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

SUMMARY RECORD OF THE TWENTY- EIGHTH (28TH) MEETING OF EXPERT APPRAISAL COMMITTEE HELD DURING 5TH TO 7TH FEBRUARY 2018 FOR ENVIRONMENTAL APPRAISAL OF INDUSTRY-I SECTOR PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The Twenty-eighth meeting of the Expert Appraisal Committee (EAC) for Industry-I Sector as per the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-I Sector Projects was held during **5th to 7th February 2018** in the Ministry of Environment, Forest and Climate Change. The list of participants is annexed.

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

28.2 Confirmation of the minutes of the 27th Meeting

The minutes of 27th meeting held during 3rd to 5th January 2018, with following corrections, as circulated were confirmed.

27.4 Enhancement in production capacity of Integrated Cement Project - Clinker (2.0 to 4.5 MTPA), Cement (2.5 to 5.2 MTPA), CPP (40 MW), WHRS (10 to 12 MW) and D.G. Set (2 x 6 MW) at Villages - Tonki, Temarni, Sondul and Golpura, Tehsil - Manawar, District - Dhar (Madhya Pradesh) by M/s. UltraTech Cement Ltd. [Online Proposal No. IA/MP/IND/50963/2016; MoEFCC File No. J-11011/86/2012-IA-II(I)] - Environmental Clearance.

Reference in MoM	For	Read as
Page no. 5, Item no. 27.4, Line no. 2	Enhancement in Production Capacity of Integrated Cement Project - **Clinker (2.0 to 4.5 MTPA)**, Cement (2.5 to 5.2 MTPA), CPP (40 MW),**WHRS (10 to 12 MW)** and D.G. Set (2 x 6 MW) at ……	Enhancement in Production Capacity of Integrated Cement Project - **Clinker (2.0 to 6.0 MTPA)**, Cement (2.5 to 5.2 MTPA), CPP (40 MW), **WHRS (10 to 16 MW)** and D.G. Set (2 x 6 MW) at ……

27.5 Production of Mild Steel Wire Rod of capacity 70000 TPA by setting up of wire rod rolling mill within the existing production of the plant of Rerolled products (70,000 TPA) and Steel Ingots and Billets (70,000 TPA) at village Sondra, Tehsil & District Raipur, Chhatisgarh by M/s Nandan Steel & Power Ltd [Online Proposal No. IA/CG/IND/71354/2017; MoEFCC File No. J-11011/1328/2007- IA.II(I)] - Modernization of existing project and Change in product mix under clause 7(ii) of EIA Notification, 2006.

Reference	For	Read as
Para 2	**M/s Nandan Steel & Power Limited** is operating the Induction Furnace to produce 70000 TPA MS Ignot/Billet and billet reheating furnace based Rolling Mill to produce structural steel	**M/s. Nandan Steels & Power Limited** is operating two facilities (i) Induction Furnaces to produce 70000 TPA MS Ingots/Billets; and (ii) billet reheating furnace based Rerolling Mills to produce

<table>
<tr><td></td><td>with prior environmental clearance vide F.No. J-11011/328/2007-IA.II(I) dated 31st July 2007 and obtained consent under Air and Water Act from Chhattisgarh Conservation Board which is valid up to 31st march 2019.</td><td>70000 TPA structural steels with prior environmental clearance vide F.No.J-11011/328/2007-IA.II(I) dated 31st October 2007 and obtained consent under Air and Water Act from Chhattisgarh Environment Conservation Board which is valid up to 31st March 2019.</td></tr>
<tr><td>Para 3</td><td>Now it is proposed to add hot charging process-based wire rod mill to the existing unit to produce wire rods from available hot billets for value addition within the overall capacity of 70000 TPA. The proposed production after modernization / change in product mix is given below:
<table>
<tr><td>Existing Products</td><td>Existing capacity</td><td>Proposed products</td><td>Proposed capacity</td><td>Remarks</td></tr>
<tr><td>Rerolled product through Billet Reheating Furnace</td><td>70000 TPA</td><td>Rerolled product through Billet Reheating Furnace and / or Wire Rod through Hot Charging of Billets</td><td>70000 TPA</td><td>No change in the overall production capacity</td></tr>
</table></td><td>Now it is proposed to add hot charging process based wire rod mill to the existing Induction Furnace unit to produce wire rods from available hot billets for value addition within the overall capacity of 70000 TPA MS Billet. The existing Billet Reheating Furnaces based Rerolling Mill capacity 70000 TPA will remain unchanged, which will continue to procure the special steel Billet form other existing MS Billet manufacturing units. The MS Billet production in the existing unit will not be increased for the proposed modernization/ change in product mix. The proposed production after modernization / change in product mix is given below:
<table>
<tr><td>Existing Products</td><td>Existing capacity</td><td>Proposed Products</td><td>Proposed capacity</td><td>Remarks</td></tr>
<tr><td>MS Ingot/ Billet</td><td>70000 TPA</td><td>MS Ingot/ Billet and/or Wire Rod through Hot Charging of MS Billet</td><td>70000 TPA</td><td>No change in the existing production capacity of MS Ingot/ Billet</td></tr>
<tr><td>Rerolled product through Billet</td><td>70000 TPA</td><td>Rerolled product through Billet</td><td>70000 TPA</td><td>No change in existing production</td></tr>
</table></td></tr>
</table>

		Reheating Furnaces		Reheating Furnaces		capacity of rerolled structural steel

27.29: 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)] – Amendment in Terms of Reference

For para 4 of 27.29:

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 NM^3	12,00,000 NM^3	12,00,000 NM^3
8	Nitrogen Plant		45,00,000 NM^3	45,00,000 NM^3	45,00,000 NM^3
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

Read para 4 of 27.29 as:

Sl	Name of the Unit	Capacity of manufacturing	Capacity of manufacturing	Total Capacity	After Approval of this Proposal

		facilities in Phase-I	facilities in Phase-II		
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	73 MW	73 MW
		-	20 MW (Biomass)		
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 NM^3	12,00,000 NM^3	12,00,000 NM^3
8	Nitrogen Plant		45,00,000 NM^3	45,00,000 NM^3	45,00,000 NM^3
9	Fly Ash Brick Plant		1,65,00,000 Nos	1,65,00,000 Nos	1,65,00,000 Nos
10	Rolling Mill	(Under commissioning stage)		4,00,000	4,00,000
11	Iron Ore Pelletization			21,00,000	21,00,000
12	Gassifier for Iron Ore Pellet Plant	-	-	56000 NM^3	56000 NM^3
13	Magnetite Powder Plant	-	-	-	200000 TPA

DATE: 5th February, 2018

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

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

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

2.0 The proposal of M/s BMA Stainless Limited for capacity expansion from 1,20,000 to 2,07,360 TPA rolled products by replacement of existing 4 nos. of 8 Ton capacity Induction Furnaces by 4 nos. of 12 Ton Induction Furnaces and modification of the existing Rolling Mill (increasing the speed of rollers),located in Village-Debipur, P.O.-Kalyaneshwari, District – Burdwan, State-West Bengal was initially received in the Ministry on 08th August 2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 10th meeting held on 29th August 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 17th November 2016 vide Lr. No. J-11011/192/2013-IA.II (I).

3.0 The project of M/s. BMA Stainless Limited located in Debipur Village, Kalyaneshwari P.O., Burdwan District, West Bengal State is for capacity expansion by replacement of existing 4 nos. of 8 Ton capacity Induction Furnaces to 4 nos. of 12 Tons Induction Furnaces and increasing the speed of existing Rolling Mill through modernization is for enhancement of production of Billed / TMT Bars from 0.12 to 0.207360 million tonnes per annum (million TPA). The existing project was accorded environmental clearance vide lr.no. J-11011/192/2013-IA II (I) dated 29th September 2014. The Status of compliance of earlier EC was obtained from Regional office of MoEFCC Bhubaneshwar vide Lr. No. 102-507/EPE/452 dated 17-10-17. There are certain non-compliances reported by Regional officer. The proposed capacity for different products for new site area as below:

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

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

5.0 The topography of the area is flat and reported to lies between 23°46'59.63"N to23°46'57.16"N Latitude and 86°49'55.42"E to 86°50'5.43"E Longitude in Survey of India topo sheet Nos. 73 I/9, 73 I/10, 73 I/13/73 I/14 at an elevation of 128 m AMSL. The ground

water table reported to ranges between 0.22 to 11.63m below the land surface during the post-monsoon season and 0.74 to 19.95m below the land surface during the pre-monsoon season.

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

7.0 The existing 1,20,000 TPA Plant is having 4x8 MT Induction Furnace and 6/7 radius, 2 strand CCM, 20 TPH Rolling Mill with auxiliaries. The Raw Material likes Sponge Iron, Pig Iron & Ferro-Alloys are being melted in Induction Furnace and the refined liquid metal is cast into billets through continuous casting machine. Billets are rolled into rolled products in Rolling Mill. Reheating Furnace has been provided to reheat the billets, if required for rolling. Producer gas is used as fuel in the Reheating Furnace. The present proposal is for replacement of existing 4x8 Tons Induction Furnaces with 4x12 Tons Furnaces and increasing the output (speed) of existing Rolling Mill through modernization. Downstream facilities like Continuous Casting Machine, Rolling Mill, Producer Gas plant doesn't require any change/modification as they have adequate capacity to meet the proposed production. In Rolling Mill motors with the Rollers shall be replaced with high speed motors to meet the annual production of 2,07,360 Tons of rolled product.

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

9.0 The water requirement of the project is estimated as 212 m^3/day (including 10 m^3/day for domestic use). The requirement will be met from DVC, Borewell and Rain Water harvesting pond. Permission for the same has been obtained from the concerned authority. The permission for drawl of surface water is obtained from Central Water Commission-DVVR Unit vide Lr. No. MD/DVRR/W-6-116/2008/602-608 date 11th September 2008 and Ground water from Ground Water Resource Development Authority, Burdwan vide permit no. P022024012520000001TSE dated 7.2.17.

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

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

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

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

14.0 No R&R is involved.

15.0 It has been reported that a total of 18,434 tons of waste will be generated due to the project, out of which 17,812 tons will be used in road/area/land development and 622 tons will be Recycled in the process. It has been envisaged that an area of 2.30 ha will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

16.0 It has been reported that the Consent to Operate from the West Bengal Pollution Control Board obtained vide Lr. No. C0107785302-WPBA/Red(Bwn)/cast(521)/06 dated 17.03.2017 and consent is valid up to 30.04.2022.

17.0 The Public hearing of the project was held on 21.07.2017 at Nandanik Hall of Salanpur Panchayet Samity P.O- Salanpur, District- Paschim Bardhaman, West Bengal under the chairmanship of Sri Kaushik Mukherjee W.B.C.S. (Exe.), Dy. Magistrate and Dy. Collector, and O.C., Judicial Munshi Khana for production of 2,07,360 TPA of Billet/Rolled Product from the existing production of 1,20,000 TPA. The issues raised during public hearing, *inter alia*, are Employment to the local people; Renovation of Toilets in local schools; Development of roads; Medical / Ambulance facility for nearby villages; Implementation of effective pollution control measures.

18.0 An amount of 20 Lakhs (2.5% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues. The details of ESC proposed are as follows:

Sl. No.	Enterprise Social Commitment Activities	Budget (Rs. Lakhs)					
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	Health Facility	1	1	1	1	1	5
2	Infrastructural Development	0.7	0.7	0.7	0.7	0.7	3.5
3	Educational Facility	0.7	0.7	0.7	0.7	0.7	3.5
4	Afforestation Programs	0.6	0.6	0.6	0.6	0.6	3.0
5	Community Welfare Activities	0.4	0.4	0.4	0.4	0.4	2.0
6	Community Water Conservation	0.3	0.3	0.3	0.3	0.3	1.5
7	Community Capacity Building	0.3	0.3	0.3	0.3	0.3	1.5
Total		20 Lakhs					

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

S.No.	**Environmental Protection Measures**	**Capital Cost Rs. In lakhs**	**Recurring Cost Rs. In Lakhs / Yr.**
1	Air Pollution Control Measures	50.00	6.00
2	Water Pollution Control Measures	3.00	1.00
3.	Noise Pollution Control Measures	1.00	0.10

S.No.	Environmental Protection Measures	Capital Cost Rs. In lakhs	Recurring Cost Rs. In Lakhs / Yr.
4	Greenbelt Development	5.00	2.00
5	Rain Water Harvesting	3.50	0.30
6	Occupational health and safety	1.50	1.00
TOTAL		**64.00**	**10.40**

20.0 Greenbelt will be developed in 2.30 Ha which is about 33% of the total acquired area. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 7000 saplings will be planted and nurtured in 2.30 hectares in 5 years.

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

22.0 The proponent has made presentation along with EIA Consultant M/s M/s Vardan Environet, Gurgaon, Haryana.

Observations of the committee

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

Recommendations of the Committee:

24.0 After detailed deliberations, the committee advised to submit revised EIA report incorporating the following additional information.

1. Revised water balance and rainwater harvesting scheme
2. Revised material balance
3. Revised greenbelt development plan to complete 2.3 ha as per the earlier Environmental Clearance
4. Complete details of raw material, source, mode of transport and distance from source
5. Scheme for 100% utilization of solid waste including hazardous waste generated from producer gas plant.
6. Revised table of issues raised during PH, commitment of PP, time bound action plan along with fund provision.
7. Revised ESC programme based on the issues emerged during PH and social impact assessment. The activity shall be for asset creation and capacity building in CAPEX mode.
8. Power supply arrangement details

9. Closure report on non-compliances reported by Regional Officer on earlier EC conditions from Regional officer of MoEFCC.

10. Hazardous waste generated in the existing and proposed expansion shall be clearly addressed.

11. The revised project and site-specific HIRA

12. Corporate Environmental Policy addressing the reporting mechanism of non-compliances to the board of directors directly.

25.0 Therefore, the proposal is deferred till the submission of about sought information by project proponent.

28.4 Capacity Expansion of Vishakhapatnam Steel Plant from 6.3 MTPA to 7.3 MTPA by revamping and augmentation of existing facilities by M/s Rashtriya Ispat Nigam Limited located at Gajuwaka, Vishakhapatnam, Andhra Pradesh [Online proposal No. IA/AP/IND/56868/2016; MoEFCC File No. J-11011/196/2005-IA.II(I)] – Environmental Clearance.

1.0 **M/s Rashtriya Ispat Nigam Limited** has made online application vide proposal no. **IA/AP/IND/56868/2016** dated **9th January 2018** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of EIA Notification, 2006 and the proposal is appraised at Central level.

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

2.0 The Capacity Expansion of Visakhapatnam Steel Plant from 6.3 MTPA to 7.3 MTPA by revamping and Augmentation of existing facilities of M/s Rashtriya Ispat Nigam Limited located in Village Gajuwaka Tehsil Visakhapatnam District Visakhapatnam State Andhra Pradesh was initially received in the Ministry on 30th June 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 8th meeting held during 27th to 29th July, 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 19th September 2016 vide Lr. No. J-11011/196/2005-IA.II(I).

3.0 The project of M/s Rashtriya Ispat Nigam Limited located in Village Gajuwaka Tehsil Visakhapatnam District Visakhapatnam, Andhra Pradesh State is for setting up of a new Modification for production of 7.3 MTPA of Steel production enhancement of production of 1MTPA from 6.3 to 7.3 million tonnes per annum (million TPA). The existing project was accorded environmental clearance vide lr.no. F.No. J-11011/196/2005-IA.II(I) dated 11-8-2005. The Status of compliance of earlier EC was obtained from Regional Office, Chennai vide Lr. No. EP/12.1/354/AP/2052 dated 21-12-2017. There are no non-compliances reported by Regional officer except for the modernisation activity undertaken by VSP/RINL which is compulsory in view of aging of the existing plant, ensure the safety during operation and cleaner environment. The proposed capacity for different products for new site area as below:

Sl. No.	Production Unit	Facilities at 6.3 MTPA stage	Production at 6.3 MTPA stage, MT	Facilities at 7.3 MTPA stage	Production at 7.3 MTPA stage, MT
1	Coke Ovens and By-products Recovery Plant (COBP) of capacity 0.8 MTPA each	COB-1 COB-2 COB-3 COB-4	0.695 0.695 0.695 0.695	COB-1 COB-2 COB-3 COB-4 COB-5	0.775 0.775 0.775 0.775 0.8
2	Sinter Plant	SP-1 SP-2 SP-3	2.85 2.85 3.25	SP-1 SP-2 SP-3	3.64 3.64 3.25
3	Blast Furnace	BF-1 BF-2 BF-3	2.0 2.0 2.5	BF-1 BF-2 BF-3	2.5 2.5 2.5
4	Lime/dolo Plant	Kiln#1-5 Kiln#6&7	0.425 0.365	Kiln#1-5 Kiln#6&7	0.425 0.365
5	LD Shop	SMS-1 SMS-2	3.5 2.8	SMS-1 SMS-2	3.5 3.8
6		Wire Rod Mill	1.65	Wire Rod Mill	1.81
		Special Bar Mill	1.65	Special Bar Mill	1.78
		Structural Mill	1.75	Structural Mill	1.93
		Rebar	-	Rebar	0.6
				Rounds for FWP	0.08
		Semis (Bloom/ Rounds/ Billets)	0.66	Semis (Bloom/ Rounds/ Billets)	0.58
		Coal Based Waste Gas Gas Based Nedo Sinter cooler	315 MW 69 MW 120 MW 20.6 MW	Coal Based Waste Gas Gas Based Nedo Sinter cooler	315 MW 69 MW 120 MW 20.6 MW
7	Captive Power	Coal Based Waste Gas Gas Based Nedo Sinter cooler	315 MW 69 MW 120 MW 20.6 MW	Coal Based Waste Gas Gas Based Nedo Sinter cooler	315 MW 69 MW 120 MW 20.6 MW

4.0 The proposed expansion is planned in the existing project site of 3240 ha. No forestland involved. The entire land has been acquired for the project. There is no River passes through the project area. It has been reported that no water body exist around the project and

modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lies between 17º34'29" to 17 º 38'49" N Latitude and 83 º 09'23" to 83 º 14'12" E Longitude in Survey of India topo sheet No. 65 O/2, at an elevation of 10 m AMSL. The ground water table reported to ranges between 5-10mgbl below the land surface during the post-monsoon season and 2-5mbgl below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be 1m. Further, the stage of groundwater development is reported to be 100% and 100% in core and buffer zone respectively and thereby these are designated as critically exploited.

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

7.0 For the proposed capacity augmentation from 6.3 MTPA to 7.3 MTPA liquid steel, it is estimated that nearly 3.533 MTPA additional minerals would be required namely iron ore in the form of fines, Sized Iron Ore& Pellets, limestone & dolomite, Quartzite. 1.2 MTPA Coal/ PCI coal as fuel is required. No additional land is required.

