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

SUMMARY RECORD OF THE TWENTIETH(20th) MEETING OF EXPERT APPRAISAL COMMITTEE HELD ON 10TH–12TH JULY 2017 FOR ENVIRONMENTAL APPRAISAL OF INDUSTRY-I SECTOR PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The Twentieth meeting of the Expert Appraisal Committee (EAC) for Industry-I Sector as per the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-I Sector Projects was held on 10th – 12th July 2017 in the Ministry of Environment, Forest and Climate Change. The list of participants is annexed.

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

20.2 Confirmation of the minutes of the 19th Meeting

The minutes of the 19th meeting, as circulated were confirmed.

DATE:10th July 2017

20.3. Expansion in production capacity (47850 to 1,13,850 TPA) of existing cement manufacturing plant (Only Grinding unit) by addition of ball Mill having capacity 200 TPD at Village Pathrala, Rural Focal Point, Tehsil & District Bathinda, Punjab by M/s New Century Cement Company - [Online Proposal No. IA/PB/IND/65681/2017, MoEF&CC File No. J-11015/622/2010-IA. II (I)] – Terms of Reference.

1.0 The proponent has made online application vide proposal no. **IA/PB/IND/65681/2017** dated 25th June 2017 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under category 'A' of the Schedule of EIA Notification, 2006 as the project attracts the general condition due to location of the project within 5 Km radius of interstate boundary of Haryana State. Therefore, the proposal is appraised at the Central Level.

2.0 **M/s New Century Cement Company** is a cement manufacturing unit (grinding unit), situated at Village Pathrala, Rural Focal Point, Tehsil & District- Bathinda, Punjab State operating since October 2000. The project was granted Environmental Clearance from the Ministry vide letter no. J-11011/622/2010-IA-II(I) dated 6th March 2012 for the installed capacity of 47,850TPA. Consent to Operate was accorded by State Pollution Control Board vide letter no. 3425 & 3423 dated 30th August 2012.

3.0 Now, it is proposed to increase the installed capacity from 47850 to 1, 13,850 TPA by addition of ball Mill having capacity 200 TPD. The details of the existing plant, proposed expansion and final capacity is given below:

Sl	Description	Existing Capacity	Proposed Expansion	Final Capacity (After expansion)

1	Portland Pozzolana Cement	4780 TPA	66000 TPA	113850 TPA

4.0 The project site is bounded between Latitudes from 29°59'18.82" to 29°59'17.23"N and Longitude from 74°46'21.93" to 74°46'26.02"E. The total land of 1.25 acres/5058m^2/0.5058Hectare is available for the existing project and its expansion. No additional land is required to acquire for expansion.

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

6.0 The capital cost of the project after expansion is about Rs. 160 Lakh including capital cost of existing plant Rs. 70 Lakh.Fund provision of pollution control measures is 23 Lakh including Rs. 8 Lakh for existing plant. Proposed employment generation from proposed project will be 4 to 5person as direct employment and total Number of manpower after expansion will be 25 persons.

7.0 Raw material requirement of the existing and proposed expansion along with source as follows:

Raw Material	Quantity (in TPA)			Source of Raw Material
	Existing	Proposed	Total	
Clinker	31102	42950	74052	Cement Plants in Punjab & Rajasthan
Gypsum	1440	1980	3420	Gypsum from Rajasthan
Fly Ash	15316	21120	36436	Thermal Power plants LehraMohabbat, Punjab.

8.0 The existing power requirement of the unit is 500 KW. The proposed power requirement of the unit will be 250KW. After expansion power demand will be 750 KW and will met from PSPCL. D.G. set of 62 KVA will be installed for office use only.

9.0 The existing water consumption is 5KLD. Water Consumption after expansion will be 6 KLD which will be met through an existing tube well. Septic tank already been provided for treatment of domestic effluent. Treated effluent will be used on land for plantation in premises and Zero Liquid Discharge will be adhered.

10.0 There will not be any solid waste generation in the industrial process.

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

12.0 The PP has made detailed presentation on the proposal along with EIA Consultant. The committee observed that detail of existing plant; land use break up; details of land area indentified for separate parking; details of ground water permission; water balance; layout showing the detail of green belt is not provided.

13.0 After detailed deliberations, the Committee desired following information for further consideration of the proposal.

i. Lay out plan showing the land identified for parking, green belt covering 33% of the total area using appropriate colour code shall be submitted.

ii. Detailed Land use breakup for different activities including industrial area, roads, green belt, parking, etc. shall be submitted.

iii. Copy of permission for withdrawal of ground water for existing plant shall be submitted.

iv. Technical specifications and efficiency of bag filter provided in the existing plant shall be submitted

v. The detailed water balance diagram shall be submitted

14.0 Therefore, the proposal is deferred for the Additional details.

20.4. Proposed Expansion of Integrated Cement Plant - Clinker (2x2.6 to 3x4.5 Million TPA), Cement (2x3.0 to 3x5.5 Million TPA), Captive Power Plant (25 to 125 MW) and Waste Heat Recovery Power Plant (30 to 100 MW) at Village: Khapradih, Tehsil: Simga, District: Balodaabazar- Bhatapara (Chhattisgarh) by M/s. Shree Raipur Cement Plant (A unit of Shree Cement Ltd.)- [Proposal No. IA/CG/IND/65209/2017. MoEF&CC File. No. J-11011/235/2008-IA II (I)] - Terms of Reference for Expansion.

1.0 The proponent has made online application vide proposal no. IA/CG/IND/65209/2017dated 5th June 2017 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants, under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central Level.

2.0 M/s. Shree Raipur Cement Plant (A unit of Shree Cement Limited) is proposed Expansion of Integrated Cement Plant - Clinker (2 x 2.6 to 3 x 4.5 Million TPA), Cement (2 x 3.0 to 3x 5.5 Million TPA), Captive Power Plant (25 to 125 MW) and Waste Heat Recovery Power Plant (30 to 100 MW) at Village: Khapradih, Tehsil: Simga, District: Balodaabazar-Bhatapara (Chhattisgarh).

3.0 The existing Cement Plant for the capacity of Clinker: 2 x 2.6 Million TPA; Cement: 2 x 3.0 MTPA; CPP: 25 MW; WHRS: 30 MW; Synthetic Gypsum: 65 TPH; DG. Sets: 2000 KVA was accorded environmental clearance vide File No. J-11011/235/2008-IA II (I) dated 5th September 2016. Consent to Operate was accorded for Unit-1 by CECB under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 vide letter no. 5901/TS/CECB/2017/Naya Raipur dated 4thFebruary, 2017 & under section 21 of Air (Prevention & Control of Pollution) Act, 1981 vide letter no. 5903/TS/CECB/2017/Naya Raipur dated 4th February, 2017 and valid up to 3rd February, 2018.

3.0 M/s. Shree Raipur Cement Plant (A unit of Shree Cement Ltd.). is now proposing for Expansion of Integrated Cement Plant - Clinker (2 x 2.6 to 3 x 4.5 MTPA), Cement (2 x 3.0 to 3

x 5.5 MTPA), Captive Power Plant (25 to 125 MW) and Waste Heat Recovery Plant (30 to 100 MW). Details of the products with capacities are given in the table below:

Particular	Unit	Existing Status	Existing Granted Capacity	Additional Proposed Capacity (Million TPA)	Total Capacities After Proposed Expansion (Million TPA)
Clinker* (Million TPA)	Unit - I & II	Unit I - Running, Unit II - Under Construction	2 units x 2.6 = 5.2	2 units x 1.9 = 3.8 (1.0 in first phase by internal modifications and balance 0.9 in second phase by installation of additional pre-heater in each unit)	2 units x 4.5 = 9.0
	Unit - III	Proposed	Nil	1x4.5	4.5
	Total	--	5.2 (2 x 2.6)	8.3	13.5 (3 x 4.5)
Cement (Million TPA)	Mill - I & II	Mill I - Running, Mill II - Yet to install	2 x 3.0 = 6.0	2 x 2.5 = 5 (1.4 MTPA by modification in VRM & balance 1.1 MTPA by installation of Ball Mill / VRM in each mill)	2 x 5.5 = 11.0
	Mill - III	Proposed	Nil	1 x 5.5 (4.4 MTPA by VRM & balance 1.1 MTPA by installation of Ball Mill/VRM)	5.5
	Total	--	2 x 3.0 = 6.0	10.5	16.5 (3x5.5)
CPP (MW)	--	Running	25	100 (in phased manner)	125
Waste Heat Recovery Power Plant (MW)	--	15 MW Running; and balance 15 MW under Construction	30	70 (in phased manner)	100

Synthetic Gypsum Unit (TPH)	--	Yet to install	65	Nil	65
D.G. Set (KVA)	--	2 * 250 KVA running; balance yet to be installed in phased manner	2000	Nil	2000
*Clinker will also be sent to the sister grinding units, market sale and receive from outside if clinker unit is not in operation or shortfall of clinker.					

4.0 The geographical coordinates of the project site are bounded between Latitudes from 21° 35' 41.84" N to 21° 36' 29.06" N and Longitude from 82°02'14.24" E to 82° 3'6.17" E covered in Survey of India Topo Sheet No. 64 K/2. Proposed expansion will be done within the existing plant area, which is 159.256 ha. Hence, no additional land will be required. Out of total project area, about 52.55 ha (33% of the total plant area) will be developed as green belt/plantation.

5.0 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.Mahanadi Canal (~0.5 km in E direction);BanjariNala (~3.0 km in NW direction);KukardihTalav (~6.5 km in NE direction);TengnaNala (~9.0 km in ESE direction);ChitawarNala (~3.0 km in SE direction);KhorsiNala (~6.5 km in SE direction);JhorkiNala (~6.5 km in SSE direction); andAmeri Diversion Canal (~4.8 km in W direction) are presnt within the 10 Km of the project boundary.

6.0 The capital cost of the project is about Rs. 4489.12 Crores including capital cost of Rs. 3392.31 Crores for the proposed expansion.The capital cost for the environment protection measures of the project is about Rs. 185 Crores including capital cost of Rs. 140 Crores for the proposed expansion.

7.0 Existing Manpower is 1600 persons and additional manpower required for proposed expansion is 650 persons. Total Manpower requirement after proposed expansion will be 2250 persons.

8.0 Cement Manufacturing Process In the cement plant, the clinker production and manufacturing processes involves crushing, blending, grinding, heating and cooling. Clinker along with fly ash, gypsum and slag is being / will be ground in Ball Mill / VRM to manufacture OPC, PPC and PSC cements. Captive Power Plant In the Captive Power Plant, Indian and Imported Pet coke & Coal will be fed in the boiler, where steam will be generated which will move turbine to produce electrical energy.

9.0 Raw material required along with estimated quantity, likely source, and mode of transport of raw material is as follows:

Material	Quantity in MTPA	Source	Mode of transport
Lime Stone	21.60	Captive lime stone mine	Covered Conveyor belt

Indian and Imported Pet coke & Coal	Pet coke:1.35 Coal: 2.16	Local petroleum refinery / Jamnagar pet coke/ USA/SA/ Indonesia etc	Road/Rail
Iron ore & Red Mud	0.21	ShriBajrang Power &Ispat Ltd. Tilda / Bharat Aluminium Company Ltd.(BalcoKorba	Road/Rail
Indian, Imported mineral gypsum, synthetic and chemical Gypsum	1.15	Swiss Singapore Overseas Pvt. Ltd. Oman Vizag; Coromondal Inter National Ltd. Visakhapatnam Vizag; Synthetic gypsum plant	Road/Rail/ship
Fly Ash	5.77	CPP, GMR Chhattisgarh Energy Ltd Tilda, Sarda Energy & Minerals Ltd Siltara, NSPCL Limited Bhilai, NTPC Limited Sipat, KSK Mahanadi Power Co. Ltd Akaltara, Chhattisgarh Power Gen. Co. Ltd. (CSEB) Marwa, D B Power Limited Raigarh	Road
Slag	8.25	MetalmanSiltara, JayaswalNeco Industries Ltd Siltara, Jindal Steel & Power Ltd Raigarh	Road/Rail

10.0 A railway line from SM-4 Station to end of plant yard i.e. 13.6 KMs is already proposed in phase-wise manner. Land acquisition for the same is under process. No new road or sea traffic will be required during construction or operation of proposed expansion project.

11.0 Existing Power Requirement - 29.2 MW. Additional Power Requirement - 127.6 MW. Total Requirement after proposed expansion - 156.8 MW. The required power will be sourced from Existing and Proposed Captive Power Plant, WHRB & D.G. Set (for back-up).

12.0 Total water requirement after the proposed expansion project (Existing + Expansion) will be 3935 m^3/day. Permission for 3000 KLD has already been granted by CGWA vide letter no. 214(36)/NCCR/CGWA/2008-569 dated 08/04/2015. Balance will be sourced from rain water collected in pits.No waste water generation from the proposed expansion project. (Zero Liquid Discharge).

13.0 No industrial solid waste is being / will be generated from the cement manufacturing process. Dust collected from various pollution control equipment is being / will be totally recycled into the process. Fly ash generated from CPP is being / will be utilized in manufacturing of PPC grade cement.

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

15.0 The PP has made detailed presentation on the proposal along with EIA Consultant M/s J.M. EnviroNet Private Limited [Sl. No. in QCI List - "87" (as updated on 5th June, 2017)]. The committee observed that the proponent has obtained Environmental Clearance for Unit-I in 2011, completed the construction &comissioned. Whereas, the PP obtained environmental clearance

for expansion of existing plant to set up Unit-II in September, 2016 and implementation of the expansion is in progress. Now, PP proposed to expand further for setting up of Unit-III.

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

i. Public Hearing to be conducted by the concerned State Pollution Control Board.

ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.

iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

iv. The PP shall submit an action plan for carrying out additional green belt with 16000 plants above the mandatory requirement of 33% preferable within the premises of the plant.

v. Certificate compliance of earlier EC from the Regional office of MoEF&CC shall be submitted along with EIA/EMP

vi. The PP shall submit justification of requirement of 100 MW Captive Power Plant shall be submitted in the EIA/EMP report.

vii. Pet coke is not allowed in the Captive Power Plant

viii. Specific consumption of power shall be reduced to present level of 58 KW/T of Cement production

ix. The PP shall submit an action plan for implementation of solar power in the premises wherever possible.

20.5. Mini Blast Furnace (1 X 65 m^3) and Sinter Plant (1 X 12 m^2) of M/s Purulia Metal Casting Private Limited, located at Village Bongabari, P.O. Vivekanandanagar, District Purulia, West Bengal [Online proposal No. IA/WB/IND/65443/2016, MoEF&CC File No. J-11011/236/2016-IA.II(I)] – Environmental Clearance based on ToR.

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

2.0 The proposed project Mini Blast Furnace (65 m^3) and Sinter Plant (12 m^2) of M/s Purulia Metal Casting (P) Ltd. (Pig Iron Division) located in Village: Bongabari, P.O.: Vivekanandanagar, District: Purulia, State: West Bengal was initially received in the Ministry on 29.10.2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 13th meeting held on 23rd to 24th November 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry had prescribed ToRs to the project on 31st January, 2017 vide File No. J-11011/236/2016-IA.II (I).

3.0 The project of M/Purulia Metal Casting (P) Ltd. (Pig Iron Division) located in Village:Bongabari, P.O.:Vivekanandanagar, District :Purulia, State : West Bengal is for setting up of a new Mini Blast Furnace (65 m^3) and Sinter Plant (12 m^2) for production of Pig Iron Production 59,310 tonnes per annum (TPA). The proposed capacity for different products for new site area as below:

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

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

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

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

7.0 The salient feature of the proposed project: Mini Blast Furnace & Sinter Plant is a material intensive process, employing various plant and equipment. To ensure an efficient and economically favourable operation, it is essential that the layout of the shop provide easy access to all operational areas and unimpeded movement of input materials and manufactured products. The major production facilities are receiving and storage of essential raw materials, such as iron ore, lime stone, dolomite, coke breeze, fuel oil etc. and miscellaneous supplies. The Sinter Plant comprises of one (1) 12 m^2 Sinter machine, raw material handling system, burden preparation unit, mixer unit, screening & crushing station and transportation of sinter to Mini Blast Furnace. The Mini Blast Furnace consists of manufacturing facility of hot metal comprises of one (1) Mini Blast Furnace of 65 m^3 capacity with blast heating system, blowing system, raw material handling system, slag granulation system, ladle preparation system, ladle transportation system, pig casting machine & auxiliary services with plant de-dusting units. This is supported by

services and utilities for water and compressed air, electric power, fuel, ancillary facilities ablution block, drainage, roads, sewerage, de-dusting etc.

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

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

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

11.0 Baseline Environmental Studies were conducted during Winter season i.e. from December 2016 to February 2017. Ambient air quality monitoring has been carried out at 8 locations during December to February and the data submitted indicated: Particulate matter (PM_{10}) ranges from 52 to 97 $\mu g/m^3$; Particulate matter ($PM_{2.5}$) ranges from 19 to 51 $\mu g/m^{3;}$ Sulphur dioxide (SO_2) is 5 to 19 $\mu g/m^{3;}$ Oxides of Nitrogen (NO_x) are 13 to 38 $\mu g/m^3$. The results of the modelling study indicate that the maximum increase of Ground Level Concentration (GLC)for the proposed project is 0.78 $\mu g/m^3$ with respect to the PM_{10}; and 2.39 $\mu g/m^3$ with respect to SO_2 and 0.59 $\mu g/m^3$ with respect to NO_x.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. p^H: 6.90 to 7.46; Total Hardness: 181 to 308 mg/L;Chlorides: 46 to 124 mg/L and Sulphate: 18 to 58 mg/L. Heavy metals are within the limits. Surface water samples were analysed from 8 locations. p^H: 7.50 to 7.89;DO: 5.0 to 6.2 mg/L;BOD: 4 to 7 mg/L and COD from 15 to26 mg/L.

