberation, the Committee recommended for extension of validity of environment clearance for another period of 3 years and recommended for amendment regarding installation of induction furnace in place of electric arc furnace.

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. **<u>Forest and wildlife related issues (if applicable):</u>**

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.

****

ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

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

--

ADDITIONAL ToRS FOR PELLET PLANT

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

–

ADDITIONAL ToRs FOR CEMENT INDUSTRY

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

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

i. A note on pulp washing system capable of handling wood pulp shall be included.

ii. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln

iii. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for *Eucalyptus/Casuarina* to produce low kappa (bleachable) grade of pulp.

iv. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.

v. A commitment that no extra chlorine basebleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills.Plan for reduction of water consumption.

****

LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

--

COKE OVEN PLANT

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

--

ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

1. Type of the project – new/expansion/modernization
2. Type of fibres used (Asbestos and others) and preference of selection from 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.

--

INDUCTION/ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE

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

--

METALLURGICAL INDUSTRY (FERROUS AND NON-FERROUS)

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

LIST OF PARTICIPANTS OF EAC (I) IN 33rd MEETING OF EAC (INDUSTRY-I) HELD ON 9th to 11th July, 2018

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