8.0 The targeted production capacity of the Vizag Steel Plant is 7.3 MTPA. The ore for the plant would be procured from (linkages Rail). The ore transportation will be done through Rail.

9.0 The water requirement of the project is estimated as 4,545.m3 /day which will be obtained from the existing Yeleru Reservoir. The permission for drawl of groundwater / surface water is obtained from VIWSCO vide agenda item no. 43/7 of 43rd meeting of the BOD held on 24/12/2009.

10.0 The power requirement of the project is estimated as 76 MW, out of which 76 MW will be obtained from the APTRANSCO.

11.0 Baseline Environmental Studies were conducted during post monsoon season 2016 i.e. from October to December 2016. Ambient air quality monitoring has been carried out at 8 locations during 17-10-2016 to 7-1-2017 and the data submitted indicated that PM_{10} (43.8 µg/m^3 to 85.0 µg/m^3), $PM_{2.5}$ (20.2 to 58.1µg/m^3), SO2 (11.6 to 17.5 µg/m^3) and NOx (14.1 to 18.5 µg/m^3). The results of the modelling study indicate that the maximum increase of GLC for the proposed implementation of 7.3 MTPA expansion is 16.6 µg/m^3 with respect to the PM10, 23.2 µg/m^3 with respect to the SO_2 9.3 µg/m^3 with respect to the NOx, which is less than the predicted GLCs due to operation of 6.3 MTPA. This is due to proposed upgradation of pollution control equipment, and also reduction in volumetric flows.

12.0 Ground water quality has been monitored in 7 locations in the study area and analysed. pH: 7.35 to 8.10, Total Hardness: 360 to 520 mg/l, Chlorides: 130 to 250 mg/l, Fluoride: 0.4 to 0.8 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 4 locations. pH: 7.21 to 8.06; DO: 5.6 to 6.2 mg/l and BOD: 1.0 to 1.3 mg/l.

13.0 Noise levels are in the range of 52.0 to 72.9 dB(A) for daytime and 42.2 to 66.2 dB(A) for night time.

14.0 No R&R is involved.

15.0 The solid waste generated at 6.3 MTPA stage will be approx 11,700 TPD which includes granulated BF slag, SMS slag, mill scales, sludges, ESP/Bag filter dust etc. In addition, about 2000 TPD of coal ash will be generated at 6.3 MTPA stage. There would be additional generation of approx 1,700 TPD of solid waste for 7.3 MTPA stage. It is estimated that 100% of the granulated BF slag would be sold to the cement making industries for manufacturing of slag cement. Other waste such as mill scale, sludges, dust etc. would be 100% recycled into the sinter plant. 60% of the SMS slag would also be used within the steel plant and the balance would be stored for further processing for secondary use.

16.0 It has been reported that the Consent for Establishment (CFE) has been obtained from the Andhra Pradesh State Pollution Control Board vide order no APPCB/VSP/108/HO/2005/317 dated 09.05. 2005.Consent for Operation has been obtained from Andhra Pradesh State Pollution Control Board vide order dt.27-04-2015 and the same is valid till February 2019.

17.0 The Public hearing of the project was held on 15th June 2017 at Trishna Grounds, Sector -2, Ukkunagaram under the chairmanship of District Collector and District Magistrate Visakhapatnam for production of 7.3 MTPA of Capacity Expansion Steel Plant / setting up of Capacity Expansion Steel Plant. The issues raised during public hearing inter alia include estimation of project cost, effluent discharge, development of greenbelt, water requirement, pollution, safety of industry, utilization of CSR funds, R&R package, etc. The Statement of main issues raised by the public and response of the project proponent is as follows:

Major Issues in Public Hearing			
Issue Raised	PP Response	Budget	Action Plan with Date
Project cost estimation is more	Expenditure will be spent for revamping of existing facilities and installation of additional facilities	Breakup for new equipment is as follows: Installation of Convertor-3 & Caster-4 – Rs.975 Crores. Twin LF Rs.106 crores. Rebar Mill – Rs.431 Crores. Augmentation of Utilities – Rs.18.57 crores. Standby facilities envisaged, COB-5 – Rs.2857.66 Crores, TB-5 – Rs.280 Crores. KBR-2 – Rs.465.85 Crores, Guard Pond – Rs.12.55 crores. Remaining expenditure will be spent for revamping of existing facilities.	During Construction and Operation stage of the Expansion Project
Effluent Discharge	Effluent is discharged into the sea after Mechanical, Biological & Chemical Treatment and after confirming to the discharge standards.		
Greenbelt	38% is already existing greenbelt,	Budget spent so far for 5.2 million plantations is Rs.3834 lakhs. Budget projection for 2017-18 to 2019-20 is Rs.13.50 crores for6.3 Mpa	Continuous
Water Requirement	MOU with Visakhapatnam Industrial Water Supply Company Limited for use of 45 MGD of water. For 6.3 MTPA the requirement of water is 30		Continuous

Major Issues in Public Hearing			
Issue Raised	PP Response	Budget	Action Plan with Date
	MGD for Plant and 8MGD for township and others. For the proposed expansion the water requirement is 7MGD		
Pollution caused by Steel Plant	Vizag Steel Plant has adopted Best Available Technology	Estimated expenditure for pollution control is Rs.559 Crores Annual expenditure for operation and maintenance is Rs >300 Crores	During Construction and Operation stage of the Expansion Project
Rainwater Harvesting	2 large rain water harvesting ponds are constructed to capture 3.3 MGD water.	Expenditure incurred for Installation is Rs.13.83 crores.	During Construction and Operation stage of the Expansion Project
Safety Studies		Expenditure for HAZOP & QRA studies is Rs 23,99,976 .	Continuous
Utilisation of CSR funds Skill Development Utilisation of local youth	Skill development is part of CSR. Training was provided for plumbing, tailoring, computer basics, solar equipment repairs & mobile repairs and industrial training. RINL involved around 300 Nos. of local youth in vocational training /skill development programmes.	Budget spent for CSR Activities is more than Rs.138 crores.	Continuous
R & R package is yet to be completed	Out of 16000 R cards issued, agreements were entered with 5000 R card holders and the jobs were provided for 6300 R Card holders.		
Earlier commitment not fulfilled – employment – R-Card	Employment during Operation is 1600 and Indirect employment 3000 shall be provided as per existing policies and guidelines Due to the Hon'ble Supreme Court of India's judgment issued in 1998, the employment opportunities are equally given to all the people by giving publicity		

18.0 The budget spent for CSR activities is more than Rs 138 crores. An amount of **778** Lakhs has been earmarked for **2017-18** for Enterprise Social Commitment based on public hearing issues. The details of ESC budget from **2014-15** to **2017-18** are as follows:

Sl. No.	Enterprise Social Commitment Activities	2014-15 (Rs.in lakhs)	2015-16 (Rs.in lakhs)	2016-17 (Rs.in lakhs)	2017-18 (up to Dec.'17) (Rs.in lakhs)	Total (Rs.in lakhs)

1	CSR **(**Health, Education, Environment, Skill enhancement, Peripheral Development, Sports, Arts & Culture, Swach Bharat & Sanitation).	1423	1137	748	778	4086

19.0 The capital cost of the project is Rs 9439.53 Crores and the capital cost for environmental protection measures is proposed as Rs. 558.99 crore. The annual recurring cost towards the environmental protection measures is proposed as Rs 33700 Lakhs. The employment generation from the proposed project / expansion is Direct Employment during Operation is 1600 and Indirect employment is for 3000 people. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

Sinter plant 1&2 revamping (ESP & dust extraction)	Rs. 76.76 crore
Blast furnace-1 revamping (stock house & cast house fume extraction)	Rs. 69 crore
Blast furnace-2 revamping (stock house & cast house fume extraction)	Rs. 73.33 crore
Steel melting shop-1 revamping (secondary ventilation system)	Rs. 75.23 crore
LD Convertor-3 in SMS-2 (Dog house modification, secondary ventilation & Dry type ESP)	Rs. 33 crore
Coke oven Battery-1 rebuilding	Rs 15 crore
Revamping of ESPs in TPP	Rs 68 Crore
COB-5 pollution control equipment	Rs 15 Crore
Pulverised coal injection	Rs 133.67
Total	**Rs. 558.99 crore**

20.0 Out of total acquired land of 8827 ha (21811.99 Acres), greenbelt has been done in 1969 ha (4866 Acres) within the plant area. On the whole about 38% of the land is afforested with the planting of 5.16 million trees.

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

22.0 Consultant Name – Bhagavathi Ana Labs Private Limited (Bureau Veritas Group Company), Hyderabad. NABET Certificate No NABET/EIA/1619/RA0049

Observations of the committee:

23.0 The committee observed that the project proponent has already started the proposed modernization and revamping activities since 2013 and the status of implementation of various packages, as reported by Regional Officer, Chennai as follows:

Package	Front hand over date / Contractual Start Date	Actual Completion date / Likely completion date	Status as on November 2017
BF-1 Revamping	25/10/2013	21/07/2014	Commissioned and running at 90% capacity
BF-2 Revamping	5/5/2016	1/08/2017	Commissioned and running at 60% capacity

Sinter Plant-1 Revamping	31/10/2016	31/07/2017	Commissioned and running at 70% capacity
Kanthi Balancing Reservoir -2	19/07/2016	Likely to complete by July 2018	15% of construction work completed
3rd Converted	March 2013	Completed in November 2016	100% completed
4th Caster	June 2014	Likely to be completed	80% completed
TB-5	June 2014	November 2017	95% completed
Sinter Plant-2 Revamping			Not yet started

24.0 The committee noted that the fact regarding violation of EIA Notification 2006 in the instant proposal was not disclosed in the EC application and related documents. Further, the committee also noted that the brief report by EIA Consultant M/s Bhagavathi Anna Labs, Hyderabad vide E-mail dated 3rd February 2018 stated that "the proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity". This amounts to be concealing of factual information.

Recommendations of the committee:

25.0 Therefore, the committee recommend to initiate appropriate action against the consultant for concealing the fact and misguiding the EAC and Ministry.

26.0 Since the project proponent has already implemented the expansion project / activity without prior Environmental Clearance attracts the violation under EIA Notification 2006.

28.5 Expansion of Sponge Iron Plant located at Village Budhakhap, P.O - Karma, Dist.- Ramgrah, Jharkhand by M/s Aloke Steels Industries Private Limited [online proposal No. IA/JH/IND/53261/2016; MoEFCC File No. J-11011/205/2016-IA.II(I)] – Environmental Clearance.

1.0 **M/s Aloke Steels Industries Private Limited** has made online application vide proposal no. **IA/JH/IND/53261/2016** dated **9th January 2018** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of EIA Notification, 2006 and the proposal is appraised at Central level.

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

2.0 The application M/s Aloke Steel Industries Pvt. Ltd. located in Village-Budhakhap, P.O.- Karma, District – Ramgarh, State-Jharkhand was initially received in the Ministry on 30.04.2016 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 7th meeting held on 30th May to 1st June 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 01.08.2016 vide Lr. No. J-11011/205/2016-IA.II(I).

3.0 The project of M/s. Aloke Steel Industries Pvt. Ltd., located in Budhakhap Village, P.O.- Karma, Ramgarh District, Jharkhand State is for expansion of the existing plant for production of 0.12 MTPA of Sponge Iron by installation of new facilities for production of Steel Melting Shop for 0.108 MTPA of Billets, Rolling Mill for production of 0.09 Million tonnes of rolled product with 18 MW Power Plant and 0.27 MTPA of Ore Crushing & Beneficiation Plant. EC for the existing project was not required as the project was installed prior to EIA Notification, 2006 and the project cost was less than 100 Cr.

Name of Unit	No of Units	Capacity of Each Units	Production Capacity
Induction Furnaces	3	12 Tonne	113,6
Billet Caster	2 Strand	6x11 m radius	108,000 TPA
Rolling Mill	1		90,000 TPA
Power Plant	4 1	2MW WHRBs 10 MW AFBC Boiler	18 MW
Iron Ore Crushing & Beneficiation Plant	1	80-100 TPH	2,70,000 TPA
Slag Crushing Plant	1	8 TPH	16,200 TPA

4.0 The total land required for the project is 'Nil' (project shall be installed within existing 21.99 ha. plant area). No forest land is involved. The entire land has been acquired for the project. The Damodar river is at a distance of 1.5 Km.

5.0 The topography of the area is undulated flat and reported to lies between 23˚39'46.33" N Latitude and 85˚33'10.04" E Longitude in Survey of India topo sheet No. 73 E/6 & 73 E/10 at an elevation of 260m AMSL. The ground water table reported is 1.6 to 5.9 mbgl. during the post-monsoon season and 2.25 mbgl at Barwatola and 11.19 mbgl at Bhurkunda respectively during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be 1 m. Further, the stage of ground water development is reported to be 60% and 40% in core and buffer zone respectively and there by these are designated as safe area.

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 doesn't report to form Corridor for Schedule-I fauna. The authenticated list of flora and fauna provided through the reporting presence of no Schedule-I fauna in the study area (Given in Chapter-3 in EIA Report).

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

Process	**Facilities**	**Basic Raw Material Used**	**Process flow**	**Waste Generated**
Steel Making	Induction Furnace	• Sponge Iron • Purchase scrap / Pig iron	Feeding of RM → Melting in IF (adding alloys as per requirement) → Metal in Liquid form → casting →cooling → Billets.	• Slag • Bag filter dust

Process	Facilities	Basic Raw Material Used	Process flow	Waste Generated
		• Revert scrap		
	Billet Caster	Liquid steel		
Rolling	15 Stand Rolling Mill	Billets	Feeding of hot billets → roughing strands → rolling → cutting & bundle → TMT Bar → dispatch	• Mill scale • Cobbles (scrap)
Power Generation	Waste Hear Recovery Boilers	DRI Gas (from existing Sponge Iron Plant)	Steam from WHRB+AFBC (char used along with coal as fuel) → TG set → Power generation	
	AFBC Boiler	• Coal • Dolo-char (From Sponge Iron Plant)		• Fly-ash
Iron Ore Beneficiation	800-1000 TPH Iron Ore Crushing & Beneficiation Plant	Iron Ore	Crushing & sizing using screens → washing in wet screens → to DRI Slurry to hydro-cyclone → dewatering →Beneficiated Iron Ore	• Tailings
Slag Crushing	Jaw & Cone crusher with magnetic separator	IF Slag	Slag → jaw crusher→ screen → magnetic separator → cone crusher → screen → magnetic separator → recovered metallic part	• Remaining slag (after metal recovery)

8.0 The water requirement of the project is estimated as 2923 m^3/day. 2923 m^3/day fresh water requirement will be obtained from Damodar Valley Corporation (DVC). Permission for drawl of 0.644 MGD ~ 2923 m^3/day from vide Lr. No. ASWA43,5/17-18 dated 17.10.2017 from Damodar Valley River Regulation Committee (DVRR) Govt. of Jharkhand.

10.0 The power requirement of the project is estimated as 18.5 MW, out of which 18 MW will be obtained from Captive generation and 0.5 MW from Grid.

11.0 Baseline Environmental Studies were conducted during Post monsoon season i.e. from 1st October to 31st December, 2016. Ambient air quality monitoring has been carried out at 8 locations during October to December and the data submitted indicated: PM10 (57.50µg/m^3 to 98.50 µg/m^3), $PM_{2.5}$ (25.70 µg/m^3 to 59.70µg/m^3), SO_2 (9.20 µg/m^3 to 15.10 µg/m^3) and NOx

(21.10 μg/m^3 to 25.04 μg/m^3). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 0.310 μg/m^3 with respect to the PM_{10}, 0.605 μg/m^3 with respect to the SO_2 and 0.948 μg/m^3 with respect to the NOx at Project Site.

12.0 Ground water quality has been monitored in 8 locations in the study area and analyzed. pH: 7.36 to 7.63, Total Hardness: 236 to 314.52 mg/l, Chlorides: 85.00 to 153.00 mg/l fluoride: 0.60to 1.26 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 2 locations. pH: 7.45 to 7.51; DO: 5.7 to 5.9 mg/l and BOD: 10.86 to 12.05 mg/l. COD from 47.60 to 54.89 mg/l.

13.0 Noise levels are in the range of 51.30 to 57.40 dB(A)for daytime and 42.90 to 48.70 dB (A) for nighttime.

14.0 No R&R is involved. It has been envisaged that no family will be rehabilitated.

15.0 It has been reported that a total of 146980 TPA of solid waste will be generated due to the project, the same will be dumped in the earmark dump yard. It has been envisaged that an area of 7.30 ha will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

16.0 It has been reported that the Consent to Operate from the Jharkhand State Pollution Control Board obtained vide Lr. No. PC/Air/HBG/A-25/05/B-4806dated 24.11.2015.

17.0 The Public hearing of the project was held on 13.05.2017 at Nav Prathamik Vidyalya, Vill- Budhakhap, Sub Division- Mandu, P.O- Karma, District- Ramgarh, Jharkhandunder the Chairmanship of Sri Dinesh Prasad Singh, Dy. Magistrate for setting up of 18 MW Power Plant, Steel Melting Shop of 108,000 TPA Billet Production and Rolling Mill for 90,000 TPA TMT Br production with Ore Crushing and Beneficiation Plant of 2,70,000 TPA through put and Slag Crushing Unit. The issues raised during public hearing which, inter alia, are concern over health of children, villagers and cattle due to pollution; effect on crop/ agriculture due to pollution from the plant; concern over water level going down in the area; Increase of development fund being given to the affected villages; employment to every educated person in the nearby villages

18.0 An amount of 4.38 Cr. (2.5% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues. The details of ESC proposed are as follows:

Sl. No.	Enterprise Social Commitment Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total (Rs. In Crores)
1	Health Facility	0.14	0.14	0.14	0.14	0.14	0.7
2	Educational Facility	0.12	0.12	0.12	0.12	0.12	0.6
3	Infrastructural Development	0.1	0.1	0.1	0.1	0.1	0.5
4	Afforestation Programs	0.08	0.08	0.08	0.08	0.08	0.4
5	Community Welfare Activities	0.076	0.076	0.076	0.076	0.076	0.38
6	Community Water Conservation	0.08	0.08	0.08	0.08	0.08	0.4
7	Community Capacity Building	0.08	0.08	0.08	0.08	0.08	0.4
8	Facilities provided to control the pollution	0.2	0.2	0.2	0.2	0.2	1.00
Total		4.38 crore					

19.0 The capital cost of the project is Rs. 169.50 Crores and the capital cost for environmental protection measures is proposed as Rs. 945 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 105.50 Lakhs. The employment generation from the proposed project / expansion is 500.The details of capital cost

for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

S. No.	Environmental Protection Measures	Capital Cost Rs. In lakhs	Recurring Cost Rs. In lakhs/year
1	Air Pollution Control Measures	800.00	84.00
2	Water Pollution Control Measures	45.00	3.00
3.	Noise Pollution Control Measures	6.00	1.50
4.	Greenbelt Development	55.00	5.00
5.	Rain Water Harvesting	9.00	2.00
6.	Fire Fighting and safety measures	30.00	10.00
TOTAL		**945.00**	**105.50**

20.0 Greenbelt will be developed in 7.30 Ha which is about 33% of the total acquired area. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 11,000 saplings will be planted and nurtured in 7.30 hectares in 5 years.