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

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

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

16.0 The Public hearing of the project was held on 25.05.2017 in the premises existing Plant of Purulia Metal Casting (P) Limitedlocated atBarakar Road, Village: Bongabari, P.O. Vivekanandanagar, Dist - Purulia, West Bengal under the Chairmanship of Additional District

Magistrate (Development), Purulia, West Bengal for the proposed project of Pig Iron Production of 59,310 TPA by Mini Blast Furnace (65 m^3) and Sinter Plant (12 m^2). The issues raised during public hearing are employment; pollution; social infrastructure; etc. An amount of 65 Lakhs (2.5% of Project Cost: 25.50 Crores) has been earmarked for Enterprise Social Commitment (ESC) for five years.

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

18.0 Greenbelt will be developed in 1.65 acres which is about 33 % of the total land area (5.0 acres). Greenbelt consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/ MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 1,500 trees/Ha. Total no. of 1,005 saplings will be planted.

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

20.3 After detailed deliberations, the committee desired following information

i. Revised action plan for compliance of issues raised during the public hearing.

ii. Revised Entrepreneur Social Commitment plan in the form of project for addressing the issues of public hearing. The fund allocated for ESC shall be used as CAPEX only.

iii. Revised water balance diagram

iv. Revised material balance diagram.

v. Pollution control devises with capacities shall be included in Process flow diagram.

vi. Plan for segregation of stormwater and industrial processed water shall be submitted.

vii. Blast Furnace Gas utilisation and associated calculations shall be submitted.

viii. The details of source of water shall be clearly submitted

ix. Bag house shall be designed for 150% of the rated flow and filter bags shall be PTFT dipped PPS type.

x. Electrical Load list shall be submitted

xi. Revised plotplan incorporating drainage (stormwater and process, material storage, road, gate, assembly point, parking, plantation, firefighting system and plant)

xii. SOx and NOx emission estimation for maximum load operations and mitigation measures

xiii. Hazardous waste disposal protocol and agreement with RAMKY (as proposed by PP)

xiv. Kitchen waste digester for the canteen waste and organic waste.

20.6. Expansion of Steel Plant – DRI Kilns (Sponge Iron from 60,000 to 2,70,000 TPA); Induction Furnace (MS Billets from 48,000 to 3,51,000 TPA); New Rolling Mill (Structural Steel & Rolled products -3,00,000 TPA); WHRB based power plant (from 4 to 24 MW); FBC based power plant (from 4 to 20 MW); Submerged Electric Arc Furnaces (SiMn – 28,800 TPA OR FeMn – 28,800 TPA OR FeSi – 14,000 TPA) at Village Gourmudi, Tehsil Tamnar, District Raigarh, Chhattisgarh by N R Ispat and Power Private Limited. [Online Proposal No. IA/CG/IND/65703/2008, MoEF&CC File No. J-11011/225/2008-IA.II(I)] – Terms of Reference for expansion.

1.0 The proponent has made online application vide proposal no. IA/CG/IND/65703/2008 dated 27th June 2017 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central Level.

2.0 N R Ispat& Power Pvt. Ltd. [NRIPPL], is an existing Steel Plant located at Village: Gourmuri, Tehsil: Tamnar, District: Raigarh, Chhattisgarh. Existing plant has obtained Environment Clearance from MoEF&CC, New Delhi vide F. No. J-11011/225/2008 – IA.II(I) dated 8th June 2009. Accordingly obtained Consent to Establishment and Consent to Operate from the Chhattisgarh Environment Conservation Board and plant is in operation.

3.0 M/s NRIPPL is proposed to expand the capacities of existing Steel plant by increasing the capacity of DRI Kilns (Sponge Iron from 60,000 TPA to 2,70,000 TPA), Induction Furnace (MS Billets from 48,000 TPA to 3,51,000 TPA), New Rolling Mill (Structural Steel & Rolled products -3,00,000 TPA), WHRB based power plant from 4 MW to 24 MW, FBC based power plant from 4 MW to 20 MW & Submerged Electric Arc Furnaces – 2x 9 MVA (SiMn – 28,800 TPA OR FeMn – 28,800 TPA OR FeSi – 14,000 TPA. The details of the existing plant, proposed expansion is given below:

Sl	Units	As per EC accorded dt. 8th June 2009	Plant in Operation	Proposed Expansion	Total Capacity after expansion
1	DRI Kilns	2 x 100 TPD (60,000 TPA)	2 x 100 TPD (60,000 TPA)	2 x 350 TPD (2,10,000 TPA	2 x 100 TPD & 2 x 350TPD (2,70,000 TPA)
2	Induction Furnaces	2 x 10 MT/Heat (60,000 TPA)	2x 8 MT/Heat (48,000 TPA	3 x 15 T, 2 x20 T & 2 x 8 T (3,03,000 TPA	2 x 8 T, 3 x 15 T, 2 x 20 T & 2 x 8 T (3,51,000 TPA)
3	Rolling Mills	1 x 200 TPD (60,000 TPA)	Not established		2 x 500 TPD (3,00,000 TPA
4	Power Plant WHRB	4 MW (2 x 2MW)	4 MW (2 x 2 MW)	20 MW (2 x 10 MW)	24 MW (2 x 2MW & 2 x 10 MW

5	Power Plant FBC	10 MW (1 x 10 MW)	4 MW (1 x 4 MW)	16 MW (1 x 16 MW)	20 MW (1 x 4 MW & 1 x 16 MW)
6	Submerged Electric Arc Furnaces (SEAFs)	--	--	2 x 9 MVA (SiMn – 28,800 TPA OR FeMn– 28,800 TPA OR FeSi – 14,000 TPA	2 x 9 MVA (SiMn – 28,800 TPA OR FeMn – 28,800 TPA OR FeSi – 14,000 TPA)

4.0 It is proposed to manufacture the above products based on the technology, *inter alia*, include production of Sponge Iron through DRI route; production of MS Billets through Induction Furnace with concast; production of Structural steel & Rolled products through Rolling Mill; production of Ferro Alloys through Submerged Electric Arc Furnace route; and power generation through Waste Heat Recovery Boiler & FBC boiler.

5.0 Existing plant is located at Village: Gourmuri, Tehsil: Tamnar, District: Raigarh, Chhattisgarh. Existing plant is located in 52.65 acres of land. Proposed expansion will be taken up partially in the Existing plant (i.e. 52.65 acres) and partially in the land adjacent to the existing plant (i.e. 9.86 acres). Total land after proposed expansion will be 62.51 acres and same is in possession of management. Coordinates of the project site are 22° 0'47.61"N 83°19'51.27"E. The entire project area will fall in the Survey of India topo sheet no. 64 N/8.

6.0 Existing plant is in 52.65 acres of land. Proposed expansion will be taken up partially in the Existing plant (i.e. 52.65 acres) and partially in the land adjacent to the existing plant (i.e. 9.45 acres – Agricultural land). Total land after proposed expansion will be 62.10 acres and same is in possession of management. Of the total area,30.0 Ac. (33%) land will be used for greenbelt developed. No Forest land involved.

7.0 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.Urdana RF (S) – 1.1 Kms., Taraimal RF (N) – 1.0 kms., Barkachhar PF (E) - 7.0 Kms., Khardungari PF (E) - 6.3 Kms., Rabo RF (W) – 2.2 Kms., Samaruma RF (N) - 7.5 Kms. exist within 10 Km. radius of the plant site.

8.0 Total project cost for proposed expansion is approx. Rs. 320 Crores. Proposed employment generation from proposed expansion project will be 100 nos. direct employment and 150 nos. indirect employment.

9.0 Proposed raw material and fuel requirement for expansion project are Iron Ore, Dolomite, Manganese ore, Pet coke, Electrode Paste Scrap, Ferro Alloys. Requirement would be fulfil by external purchase /in house. Fuel Consumption will be mainly Coal & Furnace Oil:

Raw Material		**Quantity (TPA)**	**Sources**	**Mode of Transport**
For DRI Kilns (Sponge Iron) – 2,10,000 TPA				
Iron Ore		3,36,000	Barbil, Orissa NMDC, Chhattisgarh	By rail & road (through covered trucks)
Coal	Indian	2,52,000	SECL Chhattisgarh /	By rail & road

Raw Material		Quantity (TPA)	Sources	Mode of Transport
			MCL Orissa	(through covered trucks)
	Imported	1,89,000	Indonesia / South Africa / Australia	Through sea route, rail route & by road
Dolomite		10,500	Local area	By road (through covered trucks)
For Steel Melting Shop (MS Billets) – 3,03,000 TPA				
Sponge Iron		2,55,000	Own generation & Purchased from outsite	---- By road (through covered trucks)
Scrap		1,08,800	Own generation	----
Ferro alloys		4,590	Local Area	By road (through covered trucks)
For Rolling Mill (TMT bars & Structural Steel) – 3,00,000 TPA				
Steel billets		3,40,000	Own generation & Purchased from outside	---- By road (through covered trucks)
Furnace Oil		11,900 KL	Local area	By road
For FBC Boiler [Power Generation 16 MW]				
Dolochar		63,000	In plant generation	through covered conveyors
Coal	Indian	57,300	SECL Chhattisgarh / MCL Orissa	By rail & road (through covered trucks)
	Imported	15,540	Indonesia / South Africa / Australia	Through sea route / rail route / by road

For Ferro Silicon unit (For 2 x 9 mVA)				
S.No.	**Raw Material**	**Quantity (TPA)**	**Source**	**Mode of Transport**
1	Quartz	16,900	Chhattisgarh / Andhra Pradesh	By Rail & Road (covered trucks)
2	Pet coke	5,600	Chhattisgarh / Bihar	By Rail & Road (covered trucks)
3	MS Scrap	350	Raipur	By Road (covered trucks)
4	Electrode paste	840	Maharashtra / West Bengal	By Rail & Road (covered trucks)

For Ferro Manganese unit (For 2 x 9 mVA)				
S.No.	**Raw Material**	**Quantity**	**Source**	**Mode of Transport**

		(TPA)		
1	Manganese Ore	53,300	MOIL / OMC	By Rail & Road (covered trucks)
2	Pet coke	30,700	Chhattisgarh / Bihar	By Rail & Road (covered trucks)
3	MS Scrap	2060	Raipur	By Road (covered trucks)
4	Electrode Paste	6000	Maharashtra / West Bengal	By Road (covered trucks)

For Silico Manganese unit (For 2 x 9 mVA)				
S.No.	**Raw Material**	**Quantity (TPA)**	**Source**	**Mode of Transport**
1	Manganese Ore	31,700	MOIL / OMC	By Rail & Road (covered trucks)
2	Mn. Slag	18,000	In house generation	----
3	Quartz	7,800	Chhattisgarh / Andhra Pradesh	By Rail & Road (covered trucks)
4	Pet coke	3,200	Chhattisgarh / Bihar	By Rail & Road (covered trucks)

10.0 Power required for construction and during operation of the project will be sourced from Captive power plant & Chhattisgarh State Electricity Board.

11.0 Water consumption for the proposed expansion project will be 1000 KLD and waste water generation from the proposed expansion project will be 168 KLD (160 KLD from Power generation process & 8 KLD from Domestic). Domestic waste water will be treated Septic tank followed by sub-surface dispersion trench and there will be no wastewater generation from the DRI, SMS & Rolling Mill processes, as closed-circuit cooling system will be provided. Boiler blowdown & DM plant regeneration wastewater will be treated in Neutralization tanks and will be mixed in a Central Monitoring Basin (CMB). The treated effluent from CMB will be reused for dust suppression, ash conditioning and for greenbelt development.

12.0 The management of solid waste generated during the process *inter alia* include entire Dolochar generated from DRI will be utilized in the FBC boiler. Slag generated during the manufacturing of the Billets is crushed and after recovery of iron the inert material will be used as landfill and Road construction. Mill scales from Rolling mill will be reused in SMS. Ash generated will be given to Cement / Brick manufacturers. Slag from FeMn will be reused in manufacture of Si-Mn as it contains high SiO2 and Silicon. Slag from FeSi will be given to Cast iron foundries.

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

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

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

i. Public Hearing to be conducted by the concerned State Pollution Control Board.

ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.

iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

iv. Certificate compliance of earlier EC from the Regional office of MoEF&CC shall be submitted along with EIA/EMP

v. Cumulative impact assessment shall be made and presented in the EIA/EMP report

vi. The project proponent shall plan for solar light system for all common areas, street lights, parking around project area.

vii. Management and disposal of hazardous waste as per the Hazardous and Other Waste Management Rules, 2016 shall be addressed in the EIA/EMP

viii. Mechanical sweepers shall be envisaged for regular cleaning of internal roads for prevention of fugitive dust.

20.7. Setting up of SiMn (14,400 TPA) or FeMn (25,200 TPA) or FeCr (15,000 TPA) or FeSi (7,000 TPA) or Pig Iron (25,200 TPA) in the proposed 1 x 9 mVA SEAF in the existing 7.5 MW Power Plant premises [Forward integration] at Khamhardih Village, Pathariya Tehsil, Mungeli District, Chhattisgarh by M/s Real Power Private Limited [Proposal No. IA/CG/IND/65639/2004, Earlier EC No. 4874/TS/CECB/2004; MoEF&CC File No.IA-J-11011/347/2017-IA-II(I)] – Terms of Reference for Expansion.

1.0 The proponent has made online application vide proposal no. IA/CG/IND/65639/2004 dated 22nd June 2017 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central Level.

2.0 M/s Real Power Private Limited (RPPL) is existing 7.5 MW Biomass based Power Plant at Khamhardih Village, Pathariya Tehsil, Mungeli District, Chhattisgarh. Existing plant has obtained Consent to Establishment (CTE) vide letter no. 4874/TS/CECB/2004 Raipur dated 27-11- 2004 from Chhattisgarh Environment Conservation Board.

3.0 M/s RPPL is proposed to setup manufacturing plant of Si-Mn (14,400 TPA) or Fe-Mn (25,200 TPA) or Fe-Cr (15,000 TPA) or Fe-Si (7,000 TPA) or Pig Iron (25,200 TPA) by 1 x 9 mVA SEAF in the existing plant premises. The details of the existing plant, proposed expansion is given below:

Sl	Description	Existing Capacity	Proposed Expansion	Final (After expansion)
1	Biomass based Power Plant	7.5 MW	--	7.5 MW
2	1 x 9 MVA Ferro Alloys plant		Silicon Manganese (SiMn) – 14400 TPA OR Ferro Manganese (FeMn) – 25200 TPA OR Ferro Chrome (FeCr) – 15000 TPA OR Ferro Silicon (FeSi) – 7000 TPA OR Pig Iron – 25200 TPA	Silicon Manganese (SiMn) – 14400 TPA OR Ferro Manganese (FeMn) – 25200 TPA OR Ferro Chrome (FeCr) – 15000 TPA OR Ferro Silicon (FeSi) – 7000 TPA OR Pig Iron – 25200 TPA

4.0 The Plant is located at Khasra No. 1, 4/1, 5, 6/4, 7/4, 8/3, 12, 13/2, 14, 16/2, 16/3, 21/1, 21/2, 21/3, 25/2, 25/3, 26/1, 26/2, 28/2, 30/2, 31/2, 32/1, 32/2, 32/3, 33, 34, 35, 36, 37/1, 37/2, 37/3, 38/1, 38/2, 39/2, 42, 43, Khamhardih Village, Pathariya Tehsil, Mungeli District, Chhattisgarh. The project site is bounded between Latitude 21°56'29.53"N & Longitude 81°59'20.57"E and covered in the Survey of India Topo sheet no. 64 G/13. Existing plant is located in an area of 26.82 acres of land and proposed will be taken up in the existing plant premises only.

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

6.0 The estimated cost for the proposed expansion project will be Rs. 13.0 Crores.The proposed project creates employment to 75 people during construction and 40 people during operation of the proposed project.

7.0 The following will be the raw material requirement for the proposed expansion project:

Sl.	**Material**	**Quantity in TPA**	**Source**	**Mode of transport**
A	For Ferro Silicon unit (For Proposed - 1 x 9 mVA)			
1	Quartz	8,450	Chhattisgarh / Andhra Pradesh	By Rail & Road (covered trucks)
2	Pet coke	2,800	Chhattisgarh / Bihar	By Rail & Road (covered trucks)
3	MS Scrap	175	Raipur	By Road (covered trucks)
4	Electrode paste	420	Maharashtra / West	By Rail & Road (covered trucks)

			Bengal	
B	For Ferro Manganese unit (For Proposed - 1 x 9 mVA)			
1	Manganese Ore	46,620	MOIL / OMC	By Rail & Road (covered trucks)
2	Pet coke	26,840	Chhattisgarh / Bihar	By Rail & Road (covered trucks)
3	MS Scrap	1,790	Raipur	By Road (covered trucks)
4	Electrode paste	5,240	Maharashtra / West Bengal	By Road (covered trucks)
C	For Silico Manganese unit (For Proposed - 1 x 9 mVA)			
1	Manganese Ore	15,850	MOIL / OMC	By Rail & Road (covered trucks)
2	Mn. Slag	9,000	In house generation	--
3	Quartz	3,900	Chhattisgarh / Andhra Pradesh	By Rail & Road (covered trucks)
4	Pet coke	1,600	Chhattisgarh / Bihar	By Rail & Road (covered trucks)
D	For Ferro Chrome unit (For Proposed - 1 x 9 mVA)			
1	Chrome ore	40,000	Sukinda (Odisha) Import (Indonesia)	By Road (Covered Trucks) From Port By Road (Covered Trucks)
2	Pet coke	15,750	Chhattisgarh / Bihar	By Road (Covered Trucks)
E	For Pig Iron unit (FOR PROPOSED - 1 x 9 mVA)			
1	Iron Ore / Sinter	46,000	Barbil, Odisha NMDC, Chhattisgarh	By rail & road (through covered trucks)
2	Coke	21,500	Chhattisgarh / Bihar	By Rail & Road (covered trucks)
3	Limestone	3,000	Chhattisgarh	By Rail & Road (covered trucks)
4	Quartz	1,500	Chhattisgarh / Andhra Pradesh	By Rail & Road (covered trucks)

8.0 Power required for existing plant is 1.0 MW, is being met from existing biomass power plant. Power required for proposed Ferro Alloys plant will be 9 MW and same will be sourced from captive biomass power plant and State Electricity Board.