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

22.0 The proponent has made presentation along with EIA Consultant M/s M/s Vardan Environet, Gurgaon, Haryana.

Recommendations of the committee:

23.0 After detailed deliberations, the committee advised to submit revised EIA report incorporating the following additional information.

1. Revised land use break up including land requirement for tailing pond and balance land from area shown as vacant shall be as greenbelt.

2. Exploring the possibility of briquetting plant.

3. Scheme for 100% utilization of solid waste including hazardous waste generated from producer gas plant.

4. Revised estimation of GLCs at locations where the reported particulate matter was almost near to the permissible standards. Action plan for containing the higher concentration of particulate matter shall be furnished.

5. Revised table of issues raised during PH, commitment of PP, time bound action plan along with fund provision

6. Revised ESC programme based on the issues emerged during PH and social impact assessment. The activity shall be for asset creation and capacity building in CAPEX mode.

7. Substantiating evidence for investment of existing project is less than Rs100 crore at the time of establishment for justifying that the existing project does not attract the provisions of EIA Notification 1994.

8. Hazardous waste generated in the existing and proposed expansion shall be clearly addressed.

9. The revised project and site-specific HIRA

10. Corporate Environmental Policy addressing the reporting mechanism of non-compliances to the board of directors directly.

11. The PP shall submit commitment for not using groundwater for operations.

24.0 Therefore, the proposal is deferred till the above information is submitted by project proponent.

28.6 Proposed 40 TPD Paper Mill located at Bitaura near Village Mahuli, PO. Kothiya, PS. Deedarganj, Patna, Bihar by M/s Patna Paper Mills Pvt. Ltd. (PPMPL) [Online proposal No. IA/BR/IND/71703/2017; MoEFCC File No. J-11011/-/2018-IA.II(I)] – Environmental Clearance.

1.0 **M/s Patna Paper Mills Private Limited** has made online application vide proposal no. **IA/BR/IND/71703/2017** dated **2nd January 2018** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 5(i) Pulp and paper Industry under Category "B" of EIA Notification, 2006. Since there is no SEIAA constituted in the state of Bihar at present, the proposal is appraised at Central level.

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

2.0 The paper mill project of M/s Patna Paper Mills Pvt. Ltd., is located at Bitaura near Vill. Mahuli, P.O. Kothiya, PS. Deedarganj, Dist. Patna, State Bihar, was initially received in SEIAA, Bihar on 20th Feb.'2017 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the State Expert Appraisal Committee [Bihar] during its meeting held on 24th March, 2017 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, SEIAA, Bihar had prescribed ToRs to the project on 21.04.2017 vide Lr. Ref. No. 15/SEIAA/17.

3.0 The project of Patna Paper Mills Pvt. Ltd., located near Vill. Mahuli, Block Patna Sadar, Dist. Patna, State Bihar is for production of 40 TPD Writing Paper. The proposed capacity for different products for existing site area as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Paper Mill based on recycling of waste paper	1	40 Ton / Day	12000 TPA

4.0 The total land required for the project is 1.56 Ha., which is owned by project proponent under lease agreement (31 years) with land owners. No /forestland involved. The entire land has been acquired for the project. No River passes through the project area. It has been reported that no water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lies between 25°31'52.90"N to 25°31'54.33"N Latitude and 85°13'32.10"E to 85°1339.31"E Longitude in Survey of India topo-sheet No. 72 G/2 at an elevation of 51 m AMSL. The ground water table reported to ranges between 0.44 – 11.47 m. below the land surface during the post-monsoon season and 2.05 – 11.83 m. below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be 500 m. Further, the stage of groundwater development is reported to be 47.64 % in core and buffer zone and thereby these are designated as safe areas.

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

7.0 The manufacturing involves pulping, de-inking, bleaching, Oxygen Delignification, fial bleaching, stock preparation, paper machine. Approx. 49 KLD of waste water will be generated from the proposed paper mill project. An ETP of 50 KLD capacity based on Activated Sludge Principle (ASP) will be installed for treatment of generated waste water of paper mill. Treated waste water will be 100 % recycle and reuse in process and other activities inside the premises.

8.0 The targeted production capacity of the project is 40 TPD (12000 TPA). The raw materials for the plant would be procured from local suppliers in Bihar. The transportation of raw materials will be done through Road.

9.0 The water requirement of the project is estimated as 105 m^3 /day, out of which 60 m^3/day of fresh water requirement will be obtained from the borewells and the remaining requirement of 45 m^3/day will be met from the treated water from ETP. Applied for permission for drawl of groundwater from CGWB vide Application No. 21-4/316/BR/IND/2017.

10.0 The power requirement of the project is estimated as max. 2500 KVA, which will be obtained from the BSEB Grid.

11.0 Baseline Environmental Studies were conducted during pre-monsoon season i.e. from March to May'2017. Ambient air quality monitoring has been carried out at 8 locations during March to May'2017 and the data submitted indicated: PM_{10} (38.7 µg / m^3 to 72.3 µg / m^3), $PM_{2.5}$ (23.1 to 43.1 µg / m^3), SO_2 (8.2 to 24.6 µg/m^3) and NOx (10.6 to 38.7 µg/m^3). The results of the modeling study indicated that the maximum increase of GLC for the proposed project is 3.55 µg/m^3 with respect to the PM_{10}.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 6.39 to 6.83, Total Hardness: 252 to 308 mg/ l, Chlorides: 16 to 26 mg/ l, Fluoride: 0.28 to 0.51 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 2 locations. pH: 7.14 to 07.18; DO: 3.4 to 5.9 mg/ l and BOD: 2.4 to 4.6 mg/ l. COD from 8.0 to 16.0 mg/l.

13.0 Noise levels are in the range of 34.8 to 67.1 dB(A) for daytime and 43.0 to 25.2 dB(A) for night time.

14.0 It has been reported that there are no people in the core zone of the project. No R&R is involved. It has been envisaged that no families to be rehabilitated as the project site is in possession of project authorities under leasehold basis for period of 31 years (upto 31.12.2046).

15.0 It has been reported that Waste paper sheet (1 TPD), Boiler Ash (1 TPD), ETP Sludge (0.1 TPD), Used Oil (0.1 KL/Annum) will be generated as waste due to the project. Waste paper will be recycled back to process within premises. Boiler ash will be sold to brick manufacturers for use as raw materials. ETP sludge will be sold to cardboard/hardboard manufacturers for use as raw materials. Waste used oil will be sold to CPCB authorized vendors for reprocessing. It has been envisaged that an area of 0.51 ha. will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

16.0 The Public hearing of the project was held on 02nd Sep.'2017 near project site at Utkramit Madhya Vidyalaya, Mahuli, Patna City, Dist. Patna- 800009, State Bihar under the chairmanship of Virendra Kumar Paswan, Dy. Collector (Special Program), Patna, (duly appointed Representative of District Magistrate, Patna) and Sri Nand Kumar, Regional Officer, Bihar State Pollution Control Board, Patna for production of 40 TPD writing paper. The issues raised during public hearing are attached as Chapter 7 in EIA/EMP Report. The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Sl. No.	Question/Issue/Suggestions	Response by project proponent (after PH)	Time Bound Action Plan proposed	Budgetary provision
1.	Sri Sanjit Kumar, resident of Vill. Mahuli, Sri Naresh Singh, resident of Vill. Marcha & Sri Vidyanand Singh, resident of Vill. Madhopur Expressed their happiness for establishment of proposed paper mill project. They were happy that, due to proposed project local youth of villages will got employment near their home place which subsequently restrict the migration of local youths for job opportunities. They requested that local villagers and unemployed youths should be preferred for employment in proposed paper mill project.	Mr. Vimal Pakash, Director, Patna Paper Mills Pvt. Ltd., explained that in proposed paper mill project local labours will be preferred. Moreover, educated youth of nearby areas will be employed after providing training to them. It is assured that local labours and unemployed educated youth will be preferred for employment in proposed	Local educated unemployed youth will be provided skill development training and will be absorbed in proposed paper mill project. (Upto Mar.'2019)	Rs. 2.5 Lakhs has been allocated for skill development training of local youths.

		paper mill project.		
2	Sri Jitendra Kumar, resident of Vill. Mahuli, and Sri Chandradip Yadav, Ex-serviceman, resident of Vill. Madhopur, Mahuli Panchayat	Although road infrastructure of the area has to be managed by Road Construction Deptt. (RCD), Govt. of Bihar, however, PPMPL will coordinate with RCD officials for repairing of road facility in the area for smooth movement of traffic.	PPMPL will coordinate with RCD officials for repairing of road facility in the area Upto Jul.'2018	Rs. 10 Lakhs towards assistance for adequate road infrastructure in the area.
3	Sri Lalan Singh, Sarpanch, Mahuli Panchayat, Dist. Patna Air pollution from nearby paper mill project namely "M/s Mateshwari Paper Mill", cultivation of cabbage and cauliflower were adversely affected. He suggested that paper mill should be established but with proper air pollution control devices and mitigation measures.	For minimizing air pollution due to burning of rice husk as boiler fuel, Reverse pulse jet bag filters. Apart from above, green belt will be developed within the presmises in 33% area which will also result in minimizing air pollution load.	Reverse Pulse Jet Bag Filters will be installed Upto Mar.'2019 & full fledged 3tier green belt will ve developed by Oct.'2020	Installtion of Air Pollution Control Device : Rs. 20.0 Lakhs Green Belt Development : Rs. 10 Lakhs (Capital Cost) & Rs. 5.0 Lakhs (Recurring cost)

17.0 An amount of 25 Lakhs (2.5 % of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues. The details of ESC proposed as follows;

CSR Activities	Year after Commissioning of the Project (***All figures in Lakhs Rs.***)		
	2018-19	2019-2020	**Total**

1. Distribution of high yield seeds and farming equipment to local farmers	2.5	1.5	4.0
2. Setting up Hand pump in community areas	2.5	2.5	5.0
3. LED Lighting in streets of nearby villages	2.0	1.5	3.5
4. Assistance for development of road infrastructure in the area	5.0	5.0	10.0
5. Skill development of local youths	1.5	1.0	2.5
TOTAL AMOUNT	**13.5**	**11.5**	**25.0**

18.0 The capital cost of the project is Rs 1021 Lakhs and the capital cost for environmental protection measures is proposed as Rs. 105 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 35 Lakhs. The employment generation from the proposed project is 80 nos. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

Sl. No.	Description	Capital Cost Rs. Lakh	Recurring cost per annum, Rs Lakh
1.	Installation of Air Pollution Control System (Reverse Pulse Jet Bag Filters)	20.0	10.0
2.	Installation of 65 KLD ETP	75.0	15.0
	Green Belt Development	10.0	5.0
3.	Environmental Monitoring	---	5.0
	TOTAL	105	35

19.0 Greenbelt will be developed in 0.51 Ha. which is about 33% of the total acquired area. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1275 saplings will be planted and nurtured in 0.51 Ha. in 5 years.

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

21.0 Name of Consultant: Paramarsh (Servicing Environment and Development), Luknow, Accreditation No.: 106

Observations of the committee:

22.0 During the deliberations, the PP informed that manufacturing of the writing paper of Grade-C from the waste paper and deinking, no elemental chlorine is proposed, 100% recycling of waste water is proposed by installing the tertiary filter, agreed to use the ESC funds for asset creation instead of proposed activities of revenue nature, etc. The committee advised to revised the ESC activities for asset creation. Accordingly, the PP has submitted revised ESC scheme which is as follows:

ESC Activities	Year after Commissioning of the Project (***All figures in Lakhs Rs.***)		
	2018-19	2019-2020	**Total**
1. Adoption of 1.0 Hec. of land for improving of crop productivity.	2.5	1.5	4.0

(Chemical analysis of soil, supply of high yield seeds and advice for proper irrigation and monitoring of crop yield)			
2. Setting up Hand pump in community areas	2.5	2.5	5.0
3. Providing lighting arrangement for village streets. (Supply, erection and commissioning of LED and allied fixtures)	2.0	1.5	3.5
4. Development of road and infrastructure in the area	5.0	5.0	10.0
5. Skill development of local youths for employment in the plant operation (During construction of the project)	1.5	1.0	2.5
TOTAL AMOUNT	**13.5**	**11.5**	**25.0**

Recommendations of the Committee:

23.0 After detailed deliberations, the Committee recommended the project for environmental clearance subject the following Specific and General conditions in addition to any other conditions stipulated by the Ministry during the processing of application:

i. No elemental chlorine shall be used in the process

ii. As committed by the PP, shall adhere to the Zero Liquid Discharge by recycling of waste water by installing the tertiary treatment facilities. In case of discharge of the water on to the ground, PP shall confirm to meet the standards prescribed by CPCB in this regard.

iii. An amount of Rs 25 Lakhs proposed towards Enterprise Social Commitment (ESC) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

iv. Green belt shall be developed in 0.51 Ha equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant. The plantation shall be completed within 2 years form the date of issue of EC.

v. The Capital cost Rs. 105 Lakhs and annual recurring cost Rs. 35 Lakhs towards the environmental protection measures shall be provided separately. The funds so provided shall not be diverted for any other purpose

28.7 Proposed expansion of Induction Furnace & Rolling Unit (from 109100 TPA to 166320 TPA) located at Deedarganj, Patna, Bihar by M/s Neelkamal Steels Pvt. Ltd., (NSPL) [Online Proposal No. IA/BR/IND/72319/2018; MoEFCC File No. IA-J-11011/30/2018-IA-II(I)] – Terms of Reference.

1.0 **M/s Neelkamal Steels Private Limited** made online application vide proposal no. **IA/BR/IND/72319/2018** dated **16th January 2018** along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "B" EIA Notification, 2006 and due to non-existence of the SEIAA in the state of Bihar at this time, the proposal is appraised at Central level.

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

2.0 M/s. Neelkamal Steels Pvt. Ltd. proposes to expansion of existing manufacturing unit for production of MS Ingot & TMT Bar/Rods. It is proposed to increase the production capacity by full capacity utilization of existing production facilities viz. Induction Furnace and Reheating Furnace of Re-rolling Mill.

3.0 The existing project was accorded environmental clearance vide lr.no. 129 Dt: 10.08.2015. Consent to Operate for initial project of Neelkamal Steels Pvt. Ltd. was accorded by Bihar State Pollution Control Board vide lr. no. T-7220,T-7219, T-7187, T-7186 and validity of CtO is up to 31.03.2019 & 30.06.2021. Consent to Operate for Unit – 2 of Neelkamal Steels Pvt. Ltd. was accorded by Bihar State Pollution Control Board vide lr. no. T-2696,T-2697, T-12444, T-12445and validity of CtO was up to 30.09.2017. Application of Renewal of Consent to Operate of Neelkamal Steels Pvt. Ltd. is under process.

4.0 The proposed unit will be located at Sabalpur, Didargang, Dist. Patna (Bihar).

5.0 The land area acquired for the proposed plant is 6.58 Ha. existing area within premises. No /forestland involved. The entire land has been acquired for the project. Of the total area 2.17 ha (33%) land will be used for green belt development. No additional land is required for proposed expansion activity.

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

7.0 Total project cost is approx 4.1 Crore rupees. Proposed employment generation from proposed project will be 35 nos. direct employment and 25 nos. indirect employment.

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

Name of Unit	No. of Units	Capacity of Each Unit	Production Capacity
Induction Furnace (Initial Project)	3	100 TPD	90000 TPA
Re-rolling Mill (Initial Project)	1	100 TPD	90000 TPA
Induction Furnace (Unit - 2)	1	360 TPD	108000 TPA
Re-rolling Mill (Initial Project)	1	360 TPD	108000 TPA

9.0 The electricity load of 5 MW will be procured from South Bihar Power Distribution Co. Ltd. Company has also proposed to install 250 KVA DG Set.

10.0 Proposed raw material and fuel requirement for project are Steel Scrap/Pig Iron, Sponge Iron & Ferro Alloys. The requirement would be fulfilled by domestic markets and as well as from Jharkhand also. Fuel consumption will be mainly for DG Sets only.

11.0 Water Consumption for the proposed project will be 45 KLD and waste water generation will be approx. 2 KLD domestic waste water. No industrial waste water will be generated. Water will be mainly used for cooling purposes only which will be recycled and reuse in closed circuit arrangement. Domestic waste water will be treated in septic tank following soak pit inside premises.

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

Recommendations of the committee:

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

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

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

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

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

28.8 Proposed 200 TPD Cement Grinding Unit at Khasra No. 700/20, Village - Bakliawas, Merta, District – Nagaur, Rajasthan by M/s LC Cement Works LLP [Online proposal No. IA/RJ/IND/72033/2018; MoEFC File No. IA-J-11011/26/2018-IA.II(I)] – Prescribing Terms of Reference.

1.0 The proponent has made online application vide proposal no. **IA/RJ/IND/72033/2018** dated **3rd January 2018** along with the application in prescribed format (Form-I), copy of prefeasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under category "B" of the Schedule of EIA Notification, 2006 and due to non-existence of the SEIAA in the Rajasthan at this time, the proposal is appraised at the Central Level.

2.0 M/s. LC Cement Works LLP., Merta, proposed to install a new 200 TPD clinker grinding unit. It is proposed to set up the plant for clinker grinding based on Ball mill technology.

3.0 The proposed unit will be located at Khasra No. 700/20, Village: Bakliawas, Tehsil: Merta, District: Nagaur, State: Rajasthan. The project site is bounded between the coordinates NE: Latitude 26° 40' 0.60" N and Longitude 73° 48' 2.23" E; NW: Latitude 26° 40' 0.63"N;

Longitude 73° 48’ 2.72" E; SE: Latitude 26° 40’ 0.35"N and Longitude 73° 48’ 2.67” E; SW: Latitude 26° 40’ 0.49"N and Longitude 73° 48’ 2.23"E.

4.0 The land area acquired for the proposed plant is 0.35 Ha. Out of which 0.282 Ha. has been converted for industrial use and adjoining 0.076 Ha. land area has been converted for housing purpose. Therefore, the total project area will be 0.35 Ha. (3596 sq.m.). No /forest land involved. The entire land has been acquired for the project. Of the total area 0.118 ha (33 %) land will be used for green belt development.