9.0 Water required for the proposed project will be sourced from Maniyari River. Water required for the proposed project will be 30 cum/day. Permission for Water drawl from WRD, Government of Chhattisgarh will be obtained after the grant of TOR letter for additional water. Dedicated pipeline is already laid for existing plant.

10.0 The management of solid waste generated during the process *inter alia* include slag from FeMn will be reused in manufacture of SiMn as it contains high SiO2 and Silicon; Slag from FeSi will be given to Cast iron foundries; Slag from SiMn will be used for Road construction / will be given to slag cement manufacturers; Slag from FeCr will be processed in Zigging plant for Chrome recovery and TCLP test will be performed, accordingly output will be secured land filled as per the CPCB guidelines; Slag from Pig Iron will be given to nearby Cement plant; Municipal (organic) solid wastes from the Plant will be composted and used as manure for the green belt. Inorganic wastes (Non-biodegradable) will be sent to Authorized SPCB Recyclers; and Spent/Waste oil to the tune of 0.5 Kl/Annum will also be disposed to SPCB authorized recyclers.

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

12.0 The PP has made detailed presentation on the proposal along with EIA Consultant M/s Pioneer Enviro Laboratories and Consultants. The committee observed that the proposed manufacturing plant of Si-Mn (14,400 TPA) or Fe-Mn (25,200 TPA) or Fe-Cr (15,000 TPA) or Fe-Si (7,000 TPA) or Pig Iron (25,200 TPA) by 1 x 9 mVA SEAF in the existing plant premises shall be treated as forward integration of the existing activity of the PP.

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

i. Public Hearing to be conducted by the concerned State Pollution Control Board.

ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.

iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

iv. Certificate compliance of earlier EC from the Regional office of MoEF&CC shall be submitted along with EIA/EMP

v. The project proponent shall plan for solar light system for all common areas, street lights, parking around project area.

vi. Management and disposal of hazardous waste as per the Hazardous and Other Waste Management Rules, 2016 shall be addressed in the EIA/EMP

vii. Detailed specification of Air Pollution Control equipment shall be provided in the EIA/EMP. Post project monitoring shall be clearly specified along with number of stations, location, frequency of monitoring, parameters to be monitored, fund provision, etc.

20.8. Expansion of Ferro Alloys unit – Enhancement in production capacity of Ferro Alloys from 16500 TPA to 33,000 TPA by installing additional 1x9.6 MVA Submerged Arc Furnace with the existing steel plant at plot No.428/2, Phase-I, Industrial Area, Siltara, Raipur by M/s Godawari Power and Ispat Ltd- [Online Proposal No. IA/CG/IND/65739/2017, MoEF&CC File No. J-11011/326/2005-IA.II(I)] – Terms of Reference for Expansion.

1.0 The proponent has made online application vide proposal no. **IA/CG/IND/65739/2017** dated **29thJune 2017** along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl.

No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central Level.

2.0 M/s Godawari Power &Ispat Limited was originally incorporated as IspatGodawari Limited in 1999 to set up facilities to manufacture sponge iron, billets, and generate captive power and commercial operations begin in 2001 with an annual capacity of 1,05,000 tonnes of sponge iron at plot No.428/2, Phase-I, Industrial Area, Siltara, Raipur. The initial project to manufacture sponge iron (capacity - 1,05,000 tonnes), billets (1,00,000 tonnes) and generate captive power (18 MW) becomes fully operational in 2003. During the same year, the company also received a prospecting license to mine iron ore in Chhattisgarh GPIL started the first phase of its expansion in 2004 for sponge iron (1,30,000 tonnes), steel billets (1,00,000 tonnes) and captive power generation (10 MW). This also included setting up new facilities to manufacture ferro alloys (16,500 tonnes) and HB wire (60,000 tonnes), the first big step towards moving up the value chain. The name of the company was changed to Godawari Power and Ispat Limited in 2005. GPIL was also allotted captive iron ore mines in Chhattisgarh. After the first phase of GPIL's expansion plant got completed in 2006, the second phase of the expansion was taken up. This expansion consisted increase in sponge iron capacity by 2,60,000 tonnes, steel billets 2,00,000 tonnes and captive power generation by 25 MW. In 2009, the company proposed expansion of its existing plant by installation of Biomass Power Plant, Iron Ore Beneficiation, Rolling Mill & Arc Furnace. Out of these facilities, installed the Biomass Power Plant and the other facilities are yet to be fully installed. The company has commissioned the Iron Ore Pelletizing plant of capacity of 2.1 LTPA (with 2 kilns of 6,00,000 TPA & 15,00,000 TPA) in the year 2010 & 2013 respectively.

3.0 The details of existing plant and Environmental Clearance obtained from the ministry for Ferro Alloy unit along with other integrated facilities in Phase-I and Phase-II is as follows:

Sl.	Details of Environmental Clearance	Activity	Capacity	Remarks
1	MoEF F. No. J-11011/326/2005-IA II(I) Dated 02/03/2006	Sponge Iron	4,95,000 TPA	Phase-I
		Steel Billet	4,00,000 TPA	
		Ferro Alloys	16,000 TPA	
		Pig Iron	33,000 TPA	
		H.B. Wire	1,00,000 TPA	
		O2 Generation	12,00,000 lakh NM^3	
		N2 Generation	45,00,000 lakh NM^3	
		Fly Ash Brick Plant	165.00 lakhs	
2	MoEF F. No. J-11011/179/2009-IA II(I) Dated 25/08/2009	Iron Ore Beneficiation Plant	10,00,000 TPA	Expansion of Steel Plant (Phase-II)
		Rolling Mill	3,00,000 TPA	
		Arc Furnace	5,000 TPA	
		Biomass Based Power Plant	20 MW	
3	Amendment in EC vide	Ferro Alloys	From 16,500 TPA	Capacity

	F. No. J-11011/407/ 2011-IA II(I) Dated 21/12/2011	Plant	to 15,450 TPA	Expansion
4	Amendment in EC vide F. No. J-11011/179/ 2009-IA II(I) Dated 17/08/2015	Rolling Mill	From 3,00,000 TPA to 4,00,000 TPA	Capacity Expansion
5	MoEF F. No. J-11011/216/2014-IA.II (I) Dated 07/04/2016	Iron Ore Pellet Plant	2.1 MTPA	2 Units : Kiln-I of 0.6 MTPA & Kiln-II of 1.5 MTPA
6	Amendment in EC vide F. No. J-11011/326/ 2005-IA II(I) Dated 12/05/2016	Sponge Iron Plant	From 4,95,000 TPA to 6,50,000 TPA	Capacity Expansion
7	Amendment in EC vide F. No. J-11011/326/2005-IA II(I) Dated 30.06.2017	Steel making Process	Electrical Arc Furnace route to Induction Furnace	Amendment in steel making process

3.0 Since the production capacity is substantially got improved from 2012-13 with the existing 1 x 9.6 MVA arc furnace, due to availability of high grade manganese ore (upto 46%Mn) supplies from MOIL Ltd. Now, the company proposed to increase the production capacity of its Ferro Alloys Plant from initial capacity of 16,500 TPA to 33,000 TPA by installation of an additional 1 x 9.6 MVA Submerged Arc Furnace in the same premises of the company. The details of the proposed expansion and final configuration are given below:

Sl	Name of the Unit	Capacity of manufacturing facilities in Phase-I	Capacity of manufacturing facilities in Phase-II	Total Capacity	After Approval of this Proposal
1	Sponge Iron	2,35,000	2,60,000	4,95,000 (Later amended to 6,50,000)	6,50,000
2	Steel Billet	2,00,000	2,00,000	4,00,000	4,00,000
3	Power	28 MW	25 MW	53 MW	53 MW
4	**Ferro Alloys**	**16,500**	**--**	**16,500**	**33,000**
5	Pig Iron	33,000	--	33,000	33,000
6	H.B. Wire	1,00,000	--	1,00,000	1,00,000
7	Oxygen Plant	--	12,00,000 NM3	12,00,000 NM3	12,00,000 NM3
8	Nitrogen		45,00,000 NM3	45,00,000 NM3	45,00,000 NM3

	Plant				
9	Fly Ash Brick Plant		1,65,00,000 Nos	1,65,00,000 Nos	1,65,00,000 Nos
10	Biomass Power			20 MW	20 MW
11	Rolling Mill	(Under commissioning stage)		4,00,000	4,00,000
12	Iron Ore Pelletization			21,00,000	21,00,000

4.0 The terrain of the land is plain. The project site is bounded between Latitudes from N 21°22'09.5" to 21°22'77.9" and Longitude from E 81°40'64.9" - 81°41'22.7" covered in Survey of India Topo Sheet No. F44/P/11 and F44/P/15. The Ferro Alloys Plant along with the integrated steel manufacturing facilities of the company are located within the total area of 213.657 Acres of existing land in the plant premises of Godawari Power &Ispat Limited, Siltara Industrial Area, Raipur. This Industrial Area is developed by CSIDC Ltd.Within the overall area of GPIL, the land area for existing & proposed Ferro Alloys Plant is 2.30 ha. or 5.68 Acres approx. within CSIDC land. The details of land use planning are as follows:

Sl	Purpose	Area in Acres
1	Total Covered Area	45.078
2	Total Road Area	35.029
3	Plantation already done	70.600
4	Proposed area for Plantation	8.600
5	Total Open Area	51.540
	Total Land Area	213.657

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

6.0 Standard Silico Manganese is smelted at about 1700-1800°C. A conventional Submerged Electric Furnace achieves this. The three carbon electrodes, partially submerged in the charge, are supported on hydraulic cylinders for upward and downward movements to maintain the desired electrical conditions in the furnace. The body of the furnace is cylindrical in shape, and is lined with firebricks, silicon carbide bricks and carbon tamping paste. Two tap-holes are provided at 120°. Apart for draining out both the molten alloy and the slag, during the repair works of one of the tap holes the other will function as standby.

7.0 Ferro Alloys Plant is a running unit. However, the total investment made in the entire manufacturing activities of Phase-I of the company as on 31stDecember, 2016 is Rs.306.94 Crores. An additional investment of approx. Rs.12.50 Crores is proposed for installation of an additional 1 x 9.6 MVA Submerged Arc Furnace for ferro alloys plant expansion. GPIL is providing direct employment to more than 1000 workers.

8.0 The details of raw material requirement are as follows:

Material	Existing Quantity in TPA	Proposed Quantity In TPA	Output
Manganese Ore	34,650	30,525	

High Mn Slag	6,600	6,600	slag
Dolomite	495	3,960	Dust
Quartz	1320	990	Gaseous Output Carbon & Oxide Losses to Atmosphere
Coke / Steam Coal	9,900	13,695	
Electrode Paste	495	413	
MS Item	165	165	
Lancing Pipe	50	50	
Total	53,675	56,398	

9.0 Ferro alloy is a power intensive industry. The present requirement of power is about 9 MW for Ferro Alloy unit and 9 MW of power will be required for proposed expansion. The power requirement is met from existing captive power generation sources.

10.0 The present requirement of water is about 160 KLD for Ferro Alloy unit and 160 KLD of water will be required for proposed expansion. The company has already existing reservoir and water is sourced from Chhattisgarh IspatBhoomi Limited, the nodal agency for supply of water to the industrial areas. The company had entered into an agreement for 10,000 KL/day water by Chhattisgarh IspatBhoomi Limited for industrial / domestic use in its integrated steel facilities. The overall water consumption for the total integrated steel facilities of the company is 8000 KL/Day. Cooling water will be completely recycled in closed look with makeup water. Domestic effluent if any will be taken to effluent recycling system and reused in dust suppression/green belt.

11.0 The slag generated from production of Ferro Manganese is utilized for production of Silico Manganese. Silico Manganese Slag is collected at the point of production, which is not hazardous in nature and the same will be granulized and utilized for construction of roads and filling of low-lying areas, landfill within the plant premises. Plant has enough area for disposal of slag. The management of solid waste generated during the process will as follows:

Sl. No	Solid Waste	Current Quantity (TPA)	Proposed Quantity (TPA)	Management of Solid waste
1	Slag	14,075	18,975	Slag is being used for road embankment in the plant premises and filling of lowlying areas
2	Bag Filter Dust	1,610	1,610	recycled in the process or used for road embankment

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

13.0 The PP has made detailed presentation on the proposal along with EIA Consultant M/s Pollution and Ecology Control. The committee observed that the proponent has obtained various environmental clearances for setting up of different plant in the premises. There is no comprehensive detail envisaged in the report in respect of water requirement; power requirement; raw material requirement; source of raw material; mode of transport; capital requirement; detailed land use planning; etc.

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

i. Public Hearing to be conducted by the concerned State Pollution Control Board.

ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.

iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

iv. Certificate compliance of earlier EC from the Regional office of MoEF&CC shall be submitted along with EIA/EMP

v. Details of progress will have to be submitted as follows:

   a. Against each activity/plant mentioned in various environment clearances, the progress made so far and the time still required for implementation.

   b. Against each activity/plant initiated in the plant area, the progress made so far and the time still required for implementation.

vi. The details of cumulative water requirement; power requirement; employment generation; raw material requirement; capital requirement; fund provision of environmental protection measures; mode of transport of fuel; raw material and finished products etc shall be furnished.

vii. Comprehensive land use plan showing the land requirement of existing facilities, proposed facilities, green belt, storage yards, etc. shall be provided.

viii. The project proponent shall plan for supplementing their energy requirement with solar energy to the maximum possible. A detailed plan for the same shall be submitted.

ix. Management and disposal of hazardous waste as per the Hazardous and Other Waste Management Rules, 2016 shall be addressed in the EIA/EMP

x. Detailed specification of Air Pollution Control equipment shall be provided in the EIA/EMP. Post project monitoring shall be clearly specified along with number of stations, location, frequency of monitoring, parameters to be monitored, fund provision, etc.

20.9. Expansion cum modification of its existing 6 x 9 MVA Submerged Arc Furnace (9312.08 TPM) to 9x9 MVA Submerged Arc Furnace (13,968 TPM) and addition of production of Fe-Cr and Fe-Si to its existing Fe-Mn& Si-Mn (4 products) by M/s Modern India Concast Ltd at Bhuniaraichhak, Haldia, Dist. PurbaMidinipur, West

Bengal – [Online Proposal No. IA/WB/IND/65567/2017, MoEF&CC File No. J-11011/1297/2007-IA.II(I)] - Terms of Reference for Expansion.

1.0 The proponent has made online application vide proposal no. IA/WB/IND/65567/2017 dated 20th June 2017 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central Level.

2.0 M/s Modern India Con Cast Limited is proposed expansion of its existing 6x9 MVA Ferro alloy manufacturing unit manufacturing 9312.08 TPM Ferro alloys (3,846.25 TPM Ferro Manganese & 5,465.83 TPM Silico Manganese), It is proposed to set up new 3x9 MVA Ferro alloy units based on Submerged Arc Furnace technology and manufacture all the four bulk ferro alloys namely Fe-Mn, Si-Mn, Fe-Cr & Fe-Si from all the 9x9 MVA Ferro alloy units totalling 13,968 TPM.

3.0 The existing project located at Bhuniaraichak in PurbaMedinipur District of West Bengal was accorded environmental clearance vide File No.J-11011/1297/2007-IA(II) dated25th September 2008 Consent to Operate was accorded by West Bengal State Pollution Control Board vide Letter No. CO-16816, dated 13.10.2010 (for 4x9 MVA) & CO-16828 dated 02.05.2011(for 2x9 MVA) validity of Consent to Operate is up to 31.12.2023 (for 6x9 MVA).