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

6.0 Total project cost is approx 1.61 Crore rupees. Proposed employment generation from proposed project will be 17 direct employment and 40 indirect employment.

7.0 The targeted production capacity of the Cement manufacturing is 70,000 TPA. The raw material for the plant would be procured from Beawar, Bikaner & Jodhpur. The raw material transportation will be done through Road. The proposed capacity for different products for the site will be as below:

Name of unit	**No. of units**	**Capacity of each Unit**	**Production Capacity**
Ordinary Portland Cement (OPC)	1	14,000 TPA	14,000 TPA
Portland Pozzolana Cement (PPC)	1	49,000 TPA	49,000 TPA
Portland Slag Cement (PSC)	1	7,000 TPA	7,000 TPA

8.0 The electricity load of 0.45 MW will be procured from Ajmer Vidyut Vitran Nigam Limited (AVVNL). Company has also proposed to install 1 DG Set (650 kVA).

9.0 Proposed raw material and fuel requirement for project are as follows and HSD for DG Set (650 kVA- 1 No.) is100 lt/hr.

S. No	**Raw material**	**Quantity**		**Sourced from**	**Mode of transport**
		TPA	TPD		
1	Clinker	48300	138	Beawar	Road
2	Gypsum	3500	10	Bikaner	Road
3	Flyash	14700	42	Bikaner	Road
4	Slag	3500	10	Jodhpur	Road

10.0 Water Consumption for the proposed project will be 10.0 KLD and waste water generation will be 3.0 KLD. Domestic waste water will be treated in STP and NO industrial waste water will be generated.

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

Recommendations of the committee:

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

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

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

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

iv. Impact due to proposed grinding unit on agriculture in the 5 Km radius of the project shall be addressed in the EIA/EMP in view of proposing the project amid of the agricultural land.

v. Impact due to proposed grinding unit on noise levels within 1 Km shall be addressed in the EIA/EMP Report.

28.9 Proposed expansion in production of Ferro Alloys Unit at plot 368, APIIC Growth Centre, Bobbili Vizianagaram District, Andhra Pradesh of M/s Berry Alloys Limited [Online Proposal No. IA/AP/IND/71918/2017 MoEFCC File No. J-11011/1129/2007-IA-II(I)] - Terms of Reference for expansion.

1.0 **M/s Berry Alloys Limited** has made online application vide proposal no. **IA/AP/IND/71918/2017** dated **29th December 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" EIA Notification, 2006 and the proposal is appraised at Central level.

Project details as per the submissions of the project proponent:

2.0 M/s. Berry Alloys Ltd. proposes expansion of existing manufacturing unit for Ferro Alloys Manufacturing. It is proposed to set up the additional 2 x 9 MVA MVA Electric Arc Furnace along with Existing 4 x 9 MVA Electric Arc Furnace.

3.0 The existing project was accorded environmental clearance vide Lr.no.J-11011/1129/2007- IA-II (I) dated 7th July 2017 Consent to Operate was accorded by AP State pollution Control Board vide lr. no. APPCB/VSP/VZM/160/HO/CFO/2015-3602 dated 05.08.2015 validity of CtO is up to 31st Aug. 2018. The Furnace details of existing plant, proposed expansion and total capacity after proposed expansion is as follows:

Product	Existing Quantity	Proposed Quantity	After Expansion
Electric Arc Furnace	4 X 9 MVA	2 X 9 MVA	6 X 9 MVA

4.0 The production details of existing plant, proposed expansion and total capacity after proposed expansion is as follows:

Product	Existing Quantity	Proposed Quantity	After Expansion

Ferro Manganese OR Silico Manganese OR Ferro Silica OR Ferro Chrome	86400 TPA OR 72000 TPA OR 25200 TPA OR 36000 TPA	43200 TPA OR 36000 TPA - -	129600 TPA OR 108000 TPA OR 25200 TPA OR 36000 TPA

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

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

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

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

8.0 Total project cost is approx 12.0 Crore rupees. Proposed employment generation from proposed project will be 50 nos. direct employment and 150 nos indirect employment.

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

9.0 The targeted production capacity of the after expansion will be Ferro Manganese - 129600 TPA or Silico Manganese -108000 TPA or Ferro Silica 25200 TPA or Ferro Chrome 36000 TPA. The ore for the plant would be procured from local market. The ore transportation will be done through road. The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each Unit	Total Capacity
Proposed	2 Furnace	9 MVA	Ferro Manganese - 43200 TPA or Silico Manganese - 36000 TPA

10.0 The electricity load of 45.0 MVA will be sourced from Eastern Power Distribution Company of Andhra Pradesh.

11.0 Proposed raw material and fuel requirement for project are Manganese Ore, Ferro manganese Slag, Dolomite and Quartz. The requirement would be fulfilled by Local market as well as Plant Generated Slag.

12.0 The details of solid waste generated and it's management is as follows:

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

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

Item	**Water Requirement in KLD (4 x 9 MVA)**	**Water Requirement in KLD (2 x 9 MVA)**	**Total Water Requirement (KLD)**
Cooling Purpose	50	25	75
Domestic Purpose	10	5	15
Dust Suppression			
Greenbelt			
Total	**60**	**30**	**90**

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

14.0 The EIA Consultant: Sri Sai Manasa Nature Tech Pvt Ltd., Hyderabad; Accreditation No. sr. No 146, April 10 2017.

Observations of the committee:

15.0 After detailed deliberation, the committee observed that the earlier EC granted on 7th July 2017 was based on the EIA/EMP prepared using the baseline data collected during Winter season i.e. from December 2016 to February 2017. Since the data is not older than 3 years, as requested by PP, can be used for preparation of EMP subject to not older than 3 years at the time of appraisal of the project.

Recommendations of the committee:

16.0 The committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed at **Annexure I** read with additional ToRs at **Annexure-2**.

i. 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 Enterprise Social Commitment (ESC) programme shall be based on the issues raised in the public hearing and the social impact assessment study so carried out should form part of EIA and EMP report.

iv. The EIA/EMP shall be prepared for cumulative with the existing and proposed expansion.

28.10 Proposed capacity expansion from 0.25 to 0.50 Million TPA of Zinc Smelter, from 0.125 Million TPA to 0.150 Million TPA of Lead Smelter, from 170 MW to 255 MW of Captive Power Plant and Fumer Plant in the Zinc Smelter at Dariba Smelter Complex of M/s Hindustan Zinc Limited located at Village Panchayat – Mahenduriya, P.O. Dariba, District Rajsamand, Rajasthan [Online proposal No. IA/RJ/IND/71775/2008; MoEFCC File No. J-11011/380/2008-IA.II(I)] – Terms of Reference for expansion.

1.0 **M/s Hindustan Zinc Limited** has made online application vide proposal no. **IA/RJ/IND/71775/2008** dated **28th December 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" EIA Notification, 2006 and the proposal is appraised at Central level.

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

2.0 M/s Hindustan Zinc Limited (HZL) proposes expansion of Zinc Smelter from 0.25 to 0.50 Million TPA, Lead Smelter from 0.125 Million TPA to 0.150 Million TPA, CPP from 170 MW to 255 MW and installation of Fumer Plant at its Dariba Smelter Complex. HZL has selected hydrometallurgical route for Zinc Smelter, SKS Technology for Lead Smelter and pulverised coal fired Boiler with steam turbine generator for Captive Power Plant. In Fumer plant, after modification, the current Jarosite process will be converted to pyro metallurgical process, from which 3,80,000 tons of residue (dry base) will be treated with fuming furnaces.

3.0 The existing project was accorded environment clearance vide lr.no J-11011/380/2008-IA II (I) dated 4.11.2009. Consent to Operate was accorded by Rajasthan State Pollution Control Board Vide lr. No F(CPM)/ Rajsamand(Railmagra)/ 2(1)/2015-2016/ 10179-10181 dated 02.02.2017 for Zinc Smelter, F(Tech)/ Rajsamand(Railmagra)/ 2(1)/2009-2010/ 7172-7175 dated 09.12.2013 for Lead Smelter and F(CPM)/ Rajsamand(Railmagra)/ 2(1)/2015-2016/ 8780-8782 dated 08.12.2016 for Captive Power Plant. Validity of CTOs is up to 31.10.2018, 31.08.2016 and 31.10.2018 for Zinc Smelter, Lead Smelter and Captive Power Plant respectively. Application for renewal of CTO for Lead Smelter was submitted on 20-04-2016 and is under approval at SPSB.

4.0 The proposed unit will be located at Village & P.O. Dariba, District Rajsamand, Rajasthan.

5.0 HZL Dariba Smelter Complex was established in 2010-11, in 162 ha of land which is already under industrial use. The proposed expansion requires 10 hectare of land and the land acquisition is under process. Agriculture land is available adjacent to the existing plant. The existing and proposed land details are presented below:

Particulars	**Land Requirement (As per EC granted in Nov.'2009)**	**Additional Requirement**	**Total Requirement After Proposed Expansion**
	Total Area (ha)		
a) Zinc Plant	34.00	-	34.00
b) Lead Plant	28.58	-	28.58
c) Captive Power Plant	18.86	10.0	28.86
d) Utilities (ETP, RO etc)	6.46	-	6.46
e) Hazardous Waste Disposal Site	53.00	-	53.00
f) Fumer Plant	-		
g) Others(Open space & internal roads)	21.10	-	21.10
Sub Total	**162.00**	**10.0**	**172.00**

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

7.0 Total estimated project cost is Rs. 3,450 Crores. Proposed employment generation from proposed project will be 700 persons (direct employment and indirect employment).

8.0 The Operational hydro-metallurgical Smelter is designed to produce 0.25 million TPA of Special High Grade Zinc annually from Zinc concentrate/Calcine. The hydro-metallurgical route based on Roast – Leach – Electro-winning process is widely accepted process for manufacturing Zinc metal and it is proposed to increase the Zinc production from 0.25 million TPA to 0.5 million TPA with same technology. But this increase in production will take place in two phases, first from 0.25 to 0.375 million TPA then after successful commissioning 0.375 million TPA then the second phase will start from 0.375 to 0.50 million TPA. To eliminate the generation of Jarosite, the Fumer plant is proposed in this project which will stop producing Jarosite i.e. Hazardous waste and start producing Slag which is non-hazardous waste. This important step is taken after inconsideration of environmental concerns to reduce Hazardous waste for safer environment for future generation i.e Sustainability.

9.0 In this proposed expansion the Lead Smelter production is increasing from 0.125 million TPA to 0.150 million TPA with same technology. There are 2 plants of 85 MW which is operational to meet the requirement of existing Zinc Smelter Complex but due to rise in production of Zinc there will be need of 1 more plant of 85 MW to meet the new requirements change in plant capacity is given below:

Unit	**Existing Granted Capacity (As per EC granted in Nov.'2009)**	**Existing Status**	**Additional Proposed Capacity**	**Total Capacities After Proposed Expansion**

Zinc Smelter	0.5 MTPA	0.25 MTPA	0.25 MTPA	No Change
Lead Smelter	0.125 MTPA	0.125 MTPA	0.025 MTPA	0.15 MTPA
Captive Power Plant	255 MW	PF Boiler - 170 MW WHRB – 15 MW	PF Boiler - 85 MW WHRB – 20 MW	PF Boiler - 255 MW WHRB – 35 MW
Fumer Plant	-	-	Associated with Zinc Smelter	Associated with Zinc Smelter

10.0 The details of Products and By-products are as follows:

Unit	**Existing Granted Quantity (As per EC granted in Nov.'2009)**	**Existing Status**	**Additional Proposed Quantity**	**Total Quantity After Proposed Expansion**
Products				
Zinc Smelter				
SHG Zinc Cathode/Ingot (Special High Grade)	0.50 MTPA	0.25 MTPA	0.25 MTPA	0.50 MTPA
Zinc (Continuous Galvanizing Grade) (out of 500, 000 TPA SHG Zinc)	0.08 MTPA	0.04 MTPA	0.04 MTPA	0.08 MTPA
Lead Smelter				
Lead Cathode/Ingot	0.125 MTPA	0.125 MTPA	0.025 MTPA	0.150 MTPA
Lead Alloy (Pb-Sb&Pb-Ca, Pb-Bi) (out of 150, 000 TPA Lead)	0.05 MTPA	0.05 MTPA	0.01 MTPA	0.06 MTPA
Captive Power Plant				
Power (including WHRB)	255 MW	185 MW	105 MW	290 MW
By-products (TPA)				
Sulphuric Acid	744000	744000	90,000	8,34,000
Lead – Silver Compound	80000	40000	40000	80000
Cadmium metal / Sponge (equivalent metal)	1600	800	1200	2000
Calomel	44	44	26	70
Silver	400	400	400	800
Copper as Copper cement/ sulphate/ matte/ concentrate /Compound(equivalent metal)	1900	1400	1400	2800

Antimony as Antimony concentrate (equivalent metal)	850	850	170	1020
Waste Heat power	15 MW	15 MW	20 MW	35 MW
Bismuth as Bismuth concentrate (equivalent metal)	16	16	30	46
Zinc Oxide compound	20000	20000	16000	36000
Lead concentrate (Oxide)	5000	5000	1000	6000
Anode Slime	4000	4000	800	4800
Lead Bullion	-	-	20000	20000
Sodium Sulphate	-	-	7500	7500
Sodium Chloride	-	-	750	750

11.0 The power requirement for the Smelter and CPP will be 252 MW. 255 MW coal based Captive Power Plant is envisaged for providing power to proposed expansion Smelter.

12.0 Proposed raw material and fuel requirement and fuel consumption details: The concentrate is unloaded at unloading station and stored in concentrate storage yard. From the stockyard, a pay loader feed the material into different hoppers. By means of discharge and transport belt conveyors including an over-belt magnetic separator, the material is transported to a transfer tower, from where concentrate is routed to the roasting plant. Similarly, separate silos for storing calcine have been made in the Roaster and Leaching & Purification area. The major raw materials for the project are concentrates, calcine and coal. The raw materials requirement is given below:

Raw Material	**Existing Granted Quantity (As per EC granted in Nov.'2009)**	**Existing Requirement**	**Additional Requirement**	**Total Requirement After Proposed Expansion**
Zinc concentrate	6,48,000	6,48,000	25000	6,73,000
Calcine (ZnO)	2,80,000	-	2,80,000	2,80,000
Aluminium metal	160	80	80	160
Lead concentrate	2,60,000	2,60,000	90,000	3,50,000
Coal for Lead Smelter	26000	26,000	14,000	40,000
Coke for Lead Smelter	27000	27,000	11,000	38,000
Coal for Fumer Plant	-	-	2,50,000	2,50,000
Cu2SO4 for Fumer plant	-	-	600	600
Coal for power plant	11,62,000	7,74,667	4,94,735	16,56,735
Lead Silver Compound *	80,000	40,000	40,000	80,000
Zinc Dross/ Ash/ Zinc bearing waste*	-	30,000	-	30,000

Battery/Lead Scrap and secondary *	80,000	80,000	-	80,000

13.0 Details of consumables per annum

Consumables	**Unit**	**Quantity**
Flocculants	Tons	266
Lime	Tons	68,500
SiO_2	Tons	13,000
H_2FiS_6 (Silico Fluoric Acid)	Tons	3,000
LDO/LSHS/HSD/LNG/FO	KL	14,000
Sulphuric acid (internal)	Tons	27,500
MnO_2 (internal)	Tons	6,375
Caustic Soda Solution	M3	1,500
Ammonium Chloride	Tons	638
Limestone	Tons	1,89,600
Aqueous Ammonia	Tons	1423
Iron Ore	Tons	18,000
Cement	Tons	2,000

14.0 Water consumption for the proposed project will be **46,700** KLD (Existing water **22,410** KLD+ Additional **24,290** KLD).

Unit	**Existing Granted Quantity (As per EC granted in Nov.'2009) (m^3/day)**	**Existing Requirement (m^3/day)**	**Additional Requirement (m^3/day)**	**Total Requirement After Proposed Expansion (m^3/day)**
Zinc Smelter	11,000	8,010	2,990	11,000
Fumer Plant	-	-	10,000	10,000
Lead Smelter	7,250	2,800	1500	4,300
Captive Power Plant	17,000	11,000	9,400	20,400
Domestic	1,000	600	400	1,000
Total	**36,250**	**22,410**	**24,290**	**46,700**

15.0 The total effluent generation from the smelter complex is as given below;

Units	**Existing Wastewater Generation Quantity (As per EC granted in Nov.'2009) (m^3/day)**	**Existing Generation (m^3/day)**	**Additional Generation (m^3/day)**	**Total Generation After Proposed Expansion (m^3/day)**
Zinc Smelter	6400	3600	2800	6400
Lead Smelter	2000	800	400	1200
Captive Power Plant	3425	3200	2200	5400
Fumer	-	-	2000	2000

Domestic	500	380	300	680
Total	**12325**	**7980**	**7700**	**15680**

16.0 The effluents generated from gas cleaning plant, Sulphuric acid plant, anode & cathode washing, Lead smelter, DM plant, cooling tower and power plant is treated to neutralize the acidity and to precipitate and remove metallic elements. Treated water is utilized in process. "Zero Discharge" of waste water during operation phase of the plant is maintained.

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

18.0 Name of the EIA Consultant: M/s. Vimta Labs Limited [QCI. Sr.No. 149].

Recommendations of the committee:

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

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

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

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

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

v. Explore the possibility of the transportation of ore from the mines through belt conveyor or other mode of transport in lieu of truck transport.

vi. Explore the possibility of the coal transport form the nearby railway station/line.

vii. Action plan for 100% utilization of fly ash generated

28.11 Proposed installation of Two Induction Furnace (20 MT each) Reheating Furnace (30 TPH) & Rolling Mill to produce MS Billets 1,32,000 TPA and TMT Bars 2,00,000 TPA at Village Panchayat Tapookara; Teshil – Tijara; District- Alwar; Rajasthan by M/s SBF ISPAT Pvt. Ltd. [Online proposal No. IA/RJ/IND/72197/2018; MoEFCC File No. IA-J-11011/29/2018-IA-II(I)] – Terms of Reference.

1.0 The proponent has made online application vide proposal no. **IA/RJ/IND/72197/2018** dated **15th January 2018** along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "B" EIA

Notification, 2006 and due to non-existence of the SEIAA in the state of Rajasthan at present, the proposal is appraised at Central level.

The details of the project as per the submissions of the project proponent:

2.0 M/s SBF ISPAT Private Limited proposed to install a new manufacturing unit for installation of Two Induction Furnace (20 MT each) Reheating Furnace (30 TPH) & Rolling Mill to produce MS Billets 1,32,000 TPA and TMT Bars 2,00,000 TPA. It is proposed to set up the plant for production of MS Billet, TMT bars based on IF technology.