3.0 M/s Modern India Con Cast Limited is proposed to modify and expand the existing plant. With modification in existing 6x9 MVA Submerged Arc Furnaces Fe-Mn, Si-Mn, Fe-Cr and Fe-Si will be produced and from proposed 3x9 MVA Submerged Arc Furnaces similar products like Fe-Mn, Si-Mn, Fe-Cr and Fe-Si will also be produced and production capacity will be increased from 9,312.00 TPM to 13,968.00 TPM. The details of the existing plant, proposed modification and expansion and final configuration is given below:

Sl	Description	Existing	Proposed modification	Proposed Expansion	Final (After expansion and modification)
1	Configuration	6x9MVA SAF	--	3x9MVA SAF	9x9 MVA SAF
2	Products	Fe-Mn Si-Mn	Fe-Mn Si-Mn Fe-Cr Fe-Si	Fe-Mn Si-Mn Fe-Cr Fe-Si	Fe-Mn Si-Mn Fe-Cr Fe-Si
3	Capacity in TPM	Fe-Mn: 3,846.25 Si-Mn: 5,465.83	Fe-Mn: 1,112.08 Si-Mn: 6,000.00 Fe-Cr: 1,300.00 Fe-Si: 900.00	Fe-Mn: 556.00 Si-Mn: 3,000.00 Fe-Cr: 650.00 Fe-Si: 450.00	Fe-Mn: 1668.08 Si-Mn: 9000.00 Fe-Cr:1950.00 Fe-Si:1350.00
4	Total Capacity in	9,312.08	9,312.08	4656.00	13968.08

	TPM				

4.0 The geographical coordinates of the project site are bounded between Latitudesfrom 22° 5' 30.10 North to 22° 5' 45.49" North and Longitude from 88° 10' 16.54" East to 88°10' 33.31 East. The total land of 15.98 ha is available for the existing project and its expansion. The total land required has already been acquired. No additional land is required to acquire for expansion. Expansion process will be accommodated within the existing area. The details of land use planning are as follows:

Sl	Purpose	Total land requirement (Ha)
1	Existing plant facilities including internal roads	2.50
2	Proposed plant facilities	1.00
3	Raw water reservoir & rain water harvesting pond	3.20
4	Raw material, Waste & Finished product yard	4.00
5	Green Belt	5.28
	Total	15.98

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

6.0 The capital cost of the proposed expansion is about Rs. 100 crores. Proposed employment generation from proposed project will be70 direct employment and about 250 indirect employment.

7.0 Proposed raw material and fuel requirement for project are Mn Ore 2,36,000 TPA, Chromite ore 52,800 TPA; Quartzite 51,700 TPA; Coke 82,500 TPA & Dolomite 30,800 TPA. Requirement would be fulfilled by Imported as well as Indigenous supply. Fuel consumption will be mainly for DG sets.

Material	Quantity in TPA	Source	Mode of transport
Mn Ore of different grade (35-37, 38-48 etc.)	2,90,048	Import/Barbil mines, Odisha/MOIL Ltd	Rai/Road/Ship
Chromite Ore both lump & fines	53,025	Import/Sukinda mines, Odisha	Road
Quartzite	86,675	Jharkhand, Bankura	Road
Coke	1,22,930	Import/Dhanbad/Durgapur	Rail/ship
Dolomite	31,542	Odisha, Bhutan & Import	Rail/ship
Electrode paste	34,000	Graphite India/Maharashtra Carbon Ltd	Road

8.0 22.5 MW of power will be required for the operation which will be sourced from West Bengal State Power Grid.

9.0 800 KLD of water will be required for the total project which will be provided by Haldia Development Authority.The liquid wastes will be treated in ETP and will be reused in the process. Discharge of effluent is not envisaged (Zero Liquid Discharge).

10.0 The management of solid waste generated during the process will as follows:

Sl. No	Solid Waste	Quantity in TPA	Management of Solid waste
1	Fe-Mn slag	20,000	To be fully used as raw material for Si-Mn production
2	Si-Mn slag	1,09,000	Can be sold for land fill and paver block manufacturing
3	Fe-Cr slag	23,600	It is a refractory material for sale/road construction after alloy recovery & TCLP test
4	Fe-Si slag	750	Process is slag less, however small amount generation depending on impurities in Quartz-to be used SiMn production

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

12.0 The PP has made detailed presentation on the proposal along with EIA Consultant M/s Global Tech Enviro Experts Private limited, Bhubaneshwar.

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

i. Public Hearing to be conducted by the concerned State Pollution Control Board.

ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.

iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

iv. Certificate compliance of earlier EC from the Regional office of MoEF&CC shall be submitted along with EIA/EMP

v. Analysis of the ore from the probable source shall be made for presence of hexavalent chromium

vi. The protocol for TCLP test shall be given in the EIA/EMP including action plan for disposal of ferrochrome waste in TSDF in case of presence of hexavalent chromium.

vii. Impact assessment shall be carried with worst case scenario (for operating conditions creating maximum pollution load) and accordingly mitigation measures shall be proposed in the EIA/EMP

viii. The project proponent shall plan for supplementing their energy requirement with solar energy to the maximum possible. A detailed plan for the same shall be submitted.

ix. Management and disposal of hazardous waste as per the Hazardous and Other Waste Management Rules, 2016 shall be addressed in the EIA/EMP

x. Detailed specification of Air Pollution Control equipment shall be provided in the EIA/EMP. Post project monitoring shall be clearly specified along with number of stations, location, frequency of monitoring, parameters to be monitored, fund provision, etc.

20.10. Proposed Integrated Steel Plant of 5.26 MTPA capacity with coal based Captive Power Plant of 450 MW at K.B.Hali, Chaganuru, Siriwara, Bevinahalli villages, Bellary Taluka, Bellary district, Karnataka by M/s Vedanta Limited –[Online Proposal No. IA/KA/IND/65405/2017, MoEF&CC File No. IA-J-11011/330/2017-IA.II (I)] – Terms of Reference for new project.

1.0 The proponent has made online application vide proposal no. **IA/KA/IND/65405/2017** dated 14th June 2017 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central Level.

2.0 M/s. Vedanta Limited is proposed to install Integrated Steel Plant of 5.26 MTPA capacity with coal based captive power plant of 450 MW at K.B Hali, Chaganuru, Siriwara, Bevinahalli villages, Bellary Taluka, Bellary District, Karnataka state.

3.0 M/s Vedanta Limited proposed to install the following facilities as part of the proposed Integrated Steel Plant:

Sl	Plant Facilities	Capacity
1	Blast Furnace	2x 3,700 m^3
2	Hot Metal Production	5.26 MTPA
3	Sinter Plant	1X450 m^2
4	Gross Sinter Production	4.6 MTPA
5	Coke oven (Recovery stamp charging with 4x53 ovens.)	2.23 MTPA
6	BOF Converters	3x180 T
7	Ladle furnaces	3x180 T
8	Liquid steel production	4.94 MTPA
9	Billet casters	2x6 strand
10	Billet production	2.4 MTPA
11	Slab caster	2x1 strand (TSCR)
12	Wire rod mill / bar mill production	2.3 MTPA
13	HRC production	2.4 MTPA (TSCR)
14	CRM (Cold rolling mill)	1.0 MTPA
15	Galvanizing unit	0.6 MTPA
16	Electrical steel (CRGO)	0.4 MTPA

17	Colour coating unit	0.4 MTPA
18	Calcining plant	2x600 TPD
19	Lime kiln	2x250 TPD
20	Coal based captive power plant	3x150 MW

4.0 The topography of the plant site is partially flat and sloping from west to eastand reported to Latitude between 15°08'33.3" North to 15°10'34.1" North and Longitude between 76°59'15.0 East to 77°01'36.0 East. The levels at the site range from 422 - 428 m above MSL. Hagari river at 3 km from the plant. The total land requirement for the proposed Integrated steel plant will be approximately 980.62 ha (2423.17 acres). About 284 ha (702 acres) of land is in possession of Vedanta Ltd. The remaining land will be acquired. The land is mostly single crop rain fed agricultural land.

Sl	Purpose	Total land requirement (acres)
1	Area for Plant Establishment	1550
2	Area required for Main Raw Water Reservoir	350
3	Approach Road for plant	120
4	Colony for Employees and Workmen	383
5	Rail corridor from nearest railway siding to plant	20.17
	Total	2423.17

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

6.0 The capital cost of the proposed integrated steel plant is about Rs. 30,000 crores. The overall cost on measures for the environment protection will be about 5% of the total project cost i.e. Rs. 1,500 crores.Proposed employment generation from proposed project will be around 10,000 persons direct employment and 20,000-30,000 persons indirect employment.The CSR approach of the company shall be towards sustainable livelihood management of the community around. There shall be focus on education, health, sanitation, drinking water, agriculture, water shed management, culture identity preservation, tribal welfare, welfare of socially weaker sections and marginalized people.

7.0 The targeted production capacity of integrated steel plant is 5.26 MTPA with captive power plant of 450 MW. The project will be developed in two phases. The plant will be equipped with coke oven complex, sinter plant, pellet plant, blast furnace, steel making & casting facility, rolling mills and captive power plant. The ore for the plant would be procured from Bellary–Hospet region, Karnataka. The ore transportation will be through Rail/Road. It is proposed to connect NH 63 to the site by a four-lane road and a flyover over the railway track. Rail linkage is proposed from nearest railway station to plant site.

8.0 The estimated power requirement of the plant will be about 450 MW. In order to meet the requirement of power for the proposed plant, a captive power plant of capacity 3x150 MW has been envisaged.

9.0 The quantity of raw material requirement for the proposed integrated steel plant and its source are given below:

Sr.No	Raw Materials	Source	Gross Quantity, TPA
1	Iron ore fines	Bellary–Hospet region, Karnataka	79,41,600
2	Iron ore lump	Bellary–Hospet region, Karnataka	10,57,000
3	Limestone	Bagalkot, Karnataka	5,42,300
4	Dolomite	Bagalkot, Karnataka	4,79,600
5	Limestone (for LCP)	Imported from Oman, UAE/local source	8,68,900
6	Quartzite	Local sources	65,800
7	Anthracite	Imported from Australia, Indonesia	1,20,600
8	Prime coking coal	Imported from Australia, Canada, Mozambique, South Africa, Indonesia	6,66,000
9	Semi soft coking coal	Imported from Australia, Indonesia	26,63,800
10	Coal PCI	Imported from Australia, Indonesia	9,54,200
11	Thermal Coal	Singareni coalfields, Telangana	21,28,700

10.0 The total water required for the proposed integrated steel plant 20.8 MGD (3900 m^3/hr). Proposed project will be designed for maintaining zero discharge except during monsoon. The storm water and drains will be separately constructed to minimize storm water contamination with process water.

11.0 The solid waste to be generated by the steel plant would be slag, scrap, scale and dust. The dust from dust catcher unit, SMS section will be recycled to the extent possible in the sinter plant itself. The solid waste will be recycled/used in a proper manner/sinter plant and the rejects would be dumped in a designated area.

12.0 There are three pending cases against the land of the proposed plant. 1) WP 5282/ 2015 in the matter of BSAL v. IFCI & SGL in the High court of Karnataka regarding land allotment; 2) O.S. 240/2011 in the matter of S.N. Projects v. Sesa Goa Ltd at Civil Judge Jr.Division, Bellary regarding Road leading to Integrated Steel and Iron plant site; and 3) O.S. 113/2011 in the matter of Minor Nikhil &ors. v. Madhav &Ors at Civil Judge Sr.Division, Bellary regarding share in schedule properties of Mahadevappa who is director of Bellary Steel and Alloys Ltd.

13.0 The PP has made detailed presentation on the proposal along with EIA Consultant M/s Vimta Labs, Hyderabad.

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

i. The ToR prescribed is subject to out come of the WP 5282/ 2015 in the matter of BSAL v. IFCI & SGL in the High court of Karnataka; O.S. 240/2011 in the matter of S.N.

Projects v. Sesa Goa Ltd at Civil Judge Jr. Division, Bellary; and O.S. 113/2011 in the matter of Minor Nikhil &ors. v. Madhav &Ors at Civil Judge Sr.Division, Bellary.

ii. Public Hearing to be conducted by the concerned State Pollution Control Board.

iii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.

iv. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA. I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

v. The PP shall provide justification for requirement of 450 MW Captive Power Plant

vi. The PP shall furnish a commitment, as agreed by them, for transport of 100% of coal and iron ore required through rail mode.

vii. No ash pond is allowed and fly ash shall be collected and disposed in dry form through silos.

viii. The PP shall explore the possibility of option of single stack with bi-flue with a height of 270 m.

ix. Best available technology shall be used for pollution control meeting the revised emission norms notified by the ministry on 7th December 2015. For SOx and NOx pre-process, during process measures and post process control devices shall be used.

x. MoEF&CC Notification G.S.R 02(E) dated 2.1.2014 regarding use of raw or blended or beneficiated or washed coal with ash content not exceeding 34% shall be complied with, as applicable.

xi. The project proponent shall plan for supplementing their energy requirement with solar energy to the maximum possible. A detailed plan for the same shall be submitted.

xii. Management and disposal of hazardous waste as per the Hazardous and Other Waste Management Rules, 2016 shall be addressed in the EIA/EMP

xiii. Detailed specification of Air Pollution Control equipment shall be provided in the EIA/EMP. Post project monitoring shall be clearly specified along with number of stations, location, frequency of monitoring, parameters to be monitored, fund provision, etc.

20.11. Setting up Coal based Captive Power plant of 18 MW within the existing Cement Plant located at Mattapalli village, Matampally Mandal, Suryapet District, Telangana State by M/s Sagar Cements Limited – [Proposal No. IA/TG/IND/65063/2017, MoEF&CC File No. J11011/379/2006-IA II (I)] – Terms of Reference for expansion.

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.

20.12. Proposed Expansion of Cement Plant by installation of Line- II (Clinker -1.6 MTPA, Cement 2.6MTPA & D.C. Set - 2.5 MW) at Villages - Bhavaliya&Mangrol, Tehsil - Nimbahera, District Chittorgarh (Rajasthan) by M/s. Nuvoco Vistas Corp. Ltd. (Formerly Lafarge India Ltd.)- [Online Proposal No. IA/RJ/IND/23558/2014, F.No. J-11011/134/2014-IA-II(I)] - Change of the Name of the Company and Extension of Validity of ToR.

1.0 **M/s. Nuvoco Vistas Corp. Ltd** made online application vide proposal no. IA/RJ/IND/23558/2014dated 29th January 2017 seeking extension of validity of Terms of Reference granted vide F.No. J-11011/113/2011-IA-II(I) dated 5th November 2014 to M/s Lafarge India Private Limited for the proposed Expansion of Cement Plant by installation of Line- II (Clinker -1.6 MTPA, Cement 2.6MTPA & D.C. Set - 2.5 MW) at Villages - Bhavaliya&Mangrol, Tehsil - Nimbahera, District Chittorgarh (Rajasthan) under the provisions of EIA notification, 2006 and change the name of the company as **M/s. Nuvoco Vistas Corp. Ltd**.

2.0 It was informed that the name of the company has been changed from Vedanta limited to **M/s. Nuvoco Vistas Corp. Ltd.** It was informed that no work has been carried including collection of baseline data and preparation of EMP report etc.

3.0 During the deliberation, the project proponent volunteered to go for fresh Terms of Reference.

4.0 Therefore, the proposal has been recommended for closure.

20.13. Expansion of Steel Plant (0.3 to 1.0 MTPA) at Village Jumbulapadu, Mandal Tadipatri, Anantapur, Andhra Pradesh by M/s Kalyani Gerdau Steel Ltd. (Formerly, M/s SJK Steel Plant Ltd.) [Proposal No. IA/AP/IND/4225/2010, F. No. J-11011/322/2008-IA.II(I)- (Extension of validity of Environmental Clearance) – Reconsideration based on ADS.

1.0 The proponent has made online application vide proposal no. **IA/AP/IND/4225/2010**dated 23rd March 2017 seeking extension of validity of environmental clearance granted to the above said project under the provisions of amendment in EIA notification, 2006 vide SO 1141 (E), dated 29th April 2015.

2.0 M/s Kalyani Gerdau Steel Limited obtained environmental clearance for expansion of steel plant (0.3 to 1.0 MTPA) at Village Jumbulapadu, Mandal Tadipatri, District Anantapur, Andhra Pradesh vide F. No. J-11011/322/2008-IA.II(I) dated 31st May 2010.

3.0 The proposal was considered in the 18th meeting of Expert Appraisal Committee [EAC(Industry-I)] held during 3rd to 5th May 2017.

4.0 After detailed deliberations, the committee is in view that PP did not present the justification for extension of validity of EC; progress made so far; proposed schedule of the completion. Further, it is noted that no senior level representation before the committee who can give the commitments regarding schedule of the completion. The committee desired following information for further consideration of the proposal:

i. Details of activity wise progress made both in terms of physical and financial.

ii. Activity wise schedule of completion of balance work

iii. Exact reasons for delay in implementation of the project along with substantiating justification

5.0 Accordingly PP has submitted reply to ADS on 18th May, 2017. It was submitted that some of the inits like SBQ Steel, Cold Pig iron, Steel Billets (partly), waste heat recovery was completed. The have also submitted the schedule of completion of the balance works.

6.0 After detailed deliberations, the committee recommended for extension of validity of Environmental Clearance subject to following additional conditions.

i. PP shall display the environmental monitoring data for general public outside plant gate.

ii. All the environmental clearance conditions stipulated in earlier EC shall remain same.

iii. The PP shall have to apply for fresh environment clearance, in case, the implementation of expansion remains incomplete after the completion of the validity period.

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

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

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

3.0 It was informed that the proposed Integrated Cement Plant was not implemented due to unavoidable reasons. Therefore, the PP requested for extension of validity of EC.

4.0 During detailed deliberations, the committee observed the following:

a) There was no physical progress on the ground related to the installation of plant and machinery.

b) The creation of green belt, as stipulated under the EC condition, was not even initiated.

c) The PP has already obtained TOR for a proposal for expansion from 1. MTPA to 1.3 MTPA.

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

a) As per Rajasthan State Government Rules, the minerals taken from miner mines are meant only for small and petty local uses. In order to be able to use the limestone taken from his own miner mines, the PP had to apply to the State Authorities for conversion of miner mines to major mines. After following the due process, the State Authorities have issued orders for conversion of his miner mines into major mines only in February 2017. Therefore, there was serious uncertainty about the availability of main raw material. Hence, they were unable to start any physical work on the site.

b) They have now already completed all engineering designs and finalised the procurement of machinery and equipment.

c) The PP informed that they have already made substantial financial investment in the form of payments already made for procurements.

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

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

i. substantiating evidence of financial investment made as on the date of the meeting (10th July 2017) by way of accepted copy of PO and details of advance payment/payments made.

ii. Status of land acquisition and possession by the PP.

iii. Details regarding the rules of the State Government regarding the use of minerals from miner mines.

iv. The progress report of various works done so far.

v. Full justification to be provided to satisfy the committee that all the pending works would be completed in three years if the validity of the EC period is extended as requested by PP. The schedule of completion of balance works in the form of bar chart should be provided.

vi. Full justification to be provided by PP to satisfy the committee regarding the reasons for not initiating the action for procurement of raw material in the open market.

Date: 11hJuly, 2017

20.15. Proposed expansion of Aluminum melting from 20,000 TPA to 30,000 TPA, Propane Storage from 50 MT to 100 MT and power back up from 4.9 MW to 37.3 MW at plot no SPL-1, Tapukara Industrial Area, Tehsil Tijara, District Alwar, Rajasthan by M/s Honda Cars India Ltd.- [Online Proposal No. IA/RJ/IND/5996/2013, MoEF&CC File No. J-11011/64/2013-IA-II(I)] - Environmental Clearance based on ADS reply submitted on 8th June 2017.

1.0 The proponent has made online application vide proposal no. **IA/RJ/IND/5996/2013**, dated 23rd April 2015 along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposal was considered in the 6th meeting of Expert Appraisal Committee held during 5th – 7th March 2013 and recommended for prescribing ToR for preparation of detailed EIA/EMP. The ToR was granted by Ministry vide letter No. F. No.J-11011/64/2013-IA-II(I) dated 25thApril 2013. The project proponent submitted the final EIA report online dated 23rdApril 2015. The proposed project falls in Schedule 3(a) & 6(b), Category "B" of EIA Notification 2006 as amended. However, since the Haryana State Boundary is located about 5 km from the project site, the project is treated as Category "A" and appraised at the Central level.

2.0 M/s Honda Cars India Ltd.(HCIL) has proposed to expand their production capacity at the Tapukara premises along with indigenization of various car parts to reduce the cost of car. The proposal is for enhancement of Aluminum melting from 20,000 TPA to 30,000 TPA, Propane storage from 50MT to 100 MT and power back up from 4.9 M W to 37.3 M W.

3.0 The total land area available with HCIL is about 1,768,972 Sq. m. There is enough space within the HCIL land for the proposed expansion project. The project location is reported to lay at 28^0 06' 24'' N latitude and 76^0 50' 06'' E Longitude. The site is very well connected with NH-8. Nearest Railway station is Rewari, about 22 km from the project site. The Haryana border is about 5 km NW. Nearest airport is IGI Airport, approximately 47 km away from project site (aerial distance).

4.0 The total project investment will be about Rs. 1577 Crores. In 45th meeting of EAC, 11th August 2015 the project proponent and their EIA-EMP consultant (M/s EQMS India Private Limited) gave a detailed presentation of the project. Based on the presentation made and discussions held some addition data sought. Project Proponent submitted reply toAdditional Details Sought on 8th June 2017.

5.0 The proposal is again considered in the 20th meeting of Expert Appraisal Committee [EAC (Industry-I)] held during 10th–12th July 2017 and Committee noted that PP submitted the reply and complied all the ADS point.

6.0 After detailed deliberations, the committee recommended the proposal for grant of Environmental Clearance subject to following specific conditions along with other

environmental conditions while considering for accord of environmental clearance by the ministry

i. The PP shall obtain requisite permission for storage of propane from Chief Controller of Explosives.

ii. The PP shall identify the VOCs and establish system of monitoring for VOCs, The results of monitoring shall be submitted to Regional office as a part of half yearly monitoring report.

iii. Management, Handling, Transportation and Disposal of Paint sludge and other hazardous waste shall be carried as per the provisions of Hazardous and Other waste (Management & Transboundary) Rules, 2016.

iv. The occupational health surveillance programme for the active workmen shall be carried as per the protocol of ILO. Atleast 1/5th of the active workman in a year covering all workmen in every 5 years shall be carried occupational health check-up.

20.16. Expansion of Pig Iron Plant (from 0.21 MTPA to 0.587); Integrated Steel Plant comprising of 0.387 MTPA TMT Rods, Angles, & Channels and 0.2 MTPA DI Pipes; located at Raturia Industrial Area, Angadpur, Durgapur, District Bardwan by M/s KIC Metaliks Ltd., [Online Proposal No. IA/WB/IND/65103/2016, MoEF&CC File No. J-11011/556/2009-IA-II-(I)] - Amendment in ToR for proposed 22 MW AFBC, increase MBF configuration from 215 m^3 to 245 m^3 and an additional 1 x 25 m^2 Sinter plant

1.0 The proponent has made online application vide proposal no. IA/WB/IND/65103/2016 dated 1st June 2017 for seeking amendment in Terms of Reference granted to the above said project on 10th January 2017 under the provisions of in EIA notification, 2006.

2.0 M/s KIC Metaliks Limited has proposed to expand its existing 0.210 MTPA Pig Iron Plant to 0.578 MTPA Integrated Steel Plant located at Rauria Industrial Area, Durgapur in the District of Burdwan, West Bengal. The proposal was considered in the 14th meeting of Expert Appraisal Committee [EAC(Industry-I)] held during 22nd to 23rd December 2016 and accorded Terms of Reference by the ministry vide File No. J-11011/556/2009-IA-II-(I) dated 10th January 2017.

3.0 The environmental clearance for the existing plant was accorded by the Ministry vide letter No. J-11011/556/2009- IA.II(I) dated 24.5.2011.

4.0 It is proposed to increase MBF Volume from 215 to 245 m^3; addition of 1x25 m^2; addition of 22 MW AFBC etc in the plant configuration proposed during grant of ToR. The details of configuration and capacity of existing plant; Terms of reference granted on 10th January 2017; proposed amendment and final configuration; etc. are as follows:

Sl. No.	Configuration as per earlier EC	E C impleme ntation status	Configurati on as per ToR	Proposed amendment	Final Configuratio n	Final Capacity in TPA	Product
1	Modernisation of	Impleme	Nil	Increase	1x245 m^3	2,35,000	Hot metal/Pig

	existing MBF to enhance capacity of 1x215 m^3 to 0.210 MTPA Pig	nted		MBF Volume from 215 to 245m^3	MBF		For internal use & sale
2	-	NA	2x350 DRI Kilns	No change proposed	2x350 DRI Kilns	2,24,000	Sponge Iron
3	Steel Melting shop 1x50T EAF, 1x50 T LRF,1x50 T VDwithMatching C C M	Not Implemented	1x30 T EAF 4x15 T IF With LF & VD1200 TPD CCM	No change proposed	1x30 T EAF 4x15 T IF With LF & VD1200 TPD CCM	3,84,000	Liquid metal for manufacture of billets
4	-	NA	1200 TPD R M	No change proposed	1200 TPD R M	3,78,000	TMT rods, angles etc.
5	Ferro Alloy plant 2x9 MVA (Fe-Cr, Fe-Mn& Si-Mn)	Not Implemented	Nil	No change proposed	Nil	Nil	Nil
6	Sinter Plant 1x25 m^2	Implemented	Nil	1x25m^2	2x25 m^2Sinter Plant	3,60.000	Sinter agglomerates
7	BF gas based CPP 5 MW	Implemented	14 MW (DRI WHRB)	No change proposed	5 MW CPP 14 MW CPP	19 MW CPP	Electric power for Internal use
8	-	NA	Nil	22 MW AFBC	1x22 MW	22MW	Electric power for Internal user
9	Spun pipe 24,000 TPA	Not Implemented	2x20 T IF 2x0.11 MTPA C C M (centrifugal)	No change proposed	2x20 T IF 2x0.11 MTPA C C M (centrifugal)	2,00,000	D I spun pipe
10	Cement Grinding Capacity increase to 1,00,000 TPA	In Progress	Nil	No change proposed	Nil	1,00,000	Cement
11	-	NA	1x50T & 1x100T Oxygen Plant	No change proposed	1x50T & 1x100T Oxygen Plant	2,80,000Nm^3 /day	Oxygen gas
12	-	NA	1x50T Nitrogen Plant	No change proposed	1x50T Nitrogen Plant	80,000Nm^3 /day	Nitrogen gas
13	-	NA	1x100 TPD PCI P	No change proposed	1x100 TPD PCI Plant	32,000	Pulverised Coal

5.0 The project proponent along with EIA consultant made detailed presentation of the proposed amendments.

6.0 After detailed deliberations, the committee recommended for the proposed amendments as per the aforesaid table.

20.17. Proposed green field Integrated Steel Plant Complex of 7 MTPA capacity with 1320 MW Captive Power Plant and Associated facilities at Kalmi, Gorkha, Dhangarh, Bhaganpur, Jorapali, Parsada, Chiraipani, Khairpur, Patrapali, Gejamuda villages, RaigarhTehasil and District, Chhattisgarh by M/s. Jindal Steel and Power Ltd. [Online Proposal No. IA/CG/IND/56216/2014, MoEF&CC File. No. J-11011/73/2009-IA.II (I)] – Extension of validity of ToR.

1.0 The proponent has made online application vide proposal no. **IA/CG/IND/56216/2014** dated 27th June 2017 for seeking extension of validity of Terms of Reference prescribed vide - 11011/73/2009-IA.II (I) to the above said project on 8th July, 2014 under the provisions of in EIA notification, 2006.

2.0 It was reported that baseline data has been collected during pre-monsoon season of 2015 i.e. March to May 2015. Due to change in availability scenario of the coal, **M/s. Jindal Steel and** Power Limited has also made application for amendment in the ToR vide online proposal No. IA/CG/IND/56216/2014 on 16th June 2016 to decrease the capacity of proposed Integrated Steel Plant from 7 MTPA to 4 MTPA. The revised capacities of the plant are indicated in the following table:

S. No	Units	Capacity as per earlier TOR	Proposed Capacity
1	Sinter Plant	6.6 MTPA	5.0 MTPA
2	Pellet Plant	8.0 MTPA	4.5 MTPA
3	Coke Oven (Recovery Type)	2.2 MTPA	2.20 MTPA
4	Coal Gasifiers	600,000 Nm3/hr	Deleted
5	DRI Plant (Gas based)	6.0 MTPA	Deleted
6	Cogen Plant-DRI	3x25 MW	Deleted
7	Coal Pipe Conveyor	50 Km long	Deleted
8	Cogen Plant- Coal Gasifer	5x16 MW	Deleted
9	Blast Furnace	4 MTPA	4 MTPA
10	Desulphurization Unit	2x250 T	2 x 200 T
11	Electric Arc Furnace	2x250 T	Deleted
12	Basic Oxygen Furnace	2x250 T	2 x 200 T
13	Ladle Furnace	4x250 T	2 x 200 T
14	Vacuum Degassing	2x250 T	1 x 200 T
15	RH-TOP	2x250 T	1 x 200 T
16	Slab Caster	4 MTPA	4.0 MTPA
17	Rolling Mill	4 MTPA	4.0 MTPA
18	Compact Strip Mill (CSP)	3.5 MTPA	
19	C.R.M.	1x2.0 MTPA	1 x 2.0 MTPA

20	C.G.L. (Continuous Galvanizing Line)	1x1.0 MTPA	1 X 1.0 MTPA
21	Oxygen Plant	12000 TPD	2500 TPD
22	Lime &Dolime Plant	5000 TPD	2000 TPD
23	Captive Power Plant	1320 MW	Deleted

3.0 Accordingly, the land requirement is also reduced from 1280 Ha to 809.39 Ha. The details are as follows:

Item		**Earlier TOR**	**Revised**
Land Requirement	Main Plant	912.611 Ha	809.39 Ha (Optimized within approved boundary)
	Coal Conveyor ROW	68.044 ha	Deleted
	CPP	299.479 Ha	Deleted
		Total: 1280 Ha (3163 acres)	**Total: 809.39 Ha** (2000 acres)
Forest land	Main Plant	50.233 Ha	50.233 Ha (Stage I for 30.62 Ha received)
	Coal Conveyor ROW	20 Ha	Deleted
	CPP	31.79 Ha	Deleted

4.0 The water Requirement for the plant will be 18 MCM (14 MGD), Mahanadi River (earlier approved 100 MCM). The power requirement will be catered from existing CPP at Dongamhua or Thermal Power Plant of Company at Tamnar, Raigarh. The man power requirement will be 4510 nos. during operation phase and the revised cost of the project will be Rs 15,500 Crores.

5.0 The proposal for amendment in the ToR was considered in the 9th meeting of Expert Appraisal Committee [EAC(Industry-I)] held during 27th to 29th July 2016. After detailed deliberation, the Committee recommended the proposal for amendment in the ToR letter No J-11011/73/2009-IA-II (I) Dated 08.07.2014 for the proposed Greenfield Integrated Steel Plant at Raigarh for Change in Capacity from 7.0 MTPA to 4.0 MTPA by deleting various components as indicated in the table above. The Committee also agreed for the use of baseline environmental data generated during pre-monsoon of 2015 to finalize draft EIA report for revised Plant Configuration.

6.0 It was reported that due to change in configuration, the submission of EIA/EMP and conduct of public hearing is delayed. Therefore, requested for extension of validity of ToR for further one year.

7.0 After detailed deliberation, the committee recommended for extension of validity of amended ToR for further one year i.e. up to 7th July 2018 with following additional ToRs:

i. In case of any change in the scope of the approved ToR, the PP shall obtain fresh Terms of Reference.

ii. The baseline data shall not be older than 3 years used for conduct of Public Hearing.

iii. The details of Corporate Environment Policy including its approval in the Board of directors; 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; system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large shall be provided in the EIA/EMP Report.

20.18. Expansion of Integrated Steel Plant of M/s Nalwa Steel & Power Ltd., at village Taraimal, Tehsil Gharghoda, Dist. Raigarh, Chattisgarh. [Proposal No. IA/CG/IND/23753/2007, F.No. J11011/1108/2007-IA-II(I)]- Reconsideration for Environment Clearance.

1.0 The Integrated Steel Plant of M/s Nalwa Steel & Power Ltd. is located in Village Taraimal, Tehsil Tamnar, District Raigarh, Chhattisgarh was initially received in the Ministry on 16th November 2010 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006 for expansion. The earlier environmental clearance was accorded vide letter no. J-11011/398/2006-IA.II (I) dated 24th January 2007 and amended vide letter dated 30th September 2010 and 17th December 2012. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its meeting held on 22nd -23rd February 2011 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment and Forests had prescribed ToRs to the project on 13th April 2011 with subsequent amendments on 9th June 2011 and 18th November 2011. Validity of ToR was extended vide letter dated 12th November 2013. Based on the ToRs prescribed to the project, the project proponent applied for environmental clearance to the Ministry on 3rd June 2014. 2.0 The proposal was considered in 29th reconstituted Expert Appraisal Committee (Industry) held during 11th and 12th December 2014 and the Committee observed that the baseline data was collected in 2011; Plant was established in 2003; ToR for the proposed expansion was granted in 2011; ToR validity was extended by a year in November 2013; Public hearing was held in April 2014; EC proposal submitted to MOEF&CC in May 2014. The Committee further observed that a village is existing adjacent to the Plant. The habitation is sandwiched between the existing and proposed projects. The EAC observed that AAQ values appeared very low as compared to CPCB data for Raipur located about 10 km away and also keeping in view that the TPP of M/s Jindal Power Ltd is located upwind of the project site. Fresh one-month AAQ data to be generated. Transportation involves 800 trucks (to-and fro). The Committee desired that a Plan for minimising truck movement and feasibility of using railway line and siding of project of their sister concern – M/s Jindal Power Ltd. located adjacent to this project should be explored. The EAC observed that number of complaints have been received during Public Hearing regarding poor air quality. The Committee after deliberations decided to send a team (sub-committee) of

the EAC for a site visit to ascertain issues concerning the proposed expansion project. Further, the Committee also noted that there are several inconsistencies and shortcomings in the report and sought the following clarification:

i. Baseline air data should be monitored for 1 month since the data presented is of 2011.

ii. Coal washery details including capacity and status of EC. A component of coal washery has been included in the existing and the proposed expansion project. A clarification may be provided whether coal washery is included as a part of expansion project.

iii. Water reservoir capacity

iv. village population- whether 1800 or 597 persons residing in the villages adjoining the plant.

v. Layout of the existing and proposed plant on a map as well as on a table along with land use breakup – existing and proposed in terms of agricultural land, forest land, habitation (settlements), water bodies, etc. Details of habitation of 597 persons in between existing and proposed expansion project areas.

vi. Clarification on water consumption of the Plant per tonne of Steel Produced vis-à-vis CREP standards and the best available technologies in the world.

vii. Requirement of cleaning system for the effluents + Scrubber for the PGP.

viii. A specific plan for utilisation of solid waste management along with MOU from units for utilisation of the solid wastes. Plan for disposal of SMS slag.

ix. Disaster Management Plan in line with the district DMP and should be submitted including the population close to the industrial premises.

x. Existing OHS details should be submitted

xi. Decongestion plan for the existing roads should be submitted for the proposed 600-800 trucks per day and a Plan for utilising the existing railway line of M/s Jindal Power Ltd. adjoining the existing Steel Plant should be examined.