3.0 The proposed unit will be located at plot no F-109-117 & G 143-151 Industrial area Karoli, Taluka-Tijara District –Alwar State-Rajasthan. The project site is bounded between latitudes from 28°5'53.38" N to 28°5'49.50" N and longitudes from 76°48'33.36" E to 76°48'44.51" E and covered in survey of India Topo Sheet No. 53 D/12, 13, 54 A/9 & 13.

4.0 The land area acquired for the proposed plant is 32,200 Sq.m out of which no agriculture land & grazing land and entire area is RIICO industrial area. No forestland is involved. The entire land has been acquired for the project. Of the total area 10700 Sq.m (33.22%) land will be used for green belt development.

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

6.0 Total project cost is approx 6750 Lacs rupees. Proposed employment generation from proposed project will be 220 direct and 50 indirect employment.

7.0 The targeted production capacity of the MS Billets is 1, 32, 000 TPA, TMT Bar- 2, 00,000TPA. The raw material for the plant would be procured from local market and transportation will be done through road. The proposed capacity for different products for new site area as below:

S. No.	Product	Total Proposed Capacity (TPA)
1.	MS Billets	1,32,000
2.	TMT Bar	2,00,000

8.0 The electricity load of15 MW will be procured from State Grid. Company has also proposed to install 1000 kVA DG Set (2X500).

9.0 Proposed raw material and fuel requirement for project are MS scrap (1, 01,400 TPA), Sponge Iron/Pig Iron (35,750 TPA), Silico- Mn & Alloy Metals (1,040 TPA), outsourced MS billet (80,000 TPA). The requirement would be fulfilled by indigenous as well as imported sources. Fuel consumption will be mainly in reheating furnace and DG set.

10.0 Water Consumption for the proposed project will be 66 KLD Out of which fresh water demand will be 40 KLD and waste water generation will be 28 KLD Domestic waste water will be treated in STP and industrial waste water generated will be treated in settling tank and reused 26 KLD for cooling tower.

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

12.0 Name of EIA consultant: M/s. Enkay Enviro Services Pvt. Ltd., Jaipur QCI Accredited (SI.No.42, at QCI list dated 05/01/2018).

Recommendations of the committee:

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

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 activities under Enterprise Social Commitment (ESC) shall be based on the issues raised during public hearing and social need assessment.

6th February 2018

28.12 Proposed expansion of existing Steel Plant by installing 1x350 TPD Sponge Iron Plant, (2x15 T + 2x20 T) Induction Furnaces, 1,20,000 TPA capacity Rolling Mill along with 27 MW capacity Captive Power Plant (12 MW WHRB + 15 MW AFBC utilising waste heat & dolochar from existing (2x100 TPD) & proposed Sponge Iron Plants of M/s Ma Amba Sponge Iron Limited located at Village Jemua, P.O. Mejia, District Bankura, West Bengal [Online proposal No. IA/WB/IND/60818/2016; MoEFCC File No. J-11011/242/2016-IA-II(I)] – Environmental Clearance.

1.0 M/s Ma Amba Sponge Iron Limited made online application vide proposal no. **IA/WB/IND/60818/2016** dated **15th January 2018** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of EIA Notification, 2006 and the proposal is appraised at Central level.

The details of the project as per the submissions of the project proponent:

2.0 The proposal of proposed expansion project of M/s Ma Amba Sponge Iron Ltd., located at Village Jemua, P.O. Mejia, Dist. – Bankura, West Bengal was initially received in the Ministry on 2nd December, 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 14th meeting held on 23rd December, 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 31st January, 2017 vide Ref. File No J-11011/242/2016-IA.II (I).

3.0 The project of M/s Ma Amba Sponge Iron Ltd., is located at Village Jemua, P.O. Mejia, Dist. Bankura, West Bengal is for installation of 1x350 TPD Sponge Iron Plant, (2x15 T + 2x20 T) Induction Furnaces, 1,20,000 TPA capacity Rolling Mill along with 27 MW capacity Captive Power Plant (12 MW WHRB + 15 MW AFBC utilising waste heat & dolochar from

existing (2x100 TPD) & proposed Sponge Iron Plants. No Environmental Clearance was required from MoEF&CC /SEIAA for the existing 2x100 TPD DRI Kilns at the time of its installation in 2003 as per the prevailing rule. NOC from West Bengal Pollution Control Board for the existing plant was obtained in the year 2003. The overall project scenario (Existing + Proposed) is presented below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
EXISTING PROJECT :			
Sponge Iron Plant (2x100 TPD Kilns)	2	100 TPD	72,000 TPA Sponge Iron
PROPOSED PROJECT :			
Sponge Iron Plant (1x350 TPD Kilns)	1	350 TPD	1,26,000 TPA Sponge Iron
Induction Furnaces with matching LRF	4	2x15 T + 2x20 T	2,31,000 TPA Liq. Steel
Continuous Casting Machine (6/11, 3 strand)	1	2,26,000 TPA	2,26,000 TPA MS Billet (100, 120 & 130 sq)
Rolling Mill	1	1,20,000 TPA	1,20,000 TPA TMT Bar (8 mm to 32 mm)
Captive Power Plant	1	27 MW	27 MW (12 MW WHRB utilising waste heat and 15 MW AFBC boiler utilizing dolochar (from existing 2x100 TPD & proposed 1x350 TPD Sponge Iron Plants)

4.0 The proposed expansion project will be installed within the existing plant premises occupying total 9.42 hectares (23.28 acres) land which is fully acquired. No forest land involved. Damodar River is 2.7 km in north-eastern direction w.r.t the Project Site.

5.0 The topography of the project area is flat. The geographical co-ordinates are Latitude - 23°33’23.50"N to 23°33’37.86"N & Longitude - 87°04’59.80"E to 87°05’13.00"E with above mean sea level (AMSL) of 90.0 m (295 ft). The average water level for the last five years is 5.95 mtrs BGL during summer and 2.15 mtrs BGL during post-monsoon. The infiltration rate is good, nearly 10 to 15 percent, the area is designated as safe area.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The authenticated list of flora and fauna in the study area is provided in Chapter-3.0, Section-3.12.

7.0 The major raw material, which will be handled consists of Sponge Iron, Pig Iron, dolomite, Ferro Alloys, Imported coal etc. The annual requirement of major raw materials, which will be required additionally for the proposed project, is as follows:

SL. NO.	RAW MATERIALS	ANNUAL REQUIREMENT (IN TPA)	SOURCE
SPONGE IRON PLANT (1x350 TPD)			
1.	IRON ORE	2,01,600	ORISSA
2.	IMPORTED COAL	1,63,800	SOUTH AFRICA
3.	LIME STONE	4,032	MARKET
INDUCTION FURNACES (2x15 T + 2x20 T)			
1.	SPONGE IRON	1,86,667	IN HOUSE DRI PLANT
2.	SCRAPS	30,333	IN HOUSE PLANT & MARKET
3.	PIG IRON	35,000	MARKET
4.	FERRO ALLOYS	1,808	MARKET
CAPTIVE POWER PLANT - 15 MW BASED ON AFBC BOILER			
1.	IMPORTED COAL	1,00,000	SOUTH AFRICA
2.	DOLOCHAR	1,15,500	IN HOUSE DRI PLANT

8.0 Solid wastes and their utilization for proposed expansion project are as follows:

Sl. No.	Type	Quantity in Tons/Year	Utilization
1.	Dolochar	73,500	To be used in AFBC Boiler.
2.	Slag & Dust from IFs	40,000	Slag to be used for Land filling / Road Construction purpose.
3.	End Cuts, Scale & Scrap from CCM	3840	To be used as raw materials in IFs.
4.	End cuts and missed rolls from Rolling Mill	5000	To be used as raw materials in IFs.
5.	Fly ash from Captive Power Plant	23500	To be used as a raw material for cement plants and brick manufacturing.
6.	Bottom ash from Captive Power Plant	5875	To be used for Land filling.

9.0 The targeted production capacity of the sponge iron, liquid steel, billets and TMT bars is 1,26,000, 2,31,000, 2,26,000 and 1,20,000 TPA respectively and a captive power plant of 27 MW. The Iron ore for the plant would be procured from Badampahar Iron Ore Mines, Orissa. The ore transportation will be done through Rail & Road.

10.0 The water requirement of the project is estimated as 495 m^3/day. The raw water will be sourced from DVC water supply system & Borewells.

11.0 The power requirement of the project is estimated as 39 MW, which will be sourced from 27 MW capacity captive power plant and DVC supply system.

12.0 Baseline Environmental Studies were conducted during summer i.e., from 1st March, 2017 to 31st May, 2017. Ambient air quality monitoring has been carried out at 8 locations and the data submitted indicated: PM_{10} (64.4 μg/m^3 to μg/m^3 to 75.4 μg/m^3 μg/m^3), $PM_{2.5}$ (26.2 μg/m^3 to 32.6 μg/m^3), SO_2 (6.7 to 10.7 μg/m^3) and NOx (15.2 to 25.4 μg/m^3). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 3.11 μg/m^3 with respect to PM, 5.11 μg/m^3 with respect to the SO_2 μg/m^3 and 7.02 with respect to the NOx.

13.0 Ground water quality has been monitored at 8 locations in the study area and analyzed. pH: 6.8 to7.5, Total Hardness: 207 to 298 mg/l, Chlorides: 74 to 115 mg/l, Fluoride: 0.38 to 0.56 mg/l. Surface water were analysed from 2 Damodar river water samples and 8 pond water samples. Damodar Water Samples - pH: 7.3 to 7.5; DO: 6.9 to 7.1 mg/l and BOD: 3 - 4 mg/l. 8 Pond Water Samples - pH: 7.0 to 7.8; DO: 5.8 to 6.4 mg/l and BOD: 4 - 8 mg/l.

14.0 Noise levels are in the range of 54.9 to 70.1 dB(A) for day time and 46.2 to 60.3 dB(A) for night time.

15.0 No R&R is involved.

16.0 It has been reported that a total of 1,51,715 TPA tons/m^3 of waste will be generated due to the proposed project, out of which 73,500 TPA dolochar will be used in AFBC Boiler, 40,000 TPA slag & dust from SMS will be used for Land filling / Road Construction purpose, 8840 TPA end cuts/scale & scrap will be used as raw materials in SMS, 23500 TPA fly ash will be used as raw material for cement plants and brick manufacturing and 5875 TPA bottom ash will be used for Land filling. It has been envisaged that an area of 3.1 ha will be developed as green belt in the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

17.0 It has been reported that the Consent to Establish from West Bengal Pollution Control Board was obtained vide letter no. 3759-2N-239/2003 dated 31-12-2003. Consent to Operate from West Bengal Pollution Control Board was obtained vide letter no. 2630/dr-co-3/12/0339 dated 30-11-2017 and consent is valid up to 31-12-2018.

18.0 The Public hearing of the project was held on 12th September, 2017 at Meeting Hall of Mejia Panchayat Samity, Dist. Bankura in West Bengal. The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Sl	Issues raised during PH	Response by project proponent (After PH)	Action Plan proposed	Budgetary provision as on 12-01-2018
1.	• To give priority to the local youth for employment in the proposed expansion project.	The Company in past has given priority to the local people for employment opportunity based on their qualification for their existing plants / units.	The existing practice will be adopted. The company Will give preference to the local people for the employment in its proposed project,	Rs. 20 lacs are earmarked against training to unemployed educated local youth for skill development.

			based on their qualification.	
	• PP to ensure proper functioning of the pollution control device during process activities, take necessary safety measures for the workers and initiate extensive plantation activities in and around their unit premises.	The company has already installed the necessary Pollution Control devices in its existing plant. The same shall be installed in its proposed expansion project. It is ensured that all pollution control devices function properly for all 24 hours. Necessary safety measures shall be taken by using Personal Protective Equipment throughout the time. Extensive green belt will be developed in and around the project area.	For the proposed plant, adequate control measures like installation of Electrostatic Precipitator (ESP), bag filters, dust suppression system etc. to keep the emission within the permissible limit. Like existing project PPE will be adopted in the expansion project. Action has already been taken by management for developing Green Belt by undertaking extensive plantation programme. Besides, the company has also planned for the development of parks and tree plantation in the nearby areas.	Rs. 5.5 Crores and Rs. 55 lacs are earmarked as capital and recurring costs respectively on air pollution control systems. Rs. 30 lacs have been allocated for Risk Mitigation & Safety Plan. Rs. 45 lacs and Rs. 4.5 lacs are earmarked as capital and recurring costs respectively on Green belt development programme. Besides, Rs. 30 lacs are allocated for the development of park and tree plantation in the nearby areas as Enterprise Social Commitment.
	• Initiate skill development program for local self-help groups through their CSR activities.	CSR commitments shall be fulfilled by development of self-help groups among local women.	The company has identified certain areas, to be considered for imparting the CSR activities in this context of the local scenario of the area.	Rs. 20 lacs & Rs. 15 lacs are earmarked against training to unemployed educated local youth for skill development and development of self-help groups among local

				women respectively.
2.	• To contribute towards local infrastructure development through the CSR activities. • Initiation of skill development and employment generation for the local self-help groups.	CSR commitments shall be fulfilled by taking up different programs like development of local roads and other infrastructural facilities, providing health care facilities, development of self-help groups among local women, development of drinking water facilities, helping the local schools, etc.	Proper emphasis will be laid on the development of infrastructure in the area.	The company has identified the following infrastructure facilities, to be provided along with the capital cost: • Construction of Toilets – Rs. 70 Lakhs • Tubewell in villages – Rs. 21 lacs • Road Construction – Rs. 238 lacs • Construction of charitable Dispensary – Rs. 13 lacs • Development of Community Hall – Rs. 48 lacs Besides, Rs. 20 lacs are earmarked for training to unemployed educated local youth for skill development and Rs. 15 lacs for development of self-help groups among local women.
3.	PP to ensure overall socio-economic development of the area.	It is expected that with proper CSR expenditure the socio-economic status of the area shall be uplifted.	Apart from creating direct & indirect employment opportunity, the company has identified certain areas, to be considered for	The company proposes to invest Rs. 590 Lacs on the ESC activities.

			imparting the CSR activities in this context of the local scenario of the area, which will help in uplifting the socio-economic status of the area.	
4.	To develop sanitation facility of the local villages through their CSR activities in consultation with the local administration.	The company has already considered in the proposed CSR activities to develop sanitation facility in the local villages & in the schools.	The company will Construct W/C/Toilet (2) each - 10 numbers in schools & villages in the context of the local scenario of the area.	Rs. 70 lacs are allocated for the construction of the same.

19.0 An amount of 590 Lakhs (2.5% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues. The details of ESC proposed are as follows:

Sl. No.	Enterprise Social Commitment Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total in Lakhs
1	Construction of W/C/Toilet (2) each - 10 numbers in schools & villages (@ Rs. 7.00 Lakhs per set of 2 Toilets)	10	10	10	10	10	10	10	**70.0**
2	Drinking Water Infrastructure (Tubewell in nearby villages – 14 nos. @ Rs. 1.5 Lakhs)	4	4	3	3	3	2	2	**21.0**
3	Construction of metal consolidation road (14 km) in villages ((@Rs. 17 Lakhs per km)	40	40	40	35	35	24	24	**238.0**
4	Development of Community Hall – Total 4 nos. (@ Rs. 12 Lakhs per Hall)	8	8	8	7	7	5	5	**48.0**
5	Local Village Pond upgradation	5	5	4	3	3	3	2	**25.0**

	- 5 ponds (@ Rs. 5 Lakhs per Pond)								
6	Street Lighting (solar) provision at suitable public places – 70 nos. (@ Rs. 0.5 Lakhs per Solar Light)	5	5	5	5	5	5	5	**35.0**
7	Financial Support to the Local School for extension of building / class room	6	4	4	3	3	3	2	**25.0**
8	Construction of charitable Dispensary	3	2	2	2	2	1	1	**13.0**
9	Primary health for the surrounding villages	5	5	4	4	4	2	1	**25.0**
10	Financial Support to Local Temple	4	4	4	4	4	3	2	**25.0**
11	Training to unemployed educated local youth for skill development.	3	3	3	3	3	3	2	**20.0**
12	Development of self-help groups among local women	3	2	2	2	2	2	2	**15.00**
13	Developments of parks, plantation of trees in the nearby area.	6	5	5	4	4	3	3	**30.0**
TOTAL		**102**	**97**	**94**	**85**	**85**	**66**	**61**	**590**

20.0 The capital cost of the project is Rs. 235 Crores and the capital cost for environmental protection measures is proposed as Rs. 1015 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 102 Lakhs. The employment generation from the proposed project is 450. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures are as follows:

Sl. No.	Description	Capital cost, Rs. Lakhs	Recurring cost per annum, Rs. Lakhs
1	Cost of Air Pollution Control Systems	550	55
2	Cost of Water conservation & Pollution Control	150	15
3	Cost of Solid Waste Management System	70	7
4	Green belt development	45	4.5

5	Noise Reduction Systems	80	8
6	Occupational Health Management	70	7
7	Risk Mitigation & Safety Plan	30	3
8	Environmental Management Department	20	2.5
TOTAL		1015	102

21.0 It has been envisaged that an area of 3.1 ha will be developed as green belt in the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

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

23.0 The EIA/EMP has been prepared by EIA Consultant Organization M/s Envirotech East Private Limited, Kolkata vide Accreditation No.: NABET/EIA/1011/010.

Observations and recommendations of the committee:

24.0 The committee observed that the project proponent has submitted incomplete application i.e, without obtaining permission for drawl of water from competent authority. Further, the committee also observed that no substantiating justification for operating the existing 2X100 TPD DRI Kiln without prior Environmental Clearance was provided by the project proponent. This made it difficult to decide whether the case was a matter of violation of EIA Notification or not. Therefore, the application in its present form was recommended to be returned to PP.

28.13 Proposed enhancement of production capacity of Alumina Refinery (1.5 MTPA to 3.0 MTPA) along with Cogeneration Power Plant (90 MW to 150 MW) by M/s Utkal Alumina International Limited at village Doraguda, Tehsil Kashipur, District Rayagada, Odisha [Online proposal No. IA/OR/IND/64028/2017 MoEFCC File No. J-11011/753/2007-IA.II(I)] – Environmental Clearance.

1.0 M/s Utkal Alumina International Limited made online application vide proposal no. **IA/OR/IND/64028/2017** dated **15th January 2018** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of EIA Notification, 2006 and the proposal is appraised at Central level.

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

2.0 The application for EC of M/s Utkal Alumina International Ltd. located in Village - Doraguda, Tehsil - Kashipur, District - Rayagada, State - Odisha was initially received in the Ministry on 20.04.2017 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 18th meeting held on 3rd to 5th May, 2017 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 22.05.2017 vide Lr. No. F. No. J-11011/753/2007-IA-II(I).

3.0 The project of M/s Utkal Alumina International Ltd. located in Village - Doraguda, Tehsil - Kashipur, District - Rayagada, State - Odisha is for enhancement of production capacity of Alumina Refinery (from 1.5 to 3.0 MTPA) along with Cogeneration Power Plant (from 90 to 150 MW). The existing project was accorded environmental clearance vide letter no. F. No. J-11011/753/2007-IA-II(I), dated 29.01.2008. The Status of compliance of earlier EC was obtained from Regional Office, Bhubaneswar vide letter no. 101-375/EPE dated 25.10.2017 and letter. no. 101-375/EPE/134, dated 15.01.2018. There are no non-compliances reported by Regional officer. The proposed capacity for different products for new site area as below:

Particulars	Existing Configuration	Post Expansion Final Configuration
Alumina Refinery (Calcined Alumina)	Line-I: 0.75 MTPA	Line-I: 1.0 MTPA
	Line-II: 0.75 MTPA	Line-II: 1.0 MTPA
		Line-III: 1.0 MTPA
Co-generation Power Plant	90 MW [3x30 MW]	150 MW [5 x 30MW]

4.0 The total land required for the project is 1069.51 ha, out of which 0 ha is an agricultural land, 800.784 ha is grazing land and 164.391 ha is others (164.391 ha Government Land). 104.335 ha of forest land is involved. The entire land has been acquired for the project. The Barha River passes through the project area. It has been reported that no water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is undulated and reported to lies between 19º 10' 31.5408" to 19º 12' 8.532" N Latitude and 83º 01' 19.65" to 83º 01' 57.1764" E Longitude in Survey of India topo sheet No. E44 F/4 at an elevation of 800 m to 823 m AMSL. The ground water table reported to ranges between 1.14 mbgl to 11.62 mbgl below the land surface during the post-monsoon season and 5.05 mbgl to 10.99 mbgl below the land surface during the pre-monsoon season. There will be no drawl of ground water.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The approval w.r.t. the "Site Specific Conservation Plan & Wildlife Management Plan" is given at Annexure – 3.1 in EIA/EMP Report.

7.0 The Bayer's process for extraction of Alumina using the basic raw material (Bauxite, Caustic Soda, Lime, Furnace Oil and Coal) and the various processes involved (Bauxite crushing, Grinding, Predesilication, Digestion, Clarification, Mud washing, Security filtration, Hydrate classification, Seed filtration, Precipitation, Hydrate washing and Calcination to produce the Calcined alumina. Waste generated in Bayer's process is Red Mud, Lime Grit (From lime slaking) and Fly ash from the captive power plant.

8.0 The targeted production capacity of the Alumina refinery is 3.0 million TPA of Calcined Alumina. The ore for the plant would be procured from Captive Bauxite Mine (Baphlimali Bauxite Mine). The ore transportation will be done through Long Distance Conveyor.

9.0 The water requirement of the project is estimated as 20,000 m^3/day, out of which 19,800 m^3/day of fresh water requirement will be obtained from the San River. The permission for

drawl of surface water is obtained from Department of Water Resources, Govt. of Odisha vide Lr. No. 3326/WR., Irr-II-WRC-154/2009, dated 11.02.2010.

10.0 The power requirement of the project is estimated as 150 MW, which will be obtained from the Co-generation Power Plant.

11.0 Baseline Environmental Studies were conducted during Pre-Monsoon season i.e. from March to May, 2017 Ambient air quality monitoring has been carried out at 11 locations during 01.03.2017 to 31.05.2017 and the data submitted indicated: PM_{10} (42.1 to 73.2 µg/m^3), $PM_{2.5}$ (21.7 to 40.7 µg/m^3), SO_2 (11.5 to 24.6 µg/m^3) and NOx (11.6 to 25.2 µg/m^3). The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 0.3075 µg/m^3 (0.11394 µg/m^3 w.r.t. Point Source Emission and 0.19356 µg/m^3 w.r.t. Line Source Emission) µg/m^3 with respect to the PM_{10}; 0.82689 µg/m^3 (0.63333 µg/m^3 w.r.t. Point Source Emission and 0.19356 µg/m^3 w.r.t. Line Source Emission) with respect to the SO_2; 0.82689 µg/m^3 (0.63333 µg/m^3 w.r.t. Point Source Emission and 0.19356 µg/m^3 w.r.t. Line Source Emission) µg/m^3 with respect to the NOx.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 6.5 to 7.5, Total Hardness: <0.05 to 172 mg/l, Chlorides: 7.6 to 95 mg/l, Fluoride: 0.06 to 0.65 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 10 locations. pH: 6.5 to 8.0; DO: 6.6 to 7.4 mg/l and BOD: 4.0 to 14.0 mg/l. COD from 19 to 81 mg/l.

13.0 Noise levels are in the range of 45.9 to 67.1 dB(A) for daytime and 40.0 to 61.8 dB(A) for night time.

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

15.0 It has been reported that a total of 40,80,000 tons/m^3 of waste will be generated due to the project and same will be dumped in the earmarked dump yard. It has been envisaged that an area of 353 ha will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

16.0 It has been reported that the Consent to Operate from the Odisha State Pollution Control Board obtained vide Lr. No 5057/IND-I-CON-6101 dated 22.03.2016 and consent is valid up to 31.03.2021.

17.0 The Public hearing of the project was held on 15.11.2017 at village Baghrijholla, Tahsil- Kashipur in Rayagada district under the chairmanship of Project Director, DRDA, Rayagada for production of Alumina Refinery from 1.5 to 3.0 MTPA and CPP from 90 to 150 MW. The issues raised during public hearing inter alia, include Barrier around Red Mud Pond & Ash Pond for protection of human & animals; Prevention of Dust pollution caused by the industry; River water Pollution in Bada Nadi due to discharge from plant; Plantation over surrounding bare hills; employment and development of social infrastructure; etc. The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Issues raised by the Public in Hearing	Response of the Project Proponent	Activity	Approximate Budget (Rs. In lakhs)	Time line

Environmental Issues:-				
1. Barrier around Red Mud Pond & Ash Pond for protection of human & animals.	Red mud pond area is protected by boundary wall and fence. Ash pond is situated on a hill top valley and surrounded by deep garland drains and guard wall, and thus is protected. The guard wall is being strengthened. It is worth mentioning here that, we have recently commissioned the Red Mud Filtration Unit, which will filter the wet Red Mud from 55% solids to 75% solids, thereby eliminating wet disposal. Now, Red Mud is disposed in dry form, hence hazards for humans and animals due to wet disposal have been completely eliminated. Both these ponds are under continuous security surveillance. Operation and maintenance personnel are continuously monitoring the pond status. In future expansion also similar actions will be continued.	Boundary wall and fencing around RMP & AP	500	3 years
2. Prevention of Dust pollution caused by the industry in Dwimundi, D Korol & other nearby villages	All the mitigation measures stated in the EIA, EMP have been implemented effectively to protect the environment. These measures are the part of the plant design and have been implemented since the day one of operation of the plant. The Air Pollution Control measures that have already been implemented to mitigate dust pollution are installation of state of the art equipment like ESP, Bag Filters, DSS, DES and Wet Scrubbers etc. at respective point source or fugitive source. In addition to the above High pressure fixed water sprinkling system put in place at Bauxite & Coal handling area to control fugitive dust emission. Regular water sprinkling and cleaning is being carried out on roads through mobile water tanker to reduce fugitive emission. All in plant roads have been black-topped/concreted. Moreover, plantation along the boundary wall is being carried out to prevent the dust pollution in Dwimundi, D. Korol and other nearby villages. In proposed expansion similar air pollution control measures will be adhered to, from the design stage.	Air Pollution mitigation measures as proposed in the EIA/EMP and part of the project cost.	15700	5 years
3. River water Pollution in Bada Nadi due to discharge from plant affecting downstream villages.	The plant is operating on a zero liquid discharge principle as mandated by the OSPCB & MoEFCC. Various ponds like Red Mud Pond, Ash Pond, Caustic Pond, Guard Pond and Holding Pond are in place to collect and reuse waste water in the process.	Water Pollution mitigation measures as proposed in the EIA/EMP and part of the project cost.	7200	5 years

	STP (Sewage treatment Plant) has been provided to treat the domestic waste water and reuse of treated water in gardening and afforestation. The expanded plant will have similar features to prevent any waste water discharge to outside and the plant will be designed and operated on Zero Discharge concept.			
4. Plantation over surrounding bare hills.	Plantation is a continuous activity at Utkal. We have developed in-house Nursery spreading over an area of five acres having capacity of 2.0 lakh saplings at Plant site and another nursery at Baphlimali Bauxite Mines of capacity 0.5 lakh saplings. These saplings are being planted for greenbelt development in and around the plant premises & Bauxite mines. Plantation has been carried out on bare hills and other areas owned by Utkal Alumina. UAIL will explore possibility of plantation in the surrounding private land and bare hills in coming years in consultation with the concerned land-owners and the Govt.	Greenbelt development and plantation as proposed in the EIA/EMP and part of the project cost	500	5 years
Peripheral development: -				
1. Regular Employment for local youths having Technical & other qualifications on priority basis.	Preference will be given to the local youth having Technical & other qualifications commensurate to their proficiency and skill set as and when similar vacancies arise.			
2. Suitable jobs for local ladies	Already employment has been provided to more than 210 local ladies (Direct & Indirect) depending on their qualification and skill levels. This will continue.			
3. Provision of 500 bedded Hostel at Kucheipadar, ITI at Baghrijholla, +2 Science College at Tikiri, Support to all Government UP School to develop as Model Schools & appointments of Teachers by the company.	i) Will be looked into after due consultation with the District Administration. ii) ITI at Kashipur will be strengthened through infrastructures as needed. iii) As committed during the PH, +2 Science College will be opened nearby Tikiri within the next two years. iv) Several of the Government run UP Schools of the area have been supported as required from time to time and will continue to support. Appointment of teachers will be done in consultation with the Govt. and the School Management committees with due approvals.	Infrastructure for ITI +2 Science College Support to Govt. schools Remedial coaching by teachers	25 500 50 50	2 years 3 years 3 years 3 years

4. Hospital facility & provision of 10 nos Ambulance as medical aid.	A modern 25- bedded hospital with secondary health care facilities will be operational at Oshapada village within the next few months, wherein, local community will be provided with best in class health care. Already six numbers of Ambulances are available for the local community. Possibility of providing four more will be looked into.	Utkal Hospital at Oshapada Four ambulances	500 (establishment cost) 500 per annum 40	By March 2018 Every Year after that towards operational cost. 3 years
5. Development of Road from Doraguda to Baphlimali & provision of 02 nos of Student Bus from Dongasil to Kashipur.	i) Road work has been undertaken by the Govt. ii) Provision of 02 nos of student buses will be looked into.	Two buses	60 for purchasing 30 per annum	2 years Every year after that as operational cost
6. Provision of Drinking water facilities at Hadiguda Panchayat.	Drinking water facility has been provided fully by the company in 3 villages (2 villages through overhead water tank and 1 village through Spring based water supply system) of the Hadiguda Gram panchayat. These villages are also provided with hand pump bore wells for ensuring drinking water supply at all the times. Along with this, hand pump bore wells have been provided in 5 other villages of Hadiguda Gram Panchayat. Repair and maintenance of hand pumps is done by the company as and when required. This support will be extended to rest of the villages after due consultation with the Govt.	Additional drinking water facility in the villages of Hadiguda GP	300	5 years
7. Permanent Identity Card for Land Losers	As committed during the PH, Permanent Identity Cards for Land losers will be provided within the next three months.	Identity cards	6	March 2018
8. DP status for Dwimundi & D Korol village.	This issue comes under the purview of the RPDAC and the Govt.			

18.0 An amount of Rs. 135.8 Crores (2.5% of Project cost of Rs. 5432.00 Crore) has been earmarked for Enterprise Social Commitment based on public hearing issues. The details of ESC proposed are as follows:

Sl. No.	Enterprise Social Commitment Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1.	Environmental Issues	4847	4847	4847	4680	4680	23900
2.	Education	213	213	200	--	--	626
3.	Hospital	1040	540	540	540	500	3160

4.	Student Bus facility	45	60	30	30	30	195
5.	Drinking water facility	60	60	60	60	60	300
Total							**28181**

19.0 The capital cost of the project is Rs 5432.00 Crores and the capital cost for environmental protection measures is proposed as Rs. 255.00 Crore. The annual recurring cost towards the environmental protection measures is proposed as Rs. 5.55 Crores. The employment generation from the proposed project/expansion is 375 direct employees and about 725 contractual workforces. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures are as follows:

Approx., Capital Investment for Environmental Protection

Sl. No.	Particulars	Rs. in Lakhs
I	AIR POLLUTION CONTROL	
1	Electrostatic precipitator	10000
2	Chimney	3000
3	Flue Gas Desulphurization System unit for boilers	2000
4	Dust Collector – Bag Filters	500
5	Water Sprayer (Stationary)	200
II	WATER POLLUTION CONTROL	
1	Domestic effluent treatment plant	100
2	Industrial ETP	200
3	Storm water drains, Caustic drain	1500
4	Caustic Pond/Guard Pond	300
5	Sewage System	100
6	Ash Pond/Red Mud Pond lining	3000
7	Sump Pit & Pumps	2000
III	NOISE POLLUTION CONTROL	200
IV	ENV. MONITORING AND LAB INSTRUMENTS	200
V	OCCUPATIONAL HEALTH & FIRE FIGHTING SYSTEM	
1	Occupational Health Equipment	100
2	Fire Fighting Equipment & Network System	1500
VI	GREEN BELT AND PLANTATION	500
VII	RAIN WATER HARVESTING	100
	GRAND TOTAL	25500

Recurring Annual Cost for Environmental Protection

Sl. No.	**Particulars**	**Rs. in Lakhs**
1	Air pollution control	50
2	Water pollution control	70
3	Noise pollution control	30
4	Environmental monitoring and management	80
6	Occupational health	150
7	Green belt & Plantation	100
8	Others (Environmental studies, expert advice etc.)	75
	TOTAL	**555**

20.0 Greenbelt will be developed in 353 Ha which is about 33% of the total acquired area. A 100-m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 3,00,000 saplings will be planted and nurtured in 353 hectares in 6 years.

21.0 The proponent has mentioned that there is court case (W.P.No. 5697 of 2007 in High Court of Odisha and No order/direction of the court as on today) and no violation under EIA Notification to the project or related activity.

22.0 The EIA/EMP has been prepared by EIA Consultant Organization M/s Kalyani Laboratories Pvt. Ltd. Accredited vide QCI/NABET Ref.: RAAC-137, dated 07.07.2017; Sl. No. 87 of the list in QCI Accreditation Register dated 5.01.2018.

Observations of the committee:

23.0 The committee observed that a court case is pending in the matter of writ petition no 5697 of 2007 in high court of Orissa regarding earlier Environmental Clearance granted in 1995. It was informed that no other order/direction was issued by the court till date. Further, it was observed that certain non-compliances were reported by RO, Bhubaneswar and the same was not closed.

Recommendations of the committee:

After detailed deliberations, the Committee sought following information

1. Action plan for 100% utilization of fly ash generated in existing plant as well as proposed expansion.

2. Closure of non-compliances reported by RO, Bhubaneswar

3. A detailed R&D scheme for utilization of red mud

4. Revised land use and land cover study based on high resolution satellite imagery (IRS LISS IV merged with CARTOSAT PAN-B data). Temporal changes shall also be presented by different date of pass.

5. Revised statement of issues raised during PH along with time bound action plan and budgetary provision.

6. Revised statement of ESC based on the issues raised during PH and need based assessment. The activities shall be for creation of assets and capacity building in CAPEX mode estimated as per scheduled rates.

7. Detailed management plan for storm water collection, treatment and disposal including the plant as well as red mud pond.

28.14 Expansion of Integrated Cement Plant [Clinker: 15 MTPA, Cement: 13.2MTPA; WHRB (90 MW to 125 MW); CPP: 180MW, DG sets 2000 KVA] and production of 1560 TPD of synthetic gypsum of M/s Shree Cement Ltd. located at near Village Ras, Tehsil Jaitaran, District Pali, Rajasthan [Online proposal No. IA/RJ/IND/71885/2017; MoEFCC File No J-11011/343/2012- IA.II(I)] – Environmental Clearance for expansion of WHRB from 90 MW to 125 MW under clause 7(ii) of EIA Notification, 2006.

1.0 M/s Shree Cement Limited made online application vide proposal no. **IA/RJ/IND/71885/2017** dated **28th December 2017** seeking Environmental Clearance for expansion of WHRB from 90 MW to 125 MW in the Integrated Cement Plant [Clinker: 15 MTPA, Cement: 13.2MTPA; WHRB (90 MW to 125 MW); CPP: 180MW, DG sets 2000 KVA] and production of 1560 TPD of synthetic gypsum of M/s Shree Cement Ltd. located at near Village Ras, Tehsil Jaitaran, District Pali, Rajasthan under clause 7(ii) of EIA Notification, 2006**.**

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

2.0 Shree Cement Ltd has obtained Environmental Clearance vide letter no. J-11011/343/2012-IA II(I) dt.7th November, 2017 for increase of clinker capacity from 11.2 to 15 Million TPA, Cement from 8.8 to 13.2 Million TPA, WHRS from 68 to 90 MW, CPP at 180 MW, Synthetic Gypsum Capacity of 1560 TPD, DG Sets Capacity of 2000 KVA and Bagatpura Residential Colony (40 ha, Super built-up area of 136799 Sq Meters and Total Unit 599 with Amenities).

3.0 Due to development of energy efficient technologies for recovery of waste heat for power generation without use of fuel, SCL has proposed amendment in EC under the Provision of Section 7(ii) of EIA Notification 2006 with respect to increase in Waste Heat Power Generation Capacity from 90 MW to 125 MW and reduction of Captive Thermal Power Generation Capacity from 180 to 160 MW without changing the Clinker Capacity of 15.0 Million TPA.