3.0 Accordingly, the PP submitted the details to the ministry. Therefore, the proposal was considered in the 17th EAC meeting held during 6th -7 th April 2017. After detailed presentation by PP along with their consultant M/s Min Mec Consultancy Private Ltd., the committee noted that i) No site visit was made by the sub-committee of EAC as desired in the 29th EAC; ii) No fresh status of compliance is presented; iii) Baseline ambient air quality monitoring data was collected during December 2015 and earlier during March-June 2011 not comparable as collected in two different periods. The earlier data is of 6 years old and additional data is also more than 1-year old; iv) The proposal for establishment of coal washery for 1.32 MTPA was made during the ToR. However, the PP dropped the proposed coal washery during the public hearing without prior approval from the ministry; v) Proposal was made for further changes in the configuration of the plant from 3X30 T to 2X30 T + 2X24 T in the present presentation; and vi) The habitation existing adjacent to the plant is sandwiched between the operating and

proposed projects. In view of these facts and after detailed deliberations, the committee recommended that the PP should make fresh application for seeking ToRs.

4.0 However, during the process of the proposal, the ministry advised to re-consider the proposal. The matter was deliberated in the 19th meeting of Expert Appraisal Committee held during 8th – 9th June 2017. The committee agreed to re-consider the proposal and decided to carry site visit by sub-committee of the EAC as decided in the earlier EAC in its 29th meeting. The proposal will be deliberated after site visit.

5.0 Based on the decisions in the 19th EAC meeting, sub-committee visited the site during 19th to 20th June 2017 and made following observations:

i. The habitation existing adjacent to the plant (Taraimal Village) is sandwiched between existing plant of M/s Nalwa Steel Plant and M/s SyamIspat Limited. The proposed extension of the plant towards Taraimal village, will further surround the village.

ii. Ambient Air Quality monitoring system in place is not as per the General Condition of the earlier EC.

iii. The fugitive dust generated due to plying of coal transport vehicles from Raigarh to plant site is one of the major sources of air pollution. The traffic congestion of the main road is an issue and it needs to be reduced.

iv. Plantation was carried only in 22% of the total project area against the prescribed norms of 33% of the Total plant area. Plantation along the entire boundary of the plant is also not available.

v. Raw material such as iron ore, coal, etc. are not stored in the covered yards and no wind breaks were arranged.

vi. There is no 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.

vii. There is no hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions.

viii. It was reported that the operation of the coal washery is not very regular. The washery is used only when the Indian and high ash content coal is received.

6.0 After detailed deliberations with the officials of the plant during the site visit, the following recommendations were made by the sub-committee for further consideration of the proposal.

i. The PP shall revise the layout plan of the proposed expansion so that the proposed expansion shall not adversely affect Taraimal Village further.

ii. The revised lay out plan shall be made with at least 33% of Total project area shall cover with the green belt.

iii. The PP shall explore dropping of proposed coal based power plant and existing ash pond;

iv. The stoppage of existing coal based power plant; and coal washery shall also be examined by PP. This would greatly reduce the air pollution, traffic load on the main road etc.

v. PP shall explore alternative mode of transport. Decongestion plan for the existing roads should be submitted and a Plan for utilising the existing railway line of M/s Jindal Power Limited adjoining the existing Steel Plant should be examined.

vi. PP shall submit time bound action plan for fulfilment of non-compliances of earlier EC conditions along with fund provision.

vii. Impact on air quality with revised proposal shall be studied using suitable Air Quality Impact Model and assess the increment of GLC on the surrounding areas particularly on Taraimal Village.

viii. The details of Corporate Environment Policy including its approval in the Board of directors; 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; system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large shall be provided in the EIA/EMP Report.

7.0 The observations and recommendations of the sub-committee were placed before the committee. The committee fully endorsed the recommendations made by the sub-committee. The committee opined that the decision of the fresh Terms of Reference may not be required if the PP agreed to the recommendations made by the sub-committee.

8.0 The committee informed the observations and recommendations of the sub-committee to the project proponent.

9.0 The PP has agreed to submit revised proposal in line with the recommendations of the sub-committee. Therefore, the proposal is deferred for additional information.

20.19. Expansion of Existing Sponge Iron Plant into an Integrated Steel Plant of M/s M.P.S. Steel Castings (P) Ltd., located at Wise Park, Kanjikode, Palakkad, Kerala. [Online proposal No. IA/KL/IND/26375/2015, MoEF&CC File No-J-11011/02/2015-IA. II(I)] – Environmental clearance based on reply to ADS submitted on 12th June 2017.

1.0 The proponent has made online application vide proposal no. **IA/KL/IND/26375/2015**, dated 5th August 2016 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.

2.0 M/s. M.P.S Steel Castings Private Limited (MPSSCPL) proposed expansion of its existing sponge iron plant & captive power plant (CPP), located at Wise Park Industrial Estate (Pudussery central village), Kanjikode, Palakkad Taluk and District, Kerala. The application for the proposed expansion was initially received in the Ministry on 16th January, 2015 for obtaining Terms of Reference (TORs) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its meeting held on 10th February, 2015 and prescribed ToRs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry had prescribed ToRs to the project on 28thApril 2015. Based on the ToRs prescribed to the project, the project proponent submitted an online application for environmental clearance to the Ministry on 5th August 2016. The existing plant is running based on Consents issued by the State Pollution Control Board.

3.0 M/s. M.P.S Steel Castings Pvt. Ltd has proposed to carry out expansion of existing sponge iron plant into an Integrated Steel Plant in the existing industrial premise, which is located at Wise Park Industrial Estate (Pudussery central village), Kanjikode, Palakkad Taluk and District. The expansion of Steel plant is carried out by the establishment of new melt shop and re-rolling mill.

4.0 The expansion features installing 2 x 25 MT Induction Furnace and rolling mill. The production capacity of the plant after expansion will be 90,000 TPA of Sponge iron, 1,50,000 TPA of intermediate products, 1,50,000TPA of rolled products and 10 MW power.

5.0 The existing industrial premise located in an area of about 11.33 ha and is sufficient to carry out the proposed expansion. The land has been located in a notified industrial estate. No forest land involved. No land has been acquired for the proposed expansion activities. Geographically the plant falls within 10°47'11.41" & 10°47'06.12" North latitude and 76°46'42.30" & 76°46'42.06" East longitude. The entire area falls in Survey of India topo sheet nos. 58 B/9, 58 B/10, 58 B/13, 58 B/14.

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 Following table present the details of the existing and the proposed units:

Products	**Existing**	**Proposed**	**After Expansion**
Sponge iron	90, 000 TPA	---	90,000 TPA
Intermediate product MS Billets	---	1,50,000 TPA	1,50, 000 TPA
Rolled products - TMT, rods, angles, channels, rounds & flats	---	1,50,000 TPA	1,50,000 TPA

Power plant – WHRB & FBC	10 MW	---	10 MW

8.0 The raw materials used in the sponge iron plant are Iron pellets, Coal, Limestone/Dolomite. Sponge iron, MS Scrap and Coal will be used in Melting Shop. MS Billets will be used for re-rolling mills.

S. No.	**Raw materials description**	**Estimated requirements TPA**		**Source**	**Transportation mode**
		Existing	**Proposed**		
Sponge Iron Plant					
1	Pellets	1,20,000	--	Mangalore	by road
2	Coal	81,000	--	South Africa	Ship, followed by train and road
3	Limestone/ Dolomite	3,240	--	Dindigul	Train followed by road
Melt shop					
1	Sponge Iron	--	90,000	DRI Plant	In plant transportation
2	MS Scrap	--	60,000	Local market	By road
3	Coal	--	300	Indonesia	Ship, followed by train and road
Re-rolling mills					
1	MS Billets	--	1,50,000	Direct charging from SMS	In plant transportation
Cogeneration power plant					
1	Waste flue gases	5.5 MW/hr	--	Sponge iron Kiln	--
2	Coal	25,200	--	Indonesia	Ship, followed by train and road

9.0 The total water demand after the proposed expansion is 364.33 KLD, which will be obtained from Western India- Kinfra Supply. Considering water resource management, the quantum of treated water re-used in the process will be 142.41 KLD. Thus the daily fresh water requirement amounts to 221.92 KLD.

10.0 The total power requirement after the proposed expansion is 22 MW which will be sourced from Kerala State Electricity Board (22 MW) and captive power plant (10 MW). There

will not be any sale of power to the KSEB after the proposed expansion; the entire power will be utilized for plant consumption.

11.0 Ambient air quality monitoring has been carried out at 8 locations during 1st March 2015 to 31st May 2015 and the data submitted indicated that PM_{10} ranges from 8.8 µg/m^3 to 21.4 µg/m^3 , PM $_{2.5}$ ranges from 41.5 µg/m^3 to 59.3 µg/m^3, SO2 ranges from 10.6 µg/m^3 to 17.6 µg/m^3 and NOx ranges from 12.7 µg/m^3 to 24.1 µg/m^3. The results of the modelling study indicates that the maximum increase of GLC for the proposed project is 0.12 µg/m^3 with respect to the PM_{10}, 12.3 µg/m^3 with respect to the SO_2, 0.12 µg/m^3 with respect to the NOx.

12.0 The project is going to be expanded in the industrial land, which is located in a notified industrial estate and no R&R is involved.

13.0 The solid wastes generated in the plant includes 25.0 TPD of slag, 18.5 TPD of ash, 4.5 TPD of charcoal/dolochar, 10.0 TPD of returnable scrap, 30 kg/day of solar evaporation pan residue. Slag and ash will be used in cement manufacturing plants. Charcoal/ dolochar will be reused in boiler, solar evaporation pan residue will be disposed at secured facility. It has been envisaged that an area of 9.5 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.

14.0 The Public hearing of the project has been exempted since it is located in a notified industrial estate. The capital cost of the project is Rs. 113 Crores and the capital cost for environmental protection measures is proposed as Rs.127.08 Lakhs. There is no pending litigations involved with the proposed expansion.

15.0 The proposal was considered in 10th meeting of Expert Appraisal Committee [EAC(Industry-I)] held during 29th – 31st August, 2016**.**Based on the presentation made and discussions held, the Committee desired additional information on the following for further consideration of the proposal:

i. Detailed revised process flow diagram should be submitted along with the capacities at each stage.

ii. Existing and the proposed stack emission data should be revisited and resubmitted

iii. Revised layout plan showing internal roads, green belt, parking, entry and exit points, connectivity with the main road should be submitted. The parking area for the two wheelers, 4 wheelers and trucks should be inside the plant premises.

iv. Work out the open space and provide exact area required for establishing the proposed unit. This should be reflected in the layout map.

v. Rework the land-use break-up of the plant.

vi. Existing green belt is scanty, and needs improvement. Intimate the extent of total land available for green belt development, prepare a green belt plan, and as agreed by PP, plant at least 5 acres of additional green belt- 4 acres within the plant premises, and 1 acre outside

vii. The subject of the project should be corrected and submitted.

viii. The water balance calculations should be revised and submitted. The treated effluent should be reused in process to the maximum extant.

ix. Monitoring report for the compliance of the CTE/CTO conditions from the SPCB.

x. Management plan for disposal of solar evaporation pan residue should be submitted. Since the residue is soluble salts of various chemicals, it can not be disposed as land fill.

16.0 Accordingly the project proponent has submitted reply to ADS on 12th June 2017. Based on the reply submitted the detailed deliberations were made.

17.0 After detailed deliberation the committee observed that the water balance statement and certificate of compliance from the state pollution Control Board is not satisfactory. Therefore, committee desired to submit revised water balance and report on compliance of CFO conditions form the State Pollution Control Board or Regional office of MoEF&CC for further consideration of the proposal.

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

1.0 The proponent has made online application vide proposal no. IA/HP/IND/65822/2017 dated 30th June 2017 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central Level.

2.0 M/s KundlasLoh Udyog is an existing secondary steel based industrial unit located at Kasra No.414, 415, 416, 418 and 133 of mauza Baliana, Village Baliana, Tehsil-Baddi, Distt. -Solan, State-Himachal Pradesh. The existing industrial unit has installed production capacity of ~54000 TPA. Earlier there is no requirement of Environmental Clearance for the existing project due to the plant is running since 11th April 2006 before EIA notification dated 14 September 2006 with existing capacity around 54000 MT/Annum i.e. 165 MT/Day due to these reasons the project was not under the purview of EIA notification. Therefore, not attracted the provisions of EIA Notification, 1994.

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

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

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

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

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

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

9.0 Total Power load around 11000 KVA to run the additional plant & machinery during Construction and operational Phase. Expected source is Himachal Pradesh State Electricity Board (HPSEB). Total Plot Area is around 0.778941 Hectares.

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

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

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

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

20.21. Modification -Cum-Expansion of 1.6 MTPY Stainless Steel Plant (1.6 MTPA) located at Kalingnagar Industrial Complex, Dangadi, Jajpur, Odisha by M/s Jindal Stainless Limited [Online proposal No. IA/OR/IND/20365/2007, MoEF&CC File No. J-11011/281/07-IA-II (I)] - De-merger of present company Jindal Stainless Limited (JSL) into three companies on Composite Scheme of Arrangement among Jindal

Stainless Limited (JSL), Jindal United Steel Limited (JUSL) and Jindal Coke Limited (JCL).

1.0 M/s M/s Jindal Stainless Limited has made online application vide proposal no. IA/OR/IND/20365/2007, dated 21st April 2017 seeking De-merger of present company Jindal Stainless Limited (JSL) into three companies on Composite Scheme of Arrangement among Jindal Stainless Limited (JSL), Jindal United Steel Limited (JUSL) and Jindal Coke Limited (JCL).

2.0 Environmental Clearance for 1.6 MTPA Integrated Steel Plant was accorded by the Ministry of Environment, Forest and Climate Change vide letter No. J-11011/155/2005-IA. II (I), dated 5th August, 2005 and subsequently Environmental Clearance was also obtained for modification – cum - expansion of 1.6 MTPA Integrated Steel Plant vide letter No. J-11011/281/2007-IA. II (I), dated 1st November, 2007. In addition Environmental Clearance for 4 X 125 MW coal based CPP has been obtained vide letter No. J-13011/5/2006-IA.II(T), dated 30th November, 2006.

3.0 As per the above mentioned EC's granted by the MoEFCC, the status of existing & proposed installations for which TOR Presentation held on 22.06.2017 are as follows:

Sl. No	Facility	Capacity as per EC obtained as on date (05.07.2017)	Existing Installation as on 05.07.2017	Final Capacities after additional 1 X 50 TPH AFBC Boiler and proposed Expansion of CRM for which TOR Presentation Held on 22.06.2017
1	Sinter Plant	1 X 180 m^2	-	-
2	Coke Oven battery (Recovery Type)	2 X 0.425 MTPA	0.425 MTPA	0.425 MTPA
3	Blast Furnace PCM SGP	1 X 1600 m^3 2 X 1800 TPD 1 X 401200 TPY	-	-
4	Stainless Steel Making Unit	1.6 MTPA	1.6 MTPA	1.6 MTPA
5	Ferro Alloys Plant (Semi Closed SAF)	180 TPH Chromite Briquetting Plant 6 X 60 MVA Fe-Cr Plant 2 X 27.6 MVA Fe-Mn Plant 4 X 27.6 MVA Si-Mn Plant	180 TPH Chromite Briquetting Plant 2 X 60 MVA Fe-Cr Plant 1 X 27.6 MVA Fe-Mn Plant 2 X 27.6 MVA Si-Mn Plant	180 TPH Chromite Briquetting Plant 2 X 60 MVA Fe-Cr Plant 1 X 27.6 MVA Fe-Mn Plant 2 X 27.6 MVA Si-Mn Plant
6	Secondary Refinning	2 X 120 T LRF	120 T LRF	120 T LRF

7	CCP Plant	2 X 1 Strand Slab Caster	1 X 1 Strand Slab Caster	1 X 1 Strand Slab Caster
8	Hot Strip Mill	1.6 MTPA	1.6 MTPA	1.6 MTPA
9	Cold Rolling Mill	0.8 MTPA	0.8 MTPA	1.0 MTPA
10	Power Plant -WHRB	1 X 12 MW from BF Gas 5 X 13 MW From Ferro Alloys Plant	1 X 13 MW From Ferro Alloys Plant	1 X 13 MW From Ferro Alloys Plant
11	Lime Plant	5 X 300 TPH Lime Kiln	-	-
12	Oxygen Plant	2 X 425 TPD Oxygen Plant	425 TPD Oxygen Plant	425 TPD Oxygen Plant
13	Raw Material preparation Plant	Matching the Production Facilities	Installed	Installed
14	Coal Based CPP	4 X 125 MW Coal Based CPP	2 X 125 MW Coal Based CPP	2 X 125 MW Coal Based CPP
15	AFBC Boiler	--	1 X 50 TPH AFBC Boiler	1 X 50 TPH AFBC Boiler

4.0 The land area acquired for the integrated steel complex of JSL is of 502.0243 Hectares. Out of total land of 502.0243 Ha, 177 Ha of land is used for plantation and green belt. This is almost 35.25 % of total plant area. Green belt coverage with suitable plant species have been planted all along the internal road, raw material storage & handling, ash/dust prone areas. It is planned to plant further saplings considering the parameters as type, height, leaf area, crown area, growing nature, water requirement etc.