4.0 The following measures will be implemented for to increase the waste heat power generation:

Sl	Description	Capital Cost Rs in Lacs	Present Conditions (Heat Rate, Efficiency, Losses)	New Improved Conditions (Heat Rate, Efficiency, Losses)	Recurring Benefits (MW)
1	Replacement of existing Turbine (21 MW) with energy efficient Turbine which is having 115% better efficiency	3000	Present heat Rate of 21 MW Turbine is 4027Kcal/ Kwh	Heat Rate after replacement will be 3518 Kcal/Kwh	2.3
2	Maintaining higher temp and DP of hot gases in Kiln by changing clinker cooler plates of Kiln. This will increase steam temperature which in turn improves Power generation	400	AQC Boiler FG Temp is around 550°C and Dp is around 100mmwc	AQC Boiler FG Temp is around 625°C and Dp is around 125 mmwc hence power	9.5

				generation improved by 5.23Kwh/Mt of clinker	
3	Reuse of more hot gases from pre-heater and clinker cooler for additional waste heat capture.	100	Heat Available for AQC boiler inlet is around 141Kcal/Kg clinker	Heat Available for AQC boiler inlet will be around 149 Kcal/Kg clinker	4.25
4	Installation of additional Air-Cooled Condenser (ACC) cell with existing turbines to increase efficiency	300			0.25
5	Reduction in false air in the boiler	50	Using asbestos / kevelor cloth with sodium silicate as sealant	New Air seal technology will be used for better sealing	0.20
6	New Turbines to be installed will be efficient turbines.	10000		New Turbine heat rate will be 3248 Kcal/Kwh	14.0
7	Better insulation of boiler area to reduce the radiation losses	100	LRB (thickness as per calculation for ambient+15°C)	1. Thickness will be increased for Ambient+10°C 2. Ceremic fibre blanket will be used	4.0
8	Additional super-heater waste heat boiler of kiln-9 to increase steam temperature as well as capture more waste heat	200	Steam temp is below 440°C	Steam Temp will be 480°C	0.5
	Total	14150			35.0

5.0 it was informed that no existence of National Parks and Wild Life Sanctuaries within 10km radius; No additional Land is required; No change in ground water requirement; Total ground water requirement for industrial & industrial domestic consumption is 3050 and Bagatpura residential colony is 450 KLD. NOC from CGWA is available for use of 4000 KLD for Plant, Mine and Bagatpura Residential Colony; Pollution load will be reduced for PM by 4.32 kg/hr, SO_2 by 14.42 kg/hr and NOx by 14.42 kg/hr.

Observations and recommendations of the committee:

6.0 The committee observed that the proposal is for increasing the WHRB capacity by utilizing waste heat which is available from the kilns. Since, the proposal is for utilizing the waste heat and does not generate any additional pollution, the committee recommended for

expansion of WHRB from 90 MW to 125 MW under 7(ii) of EIA Notification 2006 as amended.

28.15 Proposed Manufacturing of Manganese Dioxide, Manganese Oxide, Ferro Alloy Unit (By Thermite Process) and Manganese / Iron Ore Beneficiation plant at Survey No. 165 & 169, Village Tekadi, Tehsil Parseoni, District – Nagpur, Maharastra by M/s Shree Shyamjee Metallics [Online Proposal No. IA/MH/IND/72314/2018; MoEFCC File No. IA-J-11011/28/2018-IA-II(I)] – Terms of Reference.

1.0 The proponent has made online application vide proposal no. **IA/MH/IND/72314/2018** dated **16th January 2018** along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) and 2(b) Mineral beneficiation under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

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

2.0 M/s. Shree Shyamjee Metallics proposed to install a new manufacturing unit for Manganese Dioxide, Manganese Oxide, Ferro Alloy Unit (By Thermite Process) and Manganese/Iron Ore Beneficiation from ROM. It is proposed to set up the plant for Ferro Alloy based on Thermite Process.

3.0 The proposed unit will be located at Survey No. 165 & 169, Village Tekadi, Tahsil Parseoni, District Nagpur, (M.S).

4.0 The land area for the proposed project is 7.0 Acres out of which 33% land will be used for green belt development. No forestland involved.

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

6.0 Total project cost is approx Rs. 5.0 Crore. Proposed direct employment and indirect employment generation from proposed project will be 40-50.

7.0 The ore transportation will be done through tarpaulin covered trucks. The proposed capacity for different products is as below:

Sl	Name	Proposed
1	Manganese oxide	1500 TPM
2	Manganese dioxide	500 TPM
3	Manganese/ Iron Ore Beneficiation from ROM	7500 TPM
Ferro Alloys (By Thermite Process)		
4	Ferro Titanium OR Low Carbon Ferro Manganese OR Medium Carbon Ferro Manganese OR Ferro Molybdenum OR Ferro Vanadium OR Ferro Aluminium OR Ferro Zirconim	200 TPM

8.0 The power required will be supplied by State Electricity Board. The power requirement for the proposed project will be 100 KVA.

9.0 Proposed raw material and fuel requirement for project are Manganese Ore, Coal & Other Minerals. Requirement of Manganese would be fulfill by Mines of MOIL and other from open market.

10.0 Water Consumption for the proposed project will be 40KLD. Domestic waste water will be treated in Package type STP and industrial waste water generated will be treated in settling tank and reused in the process.

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

12.0 EIA Consultant: Pollution & Ecology Control Services, Nagpur (NABET No.: 112).

Recommendations of the committee:

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

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

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

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

28.16 Expansion of Steel Plant at Village Telighana, Tehsil Rajgangpur, District Sundergarh in Orissa by M/s Shiva Cement Limited [Online Proposal No. IA/OR/IND/6582/2011; MoEFCC File No. J-11011/84/2008-IA.II(I)] - Validity Extension of Environmental Clearance.

1.0 **M/s Shiva Cement Limited** made online application vide proposal no. **IA/OR/IND/6582/2011** dated **2nd January 2018** seeking extension of validity of Environmental Clearance granted earlier for the above mentioned project vide J-11011/84/2008-IA.II(I) on 23rd July 2011.

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

2.0 The Cement Plant of M/s Shiva Cement Ltd. located in Village Telighana, Tehsil Rajgangpur District Sundergarh, State Odisha was accorded environmental clearance for the expansion of clinker capacity from 0.115 MTPA to 0.71 MTPA and Cement production capacity from 0.132 MTPA to 0.918 vide EC letter dated 23rd July 2011.

3.0 It was informed that due to financial constraints M/s Shiva Cement could not commence the expansion project earlier. However, with the focus of government on industrial growth in the country, now, the company confident of raising the adequate fund from the bankers and financial institutions to execute the expansion project.

4.0 The proponent has submitted proposed project implementation schedule in the form of bar chart and mentioned that the expansion will be completed by June 2020.

Observations and recommendations of the committee:

5.0 The committee observed that the PP has not made any physical progress on the site and even no substantiating evidence provided for any investment. Therefore, the committee not agreed to the proposal for extension of validity of Environmental Clearance at this stage and recommended to return the application in its present form.

28.17 Expansion of Steel plant (Sponge Iron: 90000; MS Billets 123500 TPA; TMT Bars/ Structural Steel / Steel Wire Rod: 94800 TPA) along with Captive Power Plant [18 MW – WHRB (6 MW) and FBC (12 MW)] at Village Saraipalli, Tehasil Ghargoda, District Raigarh in Chattosgarh by M/s Shree Rupanadham Steel (P) Limited [Online proposal No. IA/CG/IND/4118/2011; MoEFCC File No. J-11011/308/2009-IA.II(I)] - Validity Extension of Environmental Clearance.

1.0 **M/s Shree Rupanadham Steel (P) Limited** made online application vide proposal no. **IA/CG/IND/4118/2011** dated **31st December 2017** seeking extension of validity of Environmental Clearance granted earlier for the above-mentioned project vide Environmental Clearance vide F.No. J-11011 / 308 / 2009 – IA II (I) dated 29th March 2011.

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

2.0 Following is the plant configuration for which Environmental Clearance was obtained:

S.No.	Products	Existing	Expansion (EC obtained)	After Expansion
1.	Sponge Iron	----	90,000 TPA (3 x 100 TPD)	90,000 TPA (3 x 100 TPD)
2.	MS Billets	33,500 TPA (Only 16,750 TPA is commissioned)	90,000 TPA (2 x 15 MT)	1,23,500 TPA
3.	TMT Bars / Structural Steels / Wire rod mill	4,800 (Not installed)	90,000 TPA (1 x 300 TPD)	94,800 TPA
4.	WHRB	---	6 MW	6 MW
5.	FBC		12 MW	12 MW

3.0 Status of implementation of the project is as follows:

S. No.	Products	Existing	Expansion (EC obtained)	After Expansion	Implementation Status
1.	Sponge Iron	----	90,000 TPA (3 x 100 TPD)	90,000 TPA (3 x 100 TPD)	• 2 x 100 TPD DRI Kilns (i.e. 60,000 TPA) - 80 % construction has been completed and plant will be come in operation by March 2018.

S. No.	Products	Existing	Expansion (EC obtained)	After Expansion	Implementation Status
					• 1 x 100 TPD DRI Kiln (i.e. 30,000 TPA) – will be implemented by Jan. 2019.
2.	MS Billets	33,500 TPA (Only 16,750 TPA is commissioned)	90,000 TPA (2 x 15 MT)	1,23,500 TPA	• Yet to be implemented and will be completed by March 2019.
3.	TMT Bars / Structural Steels / Wire rod mill	4,800 (Not installed)	90,000 TPA (1 x 300 TPD)	94,800 TPA	• Yet to be implemented and will be completed by Jan. 2021
4.	WHRB	---	6 MW	6 MW	• 2 x 2 MW - 80 % construction has been completed and plant will be come in operation by March 2018. • 1 x 2 MW is yet to be implemented and will be Jan. 2019.
5.	FBC		12 MW	12 MW	• 4 MW under Construction and plant will come in operation by May, 2019. • 8 MW will be implemented by March, 2021

4.0 It was informed that PP could not go ahead with the implementation of the unimplemented portion of the above referred EC due to severe recession in the market and sluggish market condition and tough financial situation. Now with the improvement in market condition, the company has initiated the process of implementing the units for which EC has been accorded as mentioned above.

5.0 It is also requested to install 1 x 4 MW & 1 X 8 MW FBC based Power Plants in place of 1 x 12 MW FBC based Power Plant.

Recommendations of the committee:

6.0 After detailed deliberations, the committee recommended to amend the EC as requested by the project proponent subject to following additional conditions.

i. The PP shall comply with stack emission norm of 30 mg /Nm^3 of particulate matter.

ii. Greenbelt, in addition to 9 acres of green belt already prescribed in earlier EC, over an area of 3 acres shall be developed (total 12 acres) with native and broad-leaved tree species *inter alia*, covering all along the boundary of the plant.

28.18 Expansion of Cement Plant (Clinker from 1.5 to 4.0 MTPA and Cement from 2.0 to 4.6 MTPA) located at Village Boyareddypalli, Yadiki Mandal, District Anantapur, Andhra Pradesh by M/s. Penna Cement Industries Limited. [Proposal No IA/AP/IND/59430/2016; File No. IA-J11011/351/2016-IA.II(I)] – Environmental Clearance – Further consideration.

1.0 **M/s. Penna Cement Industries Limited (PCPL)** has made online application vide proposal no. **IA/AP/IND/59430/2016** dated **23rd October 2017** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category "A" EIA Notification, 2006 and the proposal is appraised at the Central Level.

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

2.0 M/s PCIL is operating a cement plant located in Boyareddypalli in South-Western Andhra Pradesh, the unit was commissioned in Sep 2008. PCIL received Environmental Clearance for 2.0 MTPA cement plant 1.5 MTPA Clinker production form MoEF&CC vide letter no. J-11011/351/2006-IA.II(I) dated 18th May 2007. The certified report on status of compliance of earlier EC submitted vide RO, Chennai Lr. No. EP/12.1/570/AP/0985 dated 27th June 2017. There are some non-compliances and partial compliance are reported by the RO.

3.0 Now, M/s PCIL proposed to increase production capacity (Clinker from 1.50 MTPA to 4.0 MTPA; Cement from 2.00 to 4.6 MTPA; and WHRB from 10 to 20 MW) of Boyareddypalli Cement Plant located at Boyareddypalli Village, Yadiki Mandal, Anantapur District, Andhra Pradesh.

4.0 Increase in production of clinker from 1.50 MTPA to 4.0 MTPA inter alia include increase of clinker production from 1.5 MTPA to 1.65 MTPA by up gradation/modernization of existing Unit – I by modification of pre-heater cyclones; up gradation of equipment; increase in kiln in speed; increase of surface area of cooler and installation of a new line i.e., Unit – II with clinker production capacity of 2.35 MTPA. The production capacity of various units of the plant before and after expansion are given below:

Cement Plant	Existing Capacity			Capacity after proposed enhancement		
	Clinker (MTPA)	Cement	WHRB (MW)	Clinker (MTPA)	Cement	WHRB (MW)
Unit –I	1.5	2.0	10	1.65	2.00 (OPC/PSC/PPC)	10
Unit –II (new line)	-	-	-	2.35	2.60 (OPC/PSC/PPC)	10
Total	1.5	2.0	10	4.00	4.60	20

5.0 The expansion proposal was initially received in the Ministry on 04th October 2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 12thmeeting held during 27th

– 28th October, 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 27.03.2017.

6.0. The existing cement plant is located in the area of 60 Ha. The proposed expansion will be carried in the existing plant premises and no additional land is required to be acquired. There is no R&R is involved; no Forest area is involved; and no River passes through the project area. It has been reported that no water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed. Land break up for the existing and proposed expansion is given below:

Sl. No	Description of plant facilities	Existing	After proposed expansion
		Area in Ha	
1	Plant area and roads	30	34
2	Colony with infrastructure	04	05
3	Parking area	04	01
4	Greenbelt	16	20
5	Vacant land	06	00
	Total	60	60

7.0 The Cement plant is located near Boyarredypalli Village, Yadiki Mandal, Anantapur District, Andhra Pradesh. The project site bounded between 15° 3'35.20" - 15° 3'52.10"N latitude and 77°56’52.03 - 77°57’12.55 E longitude with an average altitude of 276 m above MSL and covered in Survey of India Toposheet no. 57/E/16. Ground water table occurs at a depth of 45 m bgl as per the gathered information in the nearby villages in summer and 35 m bgl during the rainy season.

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

9.0 It was reported that dry process of cement manufacture utilising the pre-calciner technology is adopted. The clinkerisation process along with the technological advances in the area of grinding, homogenization, pre-calciner as well as packing of cement will be incorporated.

10.0 The basic raw materials used in the cement plant are Limestone, Iron Ore, Laterite and Gypsum. Imported Coal will be used in the process. The major raw material for manufacture of cement is limestone and is sourced from the captive limestone mine.Limestone excavated from the mines is crushed at the crusher located at 1.5 km from the captive limestone mine and the crushed limestone is transported through closed conveyor of 4.5 km length upto stacker reclaimer provided in the cement plant. The requirement of raw material is given below:

Raw Material	Before Expansion	After Expansion	Source	Mode of Transport
Limestone	2.30	5.30	Captive mines	Conveyor
Iron ore	0.02	0.10	Bellary / Hospet	Railway
Laterite/red mud	0.08	0.24	Veldurty, Rajahmundry	Railway

Gypsum	0.10	0.23	SPIC and Sterlite Industries, Tuticorin, FACT, Chennai & Coramandel Fertilizers Ltd., Vizag	Railway
Coal / petcoke	0.26	0.60	Singareni Collieries Company Ltd/ Imported Coal/Petcoke from USA	Railway
Slag	0.50	1.67	Jindal Steel and Garuda Steel	Railway
Ash requirement for PPC	0.10	1.14	Rayalaseema Thermal Power Station and Jindal Power Plant, AP Genco Power Plant, Nellore.	Road

11.0 The present water requirement of the plant is 930 m^3/day (700 m^3/day for cement plant and colony and 230 m^3/day for waste heat recovery-based power plant) and is sourced from bore wells within the plant site and also from mine pit. Additional Water requirement for expansion of cement plant and WHRB power plant is 500 m^3/day and sourced from bore well and mine pit.

12.0 The peak power consumption of the Cement plant at present is 25 MW and is being met from Grid and WHRB Power Plant. Additional power required is about 35 MW and the same will be sourced from Grid and proposed WHRB Power plant.

13.0 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 and the data submitted indicated: PM_{10}(50.9 – 56.5 µg/m^3), $PM_{2.5}$ 21.2 – 26.0 µg/m^3), $SO_2$11.7 – 13.0 µg/m^3) and NOx (12.8 – 14.4 µg/m^3). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 8.02 µg/m^3 with respect to the PM_{10}, 2.41 µg/m^3 with respect to the $PM_{2.5}$, 1.92 µg/m^3 with respect to SO_2 and 11.5 µg/m^3 with respect to the NOx.

14.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.12 – 7.56, Total dissolved solids: 72 – 605 mg/l, Chlorides: 23 - 110 mg/l, Fluoride: 0.16 – 0.12 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 1 location. pH: 7.26; Total dissolved solids: 412 mg/l.

15.0 Noise levels recorded were found to be in the range of 50.5 – 70.3 dB (A) during daytime and in the range of 40.3 – 61.7 dB (A) during night time.

16.0 No additional area is required for the expansion. Therefore, No Rehabilitation and Resettlement involved.

17.0 The dust collected in the air pollution control equipment in the cement plant will be recycled back to the process. Hence no solid waste which requires disposal is generated from the plant. Refractory bricks are one of the solid waste generated from the kiln section will be disposed to outside agencies. Solid waste generated from colony is disposed after segregating the waste into biodegradable and non-biodegradable. Bio- Degradable waste is being used as

compost and Non- Bio- Degradable waste is land filled within the colony premises at identified areas. Solid waste generated at STP is dried in the sand beds and is being used as compost for Green Belt development.

18.0 Consent Order for operation of the plant issued by APPCB vide letter no. APPCB/KNL/ATP/97/HO/CFO/2015-475 dated 22nd April 2015.