5.0 M/s Jindal Stainless Limited has restructured its business strategy for 1.6 MTPA Integrated Stainless Steel Plant at Jajpur, Odisha on Composite Scheme of Arrangement amongst Jindal Stainless Limited, Jindal United Steel Limited and Jindal Coke Limited and their respective shareholders and creditors under the provision of Sec -391-394 read with 100-103 of the Companies Act, 1956 and other relevant provision act of 1956 and/or companies Act, 2013.

6.0 The objective of the Scheme is to unlock value for shareholders to increase profitability, reduction of the debt and improvement of the serviceability of the debt.

7.0 After the approval of Hon'ble High Court of Punjab and Haryana at Chandigarh on Composite Scheme of Arrangement among the three companies and their respective shareholders and Creditors, JSL has demerged its business undertakings as follow in accordance with the EC granted.

8.0 Now the existing Environmental Clearance Order of Jindal Stainless Limited (JSL) granted vide EC Order No J-11011/155/2005-IA-II(I) dtd 5th August 2005, letter No. J-13011/5/2006-IA.II(T), dated 30th November, 2006 and EC Order No. J-11011/281/2007-IA-II(I) dtd 1st Nov 2007 to be transferred between demerged Companies Jindal Stainless Limited (JSL), Jindal United Steel Limited (JUSL) and Jindal Coke Limited (JCL) separately for facilities detailed below.

1. Jindal Stainless Limited (JSL) : <u>Area : 785.52 Ac or 318.02 Ha</u>

1. 6 X 60 MVA FeCr Plant
   2 X 27.6 MVA Fe Mn Plant
   4 X 27.6 MVA Si Mn Plant
   180 TPH Chrome Briquetting Plant
2. 1.6 MTPA Steel Melting Shop.
3. 0.8 MTPA Cold Rolling Mill.
4. 2 X 425 TPD Oxygen Plant.
5. 5 X 300 TPH Lime Plant
6. Raw Material Preparation Plant Matching the Production Facilities
7. 5 X 13 MW WHRB from Ferro Alloys Plant along with Other Auxiliary Facilities.
8. 4 X 125 MW Capacity Coal Based CPP

Along with other auxiliary systems.

2. **Jindal United Steel Limited (JUSL) : Area : 382.02 Ac or 154.66 Ha**

1. 1 X 1.6 MTPA Hot Strip Mill (HSM) along with Other Ancillary and Finishing Facilities
2. Blast Furnace 1 X 1600 M3 with 1 X 401200 TPY SGP
3. PCM 2 X 1800 TPD
4. Sinter Plant 1 X 180 M2
5. 1 X 12 MW WHRB from BF Gas

Along with other Auxiliary Facilities

3. Jindal Coke Limited (JCL) : Area : 72.46 Ac or 29.336 Ha

2 X 0.425 MTPA Coke Oven Battery (Recovery Type with Wet Quenching) along with other auxiliary and By-Product Facilities.

9.0 It is a project for Demerger of Jindal Stainless Limited (JSL) into three different Companies in the name and style of Jindal Stainless Limited (JSL), Jindal United Steel Limited (JUSL) and Jindal Coke Limited (JCL). Neither additional requirement of land has been envisaged. The category of present land use is industrial and it will continue to be industrial use only.

10.0 No Ground Water is used. JSL will provide surface water drawn from River Brahmani to JUSL and JCL for their Industrial and Domestic Use. Permission for drawl of water by JSL from Water Resource Department, Odisha has been obtained.

11.0 Power is made available through 220/132 KV Duburi Grid Substation of Odisha State Electricity Board by JSL to JUSL and JCL. Requirement is 540 MVA Maximum Demand for JSL, JUSL and JCL.

12.0 The manpower requirement during construction of the main project was 400 to 500 persons and during operation the manpower requirement has been estimated to be 2267 numbers of persons excluding the personnel for Township and medical facilities to operate and maintain 1.6 MTPA capacities Integrated Steel Plant and 2 X 125 MW Coal based CPP.

13.0 The gross annual requirement of raw material for the projects for EC already granted are Iron Ore Lump of 47,900 TPA, Quartzite of 56, 700 TPA, Coal of 207,800 TPA and Coke from outside of 148,600 TPA only for Blast Furnace. For Sinter Plant, Iron Ore fines of 16,08,200 TPA, Coke breeze of 31,700 TPA, Lime stone of 2,10,800 TPA and Dolomite of 1,23,400 TPA. Similarly 12,65,801 TPA of Imported Coal will be require for Coke Oven Plant. For SMS, 5,82,500 TPA of Lime Stone and 2,40,000 TPA of Raw Dolomite will be required. For Ferro Alloys Plant/Ferro Chrome Plant, 2,64,400 TPA of Chrome ore lump, 9,90,700 TPA of Chrome ore fines, 4,59,800 TPA of Coke, 1,09,700 TPA of Quartz, 5,04,000 TPA of Mn ore, 98,100 TPA of Lime stone, 23,100 TPA of Fe Silicon and 49,500 TPA of Fe Nickel will be required.

14.0 HFO requirement for JSL, JUSL and JCL is about 45,000 KL per year.

15.0 Hazardous waste generated from Existing Facilities of JSL, JUSL and JCL are Used Oil, Waste Containing Oil, Flue Gas Cleaning Residue, Oily Sludge, Empty barrels/ Discarded Container, CRM ETP Sludge, Acid sludge from pickling bath tank of CRM, Rejected refractory liners from pickling bath cell, Acid Handling Area, Pipe line waste of acid regeneration, BOD Plant sludge from Coke Oven, Tar Storage Tank Residue and Spent Resins. Other wastes are Furnace slag, Mill Scale, Fly ash, Grinding sludge, SMS Bag filter dust.

16.0 After deliberations, the committee observed that there is a violation under the provisions of EIA Notification, 2006 and PP has already made an application for Terms of reference under the provisions of SO 804 (E), dated 14th March 2017.

17.0 Since the project is already under the violation of EIA Notification, 2006, the committee opined that it would be appropriate to consider the proposal subsequent to final settlement of the final case by competent authority.

Date: **12th July, 2017**

20.22. Expansion of Integrated Steel Plant (from 10 MTPA to 16 MTPA) along with Captive Power Plant (600 MW) of M/s JSW Steel Ltd., located near village Tornagallu, District Bellary in Karnataka. [Online Proposal No. IA/KA/IND/31502/2010, MoEF&CC File No. J-11011/489/2009-IA.II(I)]- Amendment in Environment Clearance regarding optimization of existing facilities in product mix in rolling mill area and other minor changes in the operating units; Cost of CSR Plan; Greenbelt and Partial Transfer EC of some of existing units – Based on ADS reply dated 28.06.2017

1.0 M/s JSW Steel Ltd. has made online application vide proposal no. IA/KA/IND/31502/2010, dated 8th May 2017 seeking amendment in Environment Clearance regarding optimization of existing facilities in product mix in rolling mill area and other minor changes in the operating units.

2.0 Earlier, the proponent has also made an application for partial transfer of 0.3 MTPA Tar Distillation Plant to ECPL vide letter dated 16th August 2016 which was examined in the ministry and it was directed to deliberate in the EAC meeting. Further, during the presentation before EAC in the 19th meeting of EAC held on 9th June 2017, the PP also made a request to transfer 4 MTPA Slag grinding unit to JSW cement; and 1.2 MTPA DRI Plant to JSW Projects.

3.0 The Environmental Clearance for the project was granted by the Ministry vide letter No. J-11011/489/2009-IA.II(I) dated 1st October, 2015 for expansion from 10 MTPA to 16 MTPA (with a configuration of 10+3+3 MTPA) and amendment in the EC was accorded by the Ministry vide letter of even no. dated 9th June, 2016 for change in the configuration as 10+2+4 MTPA Capacity.

4.0 It was informed that, M/s JSW Steel Ltd as commissioned 12 MTPA units on 31st December 2016 and achieved 11.05 MT of production during 2016-17. Detailed engineering and ordering is in progress for implementation of remaining expansion of 4 MTPA unit.

5.0 Details of production capacities of various units of Steel Plant as per Environmental Clearance for 16 MTPA is as follows:

Sl No.	Unit Name	At 4 MTPA	4 to 10 MTPA	10 to 16 MTPA	Total Capacity in MTPA
1	Beneficiation Plant	4.5	15	-	19.5
2	Pellet Plant	5	5	-	10
3	Sinter Plant	2.3	8.05	9.8	20.15
4	Coke Oven Non-Recovery	1.28	-	Dismantling of existing NR Coke ovens	0
5	Coke Oven Recovery	0	3.5	4.5	8
6	Hot Metal COREX	1.2	0	0	1.2
7	Hot Metal BF	3.07	6	6	15.07
8	Pig Caster(TPD)	1200	7200	3600	12000
9	SMS (EAF+BOF)	3.8	6	6	15.8
10	Lime Kiln(TPD)	1200	3600	2400	7200
11	Slab Caster	0	6.4	8.4	14.8
12	Billet Caster	-	1.5	1.2	2.7
13	HSM	2	6.2	3.6	11.8
14	WRM	0	0.6	1.2	1.8
15	Rebar Mill	0	1	0	1
16	BRM	0	0	1.2	1.2
17	CRM	0	3	0	3
18	Pipe Mill	0	0.4	-	0.4
19	Galvanizing Line	0	1	-	1
20	Colour coating	0	0.5	-	0.5
21	Captive power plant (MW)	230	600	660	1390
22	Incinerator (Kg/hr)	0	750	250	1000

23	Slag grinding	1.6	2.6	2	6.2
24	Oxygen Plant(TPD)	500	4500	3600	10600
25	Township(Nos)	2	2	1	5

6.0 In the meanwhile, there has been a consistent downturn in the domestic steel market due to large scale cheaper imports and increased input costs. It is now being proposed to marginally change the approved configuration in the production facilities. The rationale for the proposed change are given below:

Sl No	**Unit Name**	**Existing configuration**			**Total (MTPA)**	**Changes proposed**	**New Total (MTPA)**	**Increase (MTPA)**
		0-4 MTPA	**4-10 MTPA**	**10-16 MTPA**				
1	Sinter Plant	SP1-2.3 MTPA	SP2–2.3 MTPA SP3–5.75 MTPA Total-8.05MTPA	SP4 – 2.3 MTPA **SP5– 7.5 MTPA** Total–9.8 MTPA	**20.15**	SP4–2.3 MTPA **SP5–5.75 MTPA** **SP6–1.75 MTPA** Total–9.8 MTPA	**20.15**	0
2	Hot Metal BF	BF1-0.9 MTPA BF2-2.17 MTPA Total-3.07 MTPA	**BF3- 3 MTPA** BF4- 3 MTPA Total- 6.0 MTPA	BF1- 2.5 MTPA **BF5- 4.4 MTPA** Total-6.9 MTPA	**15.07**	BF1- 2.5 MTPA **BF3- 4.4 MTPA** **BF5- 3.0 MTPA** Total- 6.9 MTPA	**15.07**	0
3	BOF	SMS1 – 3.8 MTPA	SMS2- 6 MTPA	SMS2-6.4 MTPA SMS3-5.6 MTPA (**3X 200 T BOF +1.2 MTPA EAF**) Total – 6 MTPA	**15.8**	SMS2-6.4 MTPA SMS3- 5.6 MTPA (**2X 200 T BOF + 2X1.2 MTPA EAF**) Total – 6 MTPA	**15.8**	0
4	HSM	HSM1- 2 MTPA	HSM1–3.2MTPA HSM2 –5 MTPA Total-8.2 MTPA	HSM3–3.6MTPA	**11.8**	HSM1 - 4 MTPA HSM2-5.2 MTPA HSM-3:3.6MTPA Total–12.8 MTPA	**12.8**	1.0
5	CRM	0	CRM1 – 1 MTPA CRM2 – 2 MTPA Total- 3 MTPA	0	**3**	CRM1-1.8 MTPA CRM2–2.3MTPA Total – 4.1 MTPA	**4.1**	1.1
6	Galvanizing	0	4 X 0.25 MTPA	0	**1.0**	4 X 0.25 to 2 X 0.45	**1.9**	0.9
7	CPP(MW)	100 MW + 130 MW	2 X 300 MW (100% imported coal)	660 MW	**1490**	Amendment in fuel type in 2 x 300MW (50% imported coal + 50% Indian coal)	**1490**	0
8	Township				**5 Nos**	1 with 500 dwellings	**6 Nos**	1 with 500 dwellings

7.0 It was informed that no change in the plant capacity; Coal requirement will increase from existing 1.8 MTPA to 2.5 MTPA; no additional land is required; no additional water is required; and ash generation will increase from existing 0.26 MTPA to 0.625 MTPA.

8.0 It was also informed that about 5.2% of reduction in PM; 11.9% reduction in SO2 and 5.1% reduction in NOx.

9.0 It was also informed that Regional Officer of MoEF&CC visited the project on 17.11.2016 regarding compliance of conditions stipulated in Environmental Clearances granted for various phases of expansion of the Integrated Steel plant of JSW and the report from RO is expected shortly.

10.0 The proposal was considered in the 19th meeting of EAC held during 8th to 9th June 2017. The PP has made detailed presentation on the proposed change in the configuration of some of the units and mentioned that the overall capacity of the plant remains same as approved earlier i.e. 16 MTPA.

11.0 After detailed deliberation the committee recommended for proposed changes in the configuration/product mix subject to cap of 16 MTPA of the crude steel production as approved in the earlier EC.

12.0 Regarding partial transfer of units, the committee asked the PP to submit a matrix indicating all the conditions of existing environmental clearance and, and as against each condition, the mutually agreed proposal as to which unit would be responsible for compliance of which condition after the proposed disintegration is permitted (DRI plant; Cement plant and Coke oven plant). This proposed devolution of responsibilities regarding compliance of EC conditions would be deliberated upon by the Committee which would make suitable recommendations.

13.0 Undertaking of the three companies for which transfer of EC is proposed and parent company shall submit undertaking for abiding the implementation of the Environmental Clearance conditions; no change in the pollution load; and no conflict in sharing in common facilities in day to day operations.

14.0 Implementation of the Enterprises Social Responsibility (ESR) and CSR shall be responsibility of the parent company i.e. JSW Steel Limited.

15.0 Therefore, the committee deferred the proposal till the submission of the information by PP.

16.0 The PP submitted reply on 28th June 2017. The reply submitted by the PP was examined and discussed by the Committee. The Committee was of the view that the information provided by the PP was insufficient and lacking in clarity. The Committee, therefore, asked the PP to submit complete information, as sought earlier, in the form of following two matrices:

i. Against each specific and general conditions imposed in the original EC, the responsibility of the compliance should be clearly indicated against each unit including the original PP and as well as the new companies.

ii. Against each company, including the original company, the split of the facilities/utilities /activities/ancillary unit (as per the original EC) should be clearly indicated. Further, against each company, brief description of nature of operations, raw material required and final products, pollutants, mitigation measures should be indicated.

20.23. Expansion of integrated Steel Plant from 5 MTPA to 10 MTPA and Power Plant from 300 MW to 600 MW (Gas Based) at Geethapuram, Village Dolvi, Tehsil Pen, District Raigarh in Maharashtra by M/s JSW Steel Limited. [F. No. J-11011/76/2013-IA.II(I)]. [Online Proposal No. IA/MH/IND/18771/2012 for Partial transfer of clinker grinding unit to M/s JSW Cement Ltd.; Proposal No. IA/MH/IND/41055/2015 for Partial transfer of Coke Plant M/s Dolvi Coke Projects Ltd and amendment in EC regarding Greenbelt Development and Cost of CSR Plan.

1.0 M/s JSW Steel Ltd. has made online application vide proposal no. IA/MH/IND/41055/2015 dated 15th January, 2016 for partial transfer of 1.0 MTPA Coke-Oven Plant and 2.5 MTPA 'Coke-Oven including by-product plant' from M/s JSW Steel Ltd to M/s Dolvi Coke Projects Ltd and amendment in EC regarding Greenbelt Development and Cost of CSR Plan.

2.0 M/s JSW Steel Ltd. has also made online application vide proposal no. IA/MH/IND/18771/2012, dated 10th August 2016 seeking partial transfer of 10 MTPA Slag & Clinker Grinding unit' from M/s JSW Steel Ltd to M/s JSW Cement Ltd.

3.0 The proponent has also made application for use of pet coke as a raw material in the coke making for use in blast furnaces vide Lr. No. EMD/GOV/F016/2959 dated 23rd May 2017.

4.0 The Environmental Clearance to the project of 3.0 MTPA to 5.0 MTPA Integrated Steel plant at Village Dolvi, Taluka Pen, District Raigad in Maharashtra was accorded vide letter J-11011/166/2011-IA-II (I) dated 21st November 2012 to M/s JSW Steel Ltd and further expansion of its project up to 10 MTPA was accorded environmental clearance vide letter J-11011/76/2013-IA II (I) dated 25th August 2015.

5.0 It has been explained by the project proponent that the expansion projects up to 5 MTPA have been established. The existing steel plant is based on the Direct Reduced Iron (DRI) - Blast Furnace-CONARC - Continuous Casting – Rolling Mill (CSP) route. The expansion is based on proven BF - EAF route.

6.0 The project proponent mentioned that the environment clearance for steel plant up to 5 MTPA includes 1.0 MTPA recovery type Coke Oven. Further, the environment clearance up to 10 MTPA plant includes 2.5 MTPA recovery type coke oven plant. It is proposed to combine the Coke Ovens of 1.0 MTPA and 2.5 MTPA, which are part of the earlier ECs as mentioned above into a single 3.5 MTPA Coke Oven plant in same location under 5 MTPA to 10 MTPA expansion project. By combining both the Coke Ovens into one the pollution load and other resource requirement like water will not increase; however, the land requirement and Capital Cost will be optimized for setting up a single Coke oven in-place of setting up two small and separate coke ovens. Also, this will have varied and distinct advantages in terms of lower land foot print with compact design for better operational and maintenance practices and logistics for handling coal and coke.

7.0 Total project cost of the coke oven plant of 3.5 MTPA will be Rs 2520 Crores. In order to optimize the capital expenditure, it is proposed to outsource the establishment and operations of the Coke Oven facility. The 3.5 MTPA Coke Oven will be established and operated by an

Associate Company, called Dolvi Coke Projects Limited and JSW Steel will be the largest shareholder of the SPV. JSW Steel Ltd. will sign the take or pay agreement from the associate company. This arrangement will help JSW to optimize the requirement of capital expenditure for setting up 10 MTPA capacity at Dolvi Works.

8.0 The project proponent further mentioned that while granting the environmental clearance for the expansion project, Ministry vide its specific condition No (iii) stipulated that 'The commitment made by the PP for plantation of the green belt to the tune of 655 acres should be expedited. Three rows of green belt, 12-15 meters wide, all along the periphery of the plant should be planted'. The project proponent mentioned that they are in the process of developing green belt with three tier plantations along the periphery and avenue plantation along the internal roads inside the premises. JSW Steel Ltd. is fully committed to comply with the 33% green belt requirement. However, it is becoming difficult to get continuous land at Dolvi, Taluka Pen, District Raigad to comply with 33% green belt cover along the periphery premises. Therefore, the project proponent requested to grant permission for plantation in nearby areas in degraded private/ Government land outside the plant premises in coordination with District Revenue/ Forest Department, Raigad, Maharashtra or plantation in line with the condition stipulated by the Maharashtra Pollution Control Board in its Consent to Operate, which states "The applicant shall bring minimum 33% of the available open land under green coverage / plantation".

9.0 Regarding CSR related activity the project proponent mentioned that EAC on 26th March 2015, directed to allocate 2.5% of the total project cost to be spent on CSR activities, which includes 2% of the annual profit as provided in clause No 135 of the Companies Act 2013. Accordingly, the CSR plan of 10 years was submitted to MoEFCC and was accepted. However, while granting the environmental clearance, an amount equivalent to 5% of the total cost of the project to be earmarked towards the Enterprise Social Commitment (ESC) based on local needs, has been mentioned as per the specific conditions, point no (v), of the EC dated 25.08.2015. The project proponent requested to consider the CSR plan of 2.5% of the project cost as submitted.

10.0 The proposal was considered in 4th meeting of Expert Appraisal Committee [EAC (Industry-I) held during 25th -26th February 2016. Based on the presentation made and discussions held in detail, the Committee opined as under:

a) Regarding combining of the two Coke Oven plants of 1.0 MTPA and 2.5 MTPA, which were part of earlier ECs, into a single 3.5 MTPA Coke Oven plant in the same location under 5 MTPA to 10 MTPA expansion project to be operated by their Associate Company, called Dolvi Coke Projects Limited is an administrative decision to be taken by the Ministry. However, as there is no provision in the notification for partial transfer of the environment clearance, the Committee has; therefore, deferred decision in the matter and referred matter to Ministry.

b) Regarding plantation, the Committee agreed to the submission of the project proponent and recommended the proposal of plantation in nearby areas in degraded private/ Government land outside the plant premises in consultation and coordination with District Revenue/ Forest Department, Raigad, Maharashtra.

c) With regard to reconsideration of CSR budget, the Committee recommended to revise the condition for 2.5% of the total cost of the project for CSR instead of 5%.

11.0 In view of the Committee's decision, the proposal for partial transfer of coke oven plant, Clinker and grinding units were processed in the Ministry for consideration. Ministry decided to refer to the EAC again for detailed deliberation on the environmental implications of the partial transfer of units and clear recommendation on the percentage of the proposal of plantation in nearby areas in degraded private/ Government land outside the plant premises.

12.0 After detailed deliberation the committee recommended CSR cost as decided in the earlier EAC.

13.0 Regarding proposal of plantation in nearby areas in degraded private/ Government land outside the plant premises, the committee recommended for 50% of the mandated plantation (33% of the total project area) shall be carried within the premises and for remaining 50% of the plantation, the committee asked the PP to explore the double the area around the project within 10 Km from the project. It was decided that the extent of plantation outside the project will be deliberated in the EAC meeting along partial transfer of units.

14.0 Regarding partial transfer of units, the committee asked the PP to submit a matrix indicating all the conditions of existing environmental clearance and, and as against each condition, the mutually agreed proposal as to which unit would be responsible for compliance of which condition after the proposed disintegration is permitted (Slag and Clinker grinding unit; Cement plant and Coke oven plant). This proposed devolution of responsibilities regarding compliance of EC conditions would be deliberated upon by the Committee which would make suitable recommendations.

15.0 Undertaking of the three companies for which transfer of EC is proposed and parent company shall submit undertaking for abiding the implementation of the Environmental Clearance conditions; no change in the pollution load; and no conflict in sharing in common facilities in day to day operations.

16.0 Implementation of the Enterprises Social Responsibility (ESR) and CSR shall be responsibility of the parent company i.e. JSW Steel Limited.

17.0 Therefore, the committee deferred the proposal till the submission of the information by PP.

18.0 The PP submitted reply on 28th June 2017. The following submission was made by PP vide his letter dated 28th June 2017.

19.0 The PP submitted reply on 28th June 2017. The reply submitted by the PP was examined and discussed by the Committee. The Committee was of the view that the information provided by the PP was insufficient and lacking in clarity. The Committee, therefore, asked the PP to submit complete information, as sought earlier, in the form of following two matrices:

i. Against each specific and general conditions imposed in the original EC, the responsibility of the compliance should be clearly indicated against each unit including the original PP and as well as the new companies.

ii. Against each company, including the original company, the split of the facilities/utilities /activities/ancillary unit (as per the original EC) should be clearly indicated. Further, against each company, brief description of nature of operations, raw material required and final products, pollutants, mitigation measures should be indicated.

20.24. Expansion of Steel Plant by installation of Coke Oven (1.2 MTPA Recovery type) located at Hazira ,Choryasi, Surat, Gujarat by M/s. Essar Steel India Limited (ESIL) [Online proposal No. IA/GJ/IND/4155/2010; J-11011/313/2009-IA.II(I)] – Extension of Validity of EC

1.0 The proponent has made online application vide proposal no. IA/GJ/IND/4155/2010, dated 24th February 2017 along with the application in prescribed format (Form-I), copy of earlier EC, report on the status of the project, etc. and clarification on 4th July 2017 for seeking extension of validity of environmental clearance granted vide J-11011/313/2009-IA.II(I) on 28thJuly 2010 under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & nonferrous) under Category "A" EIA Notification 2006.

2.0 It was informed that the facility namely Coke Oven plant (1.2 MMTPA, Recovery Type) is under construction and could not be completed due to financial constraints within the validity period. Therefore, the PP requested for extension of validity of Environmental Clearance.

3.0 After detailed deliberations, the committee agreed to recommend for extension of validity period for EC by 3 years up to 27th July, 2020.

20.25. Aswan Silica sand beneficiation plant with throughput capacity of 0.6 MTPA of M/s Mangalore Minerals Pvt. Ltd., village Chattara, Allahabad, Uttar Pradesh. Online proposal No. IA/UP/IND/59480/2011; J-11015/188/2011-IA. II(M) – Corrigendum to EC

1.0 The proponent has made online application vide proposal no. IA/UP/IND/59480/2011, dated 2nd May 2017 for corrigendum to environmental clearance granted vide J-11015/188/2011-IA. II(M) on 19th April 2017under the provisions of the EIA Notification, 2006 for the above-mentioned project.

2.0 It was informed that proposed Aswan Silica Sand Beneficiation Plant is located at **Village Aswan Near Chattara**, Tehsil Bara, Distt Allahabad, UP. However, in the EC Letter vide letter dated J 11015/188/2011 IA II (M) dated 19.04.2017 the location is given as **Village Chattara** in the subject of the letter as well as narration at para no. (3) of the letter. Therefore, PP requested for the said modification in village name of the Plant.

3.0 Based on the documents, it is agreed to change the name of the location as follows;

For	Read as
Located at village Chattara, Allahabad, Uttar Pradesh	located at **Village Aswan Near Chattara**, Tehsil Bara, Distt Allahabad, Uttar Pradesh

20.26. Setting up for manufacturing of Clinker (5,40,000 TPA), Portland Slag Cement (9,37,500 TPA), Portland Pozzolana Cement (1,80,000 TPA) and Captive Power

plant (20 MW) with captive railway siding at Village Hansda, District SaraikelaKharsawan in Jharkhand by M/s Jupiter Cement Industries Online Proposal No. IA/JH/IND/6147/2010 MoEF File No. J-11011/692/2008-IA.II(I)– Extension of validity of Environmental Clearance

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

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

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

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

5.0 After detailed deliberations the committee came to the opinion that it would be appropriate to consider the requested extension of validity of EC only after the final decision on the proposal of name change is taken by the ministry because, as of now, the present EC is not in the name of the applicant (M/s Shree Cement).

20.27. Expansion of Integrated Cement Plant (Line-I, II & III) [Clinker production capacity from 8.4 to 8.9 MTPA; Cement 8.0 MTPA; Captive power plant 73 MW; WHRB 16.05 MW; and DG set 12 MW] located at Village: Sawa-Shambupura, Tehsil & District: Chittorgarh, State Rajasthan by M/s. UltraTech Cement Ltd. (Unit: Aditya Cement Works) Online Proposal No. IA/RJ/IND/53064/2016; MoEF&CC File No J-11011/405/2011-IA-II(I) – Environmental clearance for proposed enhancement of clinker production capacity from 8.4 to 8.9 MTPA by process optimization under the provisions of clause 7(ii) of EIA Notification, 2006 – Based on reply of the PP dated 7th February, 2017.

1.0 The proponent has made online application vide proposal no. IA/RJ/IND/53064/2016, dated 22nd April 2016 along with the application in prescribed format (Form-I), copy of pre-feasibility report seeking environmental clearance under the provisions of Clause 7(ii) of the EIA Notification, 2006 for the proposed enhancement of clinker production capacity from 8.4 to 8.9 MTPA in the in the above-mentioned project. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category "A" EIA Notification 2006.

2.0 M/s. Ultratech Cement Ltd. (Unit: Aditya Cement Works) has an existing Integrated Cement Plant (Line - I, II & III) having total Clinker production capacity of 8.4 MTPA, Cement 8.0 MTPA, Captive Power Plant 73 MW, WHRB 16.05 MW and DG Set 12 MW at Village Sawa-Shambupura, Tehsil & District Chittorgarh (Rajasthan). Environmental Clearance for existing capacities was issued vide File No. J-11011/980/2008 dated 25th August, 2009 (6.4 MTPA clinker) and J-11011/405/2011-IA-II (I) dated 26th February, 2013 (2.0 MTPA clinker) respectively.

3.0 Now, M/s. Ultratech Cement Limited is proposed for enhancement in clinker production capacity from 8.4 MTPA to 8.9 MTPA (6% increase) by process optimization in existing Line - III under Clause 7(ii) of EIA Notification, 2006. The existing and proposed enhancement capacity are as follows:

S. No.	**Units**	**Line**	**Existing Capacity**	**Additional Capacity**	**Total Capacity after Enhancement**
1.	Clinker (MTPA)	Line - I	2.2	No Change	2.2
		Line - II	4.2	No Change	4.2
		Line - III	**2.0**	**0.5**	**2.5**
		Total	**8.4**	**0.5**	**8.9**
2.	Cement (MTPA)	Line - I, II & III	8.0	No Change	8.0
3.	CPP (MW)	Line - I, II & III	73 (1 x 23 and 2 x 25)	No Change	73 (1 x 23 and 2 x 25)
4.	WHRS (MW)	Line - I, II & III	16.05	No Change	16.05
5.	D.G. Set (MW)	Line - I, II & III	12.0 (2 x 6)	No Change	12.0 (2 x 6)

4.0 The total existing plant area is 250.55 ha; proposed enhancement will be done within the existing premises by process optimization. No additional water, manpower, cost, storage area is required. The proposed enhancement will be done by internal modifications.

5.0 No National Park, Wildlife Sanctuary, Biosphere Reserve exist within 10 km radius of plant site.

6.0 The targeted production capacity of the Clinker is 8.9 MTPA. The raw material and fuel requirement for the proposed enhancement is given below:

S. No.	**Raw Material**	**Requirement (MTPA)**			**Source**
		Existing (Line - I, II & III)	**Additional (Line - III)**	**Total after proposed enhancement**	
1	Limestone	11.58	0.69	12.27	Own Captive Mine
2	Additive (Red Ochre / Laterite)	0.885	0.526	1.411	Sawa-Rajasthan

3	Coal (Indigenous/ Imported), Petcoke	0.919	0.055	0.974	SECL Reliance, Essar IOCL, & Others

7.0 All major sources of air pollution are being provided with Bag Houses / Bag filters, ESPs to maintain the PM emission level below permissible limit. Ambient air quality and stack emission will be regularly monitored to ensure that ambient air quality standards are being met all the time. Domestic wastewater generated from plant & colony will be treated in STP and treated water will be utilized in greenbelt development. Rain water harvesting structures will be installed within the plant and colony premises. Out of the total plant area (250.55 ha), 95.76 ha i.e. 38% of the total plant area has already been developed under greenbelt / plantation.

8.0 The proposal was considered in the 8th meeting of Expert Appraisal Committee [EAC(Industry-I)] held during 27th – 28th June, 2016. Based on the presentation made and discussions held the Committee recommended the project for environment clearance under clause 7(ii) of EIA Notification, 2006 subject to stipulation of the following additional specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

i. The Project Proponent shall comply with all specific and general conditions stipulated earlier to the project vide Environment Clearance letter No. J-11011/980/2008 dated 25th August, 2009 and J-11011/405/2011-IA-II (I) dated 26th February, 2013

ii. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.

iii. The project proponent shall provide for LED lights in their offices and residential areas.

iv. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.

v. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.

9.0 During the processing of the proposal in the ministry, competent authority desired the compliance status of earlier EC, from the Regional Office of MoEF&CC. Accordingly, PP submitted the status of compliance to the ministry vide their letter no. UTCL/ENV/MUM/2017/08 dated 7th February 2017.

10.0 The PP made presentation on the status of compliance of earlier EC. The committee, having examined the information, decided to recommend the proposal for grant of EC.

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 equipments 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 Cahnge as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB/PCC shall be attached with the EIA-EMP report.
     - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. Site Details

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

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

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

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

6. **Environmental Status**

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

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

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

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

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

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

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

viii. Soil Characteristic as per CPCB guidelines.

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

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

xi. Socio-economic status of the study area.

7. Impact Assessment and Environment Management Plan

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

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

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport

of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.

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

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

vi. Measures for fugitive emission control

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

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

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

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

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

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

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

8. Occupational health

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

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

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

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

9. Corporate Environment Policy

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

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

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

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

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

11. Enterprise Social Commitment (ESC)

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

12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13. A tabular chart with index for point wise compliance of above ToRs.

14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

The following general points shall be noted:

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCl)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.
ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCBshall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

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

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ADDITIONAL ToRS FOR PELLET PLANT

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

7. Plan for slag utilization
8. Plan for utilization of energy in off gases (coke oven, blast furnace)
9. System of coke quenching adopted with justification.
10. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
11. Trace metals in waste material especially slag.
12. Trace metals in water

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ADDITIONAL ToRs FOR CEMENT INDUSTRY

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

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

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

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

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

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

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

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LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

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COKE OVEN PLANT

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

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ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

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

8. In case of green field project asbestos fibre to be measured at ambient air.

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INDUCTION/ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE

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

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METALLURGICAL INDUSTRY (FERROUS AND NON-FERROUS)

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

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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

ANNEXURE-3

Air Pollution

Plant /Unit	**Pollutants**	**Qty generated**	**Method used to Control/ and specifications/attach Separate Sheet to furnish Details**	**Number of units planned & Capacity**	**Budget**	**Estimated Post Control Qty of Pollutant**	
						Per Unit	Per Day

LIST OF PARTICIPANTS OF EAC (I) IN 20th MEETING OF EAC (INDUSTRY-I) HELD ON 10th – 12th July, 2017

S. No	Name and Address	Position	Attendance			Signature
			10th	11th	12th	
1	Dr.Chhavi Nath Pandey, IFS(Retired)	Chairman	P	P	P	
Members						
2.	Dr.ShivakarMisra Central Pulp and Paper Research Institute	Member	P	A	A	
3.	Director, Central Leather Research Institute	Member	A	A	A	
4.	Dr.Siddarth Singh, Representative of Indian Meteorological Department	Member	P	P	P	
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	P	P	P	
9.	Dr.G.V.Subrahmanyam	Member	P	P	P	
10.	Prof.Arun Pandey	Member	A	A	A	
11.	Shri Santosh Raghunath Gondhalekar	Member	P	P	P	
12.	Shri Ashok Upadhyay	Member	P	P	P	
13.	Shri Sharath Kumar Pallerla, Scientist 'F' / Director, MoEF&CC	Member Secretary	P	P	P	
14.	Shri RajasekharRatti, Scientist 'C', MoEF&CC	Dy. Director	P	P	P	

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