19.0 The Public hearing of the project was held on 2nd August, 2017 at existing plant premises under the chairmanship of Joint Collector and Additional District Magistrate for the proposed expansion project. The issues raised during public hearing are inter alia include employment; development of social infrastructure; supply of drinking water; pollution issues; etc. An amount of 20.00 Crores (2.5% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues and need based assessment. The details of Enterprise Social Commitment proposed by PP as follows:

PROPOSED ACTION PLAN FOR CSR - 2017- 22 (Amount in Rs. In Lakhs)						
ACTIVITY	**2017-2018**	**2018-2019**	**2019-2020**	**2020-2021**	**2021-2022**	**Total**
Promotion of Higher educational facilities to all the boys & girls	3	3	3	3	3	12
Internal Roads at Burugula, Kovalapalli, Chintalayalpalli, and other two villages	10	10	10	10	10	50
Renovation of temples and Masjids	3	2	2	2	2	11
Health / Medical Camps	15	10	10	10	5	50
Development of Road facility	10	10	10	10	10	0.5
Individual Toilet Facilities	5	5	5	5	5	25
Drinking water RO Plant	10	10	10	10	10	0.5
Boundary wall & Burial grounds in three village and renovation of roads to burial ground.	2	2	2	2	2	10
Infrastructure development	5	5	5	5	5	25
Improvement in the Drainage (Side Drains)	3	3	3	3	3	15
Social causes	3	2	2	2	3	12
Veterinary camps	2	2	2	2	1	9
Renovation, scholarship, books infrastructural facilities for all the schools	5	2	2	2	1	12
Contribution for performing Peddamma Jathara at Boyareddypalli village	2	2	2	2	2	10
Contribution for Sri Gomeswara swamy temple development works at Kundanakota	5	5	0	0	0	10
Contribution to Govt. on behalf of Village for arranging 10 Nos. Solar Street lights in in each and every village	5	5	0	0	0	10
Sri Kothavenkata Ramana swamy temple renovation works at Chintalayapalli village	5	5	0	0	0	10
Construction of culvert on drainage in Veerareddipalli, and road work upto main road village(10 years)	20	20	20	20	20	200
Unforseen expenditure from the villages	10	10	10	10	10	50

PROPOSED ACTION PLAN FOR CSR - 2017- 22 (Amount in Rs. In Lakhs)						
ACTIVITY	**2017-2018**	**2018-2019**	**2019-2020**	**2020-2021**	**2021-2022**	**Total**
Construction of college for the villagers	100	200	100	0	0	400
Laying of pipeline to villages for drinking water supply	50	50	20	0	0	120
Construction of checkdams and Rainwater harvesting structures	100	100	100	100	0	400
Hostel for the students And maintenance (10 years)	40	60	50	50	50	500
Medical camps every year (10 years)	10	10	10	10	10	100
Contribution to colleges and hostels outside (10 years)	20	20	20	20	20	200
Total	**443**	**553**	**330**	**278**	**172**	**2000**

20.0 The cost of the proposed expansion is estimated to be about Rs. 800 Crores and the Capital Cost of Environmental measures (EMP) is about Rs. 120 Crores and the annual recurring cost is about Rs. 4.5 Crores. The details of budget allocated for implementation of environmental management plant is given below:

Sl	Component	Area	Capital Cost	Recurring Cost
1	Air environment	Raw Mill / Kiln bag house	44.0	04.00
2		Cooler ESP, Coal Mill and Cement Mill bag houses	49.0	
3		Transfer point Bag Filters	20.0	
4		Continuous Monitoring Equipment	02.0	
5	Green belt Development	Plant and Colony	01.0	0.50
6	Rainwater Harvesting		04.00	--
	Total		120.00	4.5

21.0 The required greenbelt as per norms is 33 % of the plant area. PCIL has already developed greenbelt in an area of 16 Ha and now proposes to develop the greenbelt in additional area of 4.0 Ha. PCIL has taken up plantation outside the cement plant area in an area of about 11.17 Ha.

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

23.0 The project proponent has made detailed presentation on the proposal along with EIA Consultant M/s B. S. Envi-Tech Pvt Limited, Hyderabad.

24.0 After detailed deliberation the committee observed the following:

i. Material balancing is not matching;

ii. No Hydrogeological details are furnished in the EIA/EMP report;

iii. There are certain non-compliances / partial compliances of earlier EC conditions reported by Regional Officer, MoEFCC, Chennai;

iv. There is no mechanism of reporting of non-compliances / infringements observed in compliance of EC conditions envisaged in the Environmental Policy document of the company;

v. No rationalization in noise level monitoring and soil sample analysis; and

vi. Hazard identification and mitigation measures suggested in the Risk Assessment Plan is not proper.

25.0 Therefore, the committee advised to submit revised EIA/EMP incorporating following details for further consideration of the proposal:

i. Possibility of recovering more heat from the kiln and cooler;

ii. No Use of Pet coke in power generation;

iii. The emission levels within 25 mg/Nm^3;

iv. The additional green belt of 4 Ha in addition to the existing 16 Ha with native and broad leaved tree species;

v. Establishment of the environmental cell with qualified person as head-environment with requisite support staff;

vi. Revised Corporate Environment Policy including its approval in the Board of directors; SoPs for reporting of non-compliances to the board of directors; hierarchical system to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions;

vii. Soil quality representing the various land uses in the area;

viii. Hazard identification and Risk Assessment (HIRA) along with proposed mitigation measures specific to the plant;

ix. The hydrogeological report based on GEC methodology;

x. Enterprise Social commitment shall be revised with addressing the issues raised during the public hearing and need based assessment for creation of facilities in CAPEX mode and implemented in concurrence with expansion proposal; and

xi. Ground water withdrawal should not exceed 700 m^3/day and maximize the use of rainwater harvested

26.0 Accordingly the PP submitted reply to ADS on 21st December 2017. The information sought by the EAC is incorporated as given below:

Sl	Points	Reply	Reference in the Revised EIA/EMP.
1	Possibility of recovering more heat from the kiln and cooler	PCIL has carried out a detailed technical study for recovering more heat from the kiln and coolers.	Chapter - 2 Para - 2.9.3 Page - 32 to 35
2	No Use of Pet coke in power generation	power generation PCIL has not installed any power plant which is based on solid fuel. The existing and proposed power plants are based on waste heat	Chapter - 2 Para - 2.9.3.2 Page – 35

		recovery system. No pet coke will be used in power generation	
3	The emission levels within 25 mg/Nm^3	PCIL will comply with the new norms issued by MoEF&CC vide Gazette Notification GSR 612 (E) dated 25th August, 2014 where emission concentration permitted is 30 mg/Nm^3 for all the cement plants operating and proposed in the country.	Chapter - 4 Para - 4.1.6 Page - 117 to 120
4	The additional green belt of 4 Ha in addition to the existing 16 Ha with native and broad leaved tree species	PCIL will develop additional area of 4 Ha (own land) under greenbelt in addition to existing 16 Ha. The list of broad leaved species proposed for plantation is enclosed	Chapter - 4 Para - 4.4.3 Page - 132 to 137
5	Establishment of the environmental cell with qualified person as headenvironment with requisite support staff;	PCIL has established the Environmental Cell. The cell is headed by experienced Environmental Engineer and he is supported by an Environmental Scientist	Chapter - 10 Para - 10.4 Page - 198 to 199
6	Revised Corporate Environment Policy including its approval in the Board of directors; SoPs for reporting of non-compliances to the board of directors; hierarchical system to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions;	Revised Corporate Environment Policy approved by Board of Director is Enclosed SoPs for reporting of non-compliances to the board of directors is enclosed Hierarchical system to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions is shown in Organization Structure	Chapter - 10 Para - 10.2 Page - 196 Chapter - 10 Annexure 10A Chapter - 10 Para - 10.4 Page – 199
7	Soil quality representing the various land uses in the area;	The various land uses in 10 km radius of the cement plant are given below a. Barren Land - S I b. Agriculture crop land - S2 c. Agriculture Fallow Land -S 3 d. Forest Land - S4 e. Water Bodies f. Builtup Area g. Other Mines/quarries Four soil samples from the above locations have been collected. Fig - 3 shows the sampling locations on the land use map	Chapter - 3 Para - 3.4.1 Page - 55 to 57

		Soil Quality of the samples collected at the above locations along with are enclosed	
8	Hazard identification and Risk Assessment (HIRA) along with proposed mitigation measures specific to the plant;	Hazard identification and Risk Assessment (HIRA) specific to the cement plant operations along with proposed mitigation measures are given.	Chapter - 7 Para - 7.2.1 Page - 148 to 155
9	The hydrogeological report based on GEC methodology;	Hydro Geology report based on GEC methodology is enclosed	Chapter - 3 Para - 3.4 Page – 55
10	Enterprise Social commitment shall be revised with addressing the issues raised during the public hearing and need based assessment for creation of facilities in CAPEX mode and implemented in concurrence with expansion proposal; and	Revised CSR plan under Enterprise Social commitment addressing the issues raised during the public hearing and need based assessment are enclosed	Chapter - 8 Para - 8.3 Page - 185 to 193
11	Ground water withdrawal should not exceed 700 m^3/day and maximize the use of rainwater harvested	Ground water withdrawal will not exceed 700 m^3/day and balance water requirement of the plant will be met from harvested rainwater	Chapter - 2 Para - 2.6.3 Page - 22

Observations of the committee

27.0 After detailed deliberation the committee advised to revise the ESC budget and PP has submitted the revised budget for ESC as follows:

ACTIVITY	**Capital Cost Rs Lakhs**	**Implementation Year**				
		1st	**2nd**	**3rd**	**4th**	**5th**
Development of Internal Roads	220	30	30	50	50	60
Installation of RO plants for Drinking water	120	20	20	20	30	30
Construction of Toilet Facilities	50	10	10	10	10	10
Drainage Development - side drains	60	10	10	10	10	20
Providing Solar Street Lights	40	5	5	10	10	10
Construction of Culvert on drainage	120	-	-	120	-	-
College construction for the villagers	500	-	500	-	-	-

ACTIVITY	Capital Cost Rs Lakhs	Implementation Year				
		1st	2nd	3rd	4th	5th
Hostel for the students and maintenance						
Laying of pipeline to villages for drinking water supply	160	-	40	40	40	40
Construction of checkdams and Rainwater harvesting structures	400	50	50	100	100	100
Boundary wall & Burial grounds in three village and renovation of roads to burial ground.	20	10	10	-	-	-
Tree Guards for plants	50	10	10	10	10	10
Other Social commitments	260	Amount will be allocated based on the needs as when arise				
Total	**2000**					

Recommendations of the committee:

28.0 After detailed deliberations, the committee recommended for grant of EC with following specific conditions in addition to the conditions that may be prescribed by the ministry during the processing of application:

i. The PP shall comply with stack emission norm of 25 mg /Nm^3 of particulate matter.

ii. Greenbelt, in addition to 16.0 ha of green belt already prescribed in earlier EC, over an area of 4.0 ha shall be developed (total 20.0 ha) with native and broad-leaved tree species *inter alia*, covering all along the boundary of the plant.

iii. Groundwater drawl shall not be exceeded 70 m^3/day and balance shall be met through rainwater harvesting.

iv. An amount of Rs 20 Crores proposed towards Enterprise Social Commitment (ESC) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

v. The Capital cost Rs. 120 Crores and annual recurring cost Rs. 4.5 Crores towards the environmental protection measures shall be provided separately. The funds so provided shall not be diverted for any other purpose

28.19 Steel/Sponge Iron Manufacturing plant of (3x60 TPD) 54000 MTPA in existing steel Manufacturing unit having capacity 72 TPD of steel Ingots of M/s Eden Steel Alloys located at Village Mullanpur Kalan, Ambey Majra Road Mandigobindgarh, Tehsil Sirhind, District Fatehgarh Sahib, Punjab [Online proposal no. IA/PB/IND/59542/2016; MoEFCC File No. J-11011/233/2016- IA-II(I)] – Environmental Clearance - Further consideration.

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

28.20 Rotary Kiln for clinker (500 TPD) and Cement grinding (500 TPD) (closed circuit) units of M/s K. R. Associates, located Village Ambher, Jorabat, Mouza-Sonapur, District Kamrup, Assam [Online Proposal No. IA/AS/IND/29322/2015; MoEFCC File No. J-11011/139/2015-IA-II(I)] – Amendment in EC.

1.0 M/s K. R. Associates made online application vide proposal no. IA/AS/IND/29322/2015 seeking amendment in environmental clearance issued earlier for modification of the certain conditions imposed:

2.0 The project proponent requested for modification of EC conditions as follows:

NO.	Condition/ Line/ Paragraph	Details mentioned in EC Letter	Amendment required in EC Letter.	Clarification /justification
I	Condition No. i of A. Specific Condition on page no. 2	The project location is in the vicinity of Amchang Wildlife Sanctuary at a distance of 1.6 km. As per this Ministry's OM No. J-11013/41/2006/IA-II(I) dated 2nd December 2009, the PP should obtain prior clearance from Standing Committee of NBWL.	The project location is in the vicinity of Amchang Wildlife Sanctuary at a distance of 1.6 km.	As per MoEF&CC notification dated 7th May 2017 Eco-sensitive Zone of Amchang Wildlife Sanctuary was defined, and project is located out ESZ.
II	Condition No. iv of A. Specific Condition on page no. 2	Continuous stack monitoring facility to monitor gaseous emission from the process stacks shall be provided. After expansion, limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control viz Electrostatic	Condition need to be removed.	Typographical error. Same complete condition is already mentioned on next page with same sr. no.

		precipitators to clinker cooler, bag house to raw mill/kiln and bag.		
III	Condition No. iv of A. Specific Condition on page no. 3	Continuous stack monitoring facility to monitor gaseous emission from the process stacks shall be provided. After expansion, limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control viz Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filter to coal mill and cement mill. Low NOx burners shall be provided to control NOx emission. Regular calibration of the instrument must be ensured.	Continuous stack monitoring facility to monitor gaseous emission from the process stacks shall be provided. Limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control viz Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filter to coal mill and cement mill. Low NOx burners shall be provided to control NOx emission. Regular calibration of the instrument must be ensured.	Typographical error. Proposed project is green field project hence "After expansion," need to be removed.

Recommendations of the committee:

3.0 After detailed deliberations the committee not agreed for amendment in the EC and advised to make application for corrigendum for point No. II and III. Therefore, the committee recommended to return the application in present form.

7th February 2018

28.21 Expansion cum modification of existing Integrated Steel Plant for 0.85 MTPA with 184 MW CPP located at Jamuria Industrial Estate, Village Ikra, P.O Mondalpur, Tehsil Jamuria, District Bhurdhwan, West Bengal by M/s Super Smelter Ltd. [Online Proposal No. IA/WB/IND/57744/2016; MoEFCC File No. F. No-J-11011/86/2008-IA.II(I)] – Environmental Clearance.

1.0 **M/s Super Smelter Ltd.** made online application vide proposal no. **IA/WB/IND/57744/2016**, dated **17th January 2018** along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level as Category "A".

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

2.0 The proposed Modification cum Expansion project of M/s Super Smelters Ltd. is located in village-Ikra, PO-Mondalpur, Jamuria Industrial Estate, District-Burdwan(W) in the state of West Bengal was initially received in the ministry on 23rd July, 2016 for obtaining terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 10th meeting held on 30th August.2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of environment and Forests and prescribed ToR to the project on 17th November 2016.

3.0 The project of M/s Super Smelters Ltd , located in village-Ikra, Tehsil-Jamuria, District-Burdwan(W) is for modification cum expansion of its existing project to achieve 0.85-million-ton steel per annum (AS, MS and SS taken together) for which EC had already been taken. However, there will be additional sponge iron for sale. The existing project was accorded environmental clearance vide J-11011/86/2008-IA II(I), 1st August 2008 and there after validated to 31.07.2018, vide Lr dated 19th May, 2016. The status of compliance of earlier EC was obtained from Regional Office, Bhubaneswar vide lr No-102-278/EPE/195, dated 17.01.2018. There are no non-compliances reported by Regional Officer. The proposed capacity increase for different products are as follows:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
I/o Beneficiation plant	1	2 MTPA	1.2 MTPA concentrate
Pellet Plant	1	0.6MTPA	0.6 MTPA pellet
DRI Kiln	2	500 TPD	0.32 MTPA Sponge iron
IF	2	25T, 10 H	0.16 MTPA liquid steel
IF	4	20T, 10 H	0.26 MTPA liquid steel
Sinter Plant	1	$5m^2$	0.06 MTPA sinter

4.0 The proposed capacity decrease for different products are as follows:

Name of unit	EC accorded Capacity	Proposed modified capacity	Reduction in Production Capacity
MBF	380 m^3	65 m^3	0.32 MTPA HM
EAF	140 T, 18-20 H	Nil	0.85 MTPA liquid steel

5.0 The entire land of 116.70 ha has been acquired for the project is. No agricultural land, no grazing land, no forest land is involved. No river passes through the project area. No water

body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

6.0 The topography of the area is flat and reported to lie between 23^0 40'38.30" to 23^0 41'42.17" N Latitude and 87^0 5' 24.13" to 87^0 6' 14.90" E Longitude in survey of India topo sheet no F45D2 at an elevation of 39-40 m AMSL. The ground water table reported to range between 4.0 and 5.0 m below the land surface during post-monsoon season and 5.5 and 10.5 m below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be about 3,000 ha m. Further, the stage of ground water development is reported to be 16% & 41% in core and buffer zone respectively and thereby these are designated as safe area.

7.0 No National Park, no Wildlife Sanctuary, no Biosphere Reserve, no Tiger Reserve nor Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for schedule-I fauna. The authenticated list of flora and fauna provided through the website and local DFO reporting presence of no schedule-I fauna in the study area.

8.0 The project consists of 1) Iron ore beneficiation plant 2) Pellet Plant 3) Sinter Plant 4) DRI kilns 5) Induction Furnaces with LF, AOD & CCM 6) MBF & Pig casting Machine with LF & CCM. 7) Rolling Mills and WHRB & CFBC based captive power plant. For enriching of Fe content in iron ore fines from a level of 54-58% to 65-67% the process being considered is scrubbing / washing, closed circuit grinding with hydrocycloning, flotex gravity separation followed by high intensity magnetic separation.

9.0 The targeted production capacity of the total project is 0.85 MTPA steel. The Iron ore for the plant would be procured from Iron ore mines of Odisha and Jharkhand. The ore transportation will be done through rail and road fully covered.

10.0 The water requirement of the project is estimated as 27,000 m^3/day out of which 19,440 m^3/day of fresh water requirement will be obtained from Ajay river through ADDA supply.

11.0 The power requirement of the project on full load running is estimated to be about 175 MW, out of which 167 MW is own generation after power plant internal consumption of 17 MW. No external power drawl will be required, however system will remain connected with grid.

12.0 Ambient air quality monitoring has been carried out at 8 locations during December 2016 to February 2017. And data submitted indicated PM_{10} (58.4 µg/m^3 to 80.4 µg/m^3), $PM_{2.5}$ (27.4 µg/m^3 to 38.6 µg/m^3), SO_2 (20.9 to 33.6 µg/m^3), NOx (13.7 to 28.6 µg/m^3). The result of the modelling study indicates that the maximum increase of GLC for the proposed project is 2.056 µg/m^3 with respect to PM_{10} and 1.474 µg/m^3 with respect to $PM_{2.5}$ and 1.56 µg/m^3 with respect to SO_2.

13.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 6.53 to 7.12. Total Hardness: 128 to 260 mg/l, chlorides: 61.2 to 88.92 mg/l, Fluoride: 0.28 to 0.42 mg/l. Heavy metals are within limit. Surface water samples were analysed from 8 locations. pH: 6.8 to 8.1. DO: 4.6 to 8.4 mg/l and BOD: 2 to 3mg/l.

14.0 Noise levels are in the range of 41.6 to 52.6 dB(A) for daytime and 30.2 to 49.3 dB(A) for night time.

15.0 It has been reported that there are no people in the core zone of the project. No R&R is involved.

16.0 It has been reported that a total a total 17,03,457TPA (including 8,00,000 TPA iron ore tailings in future) of waste will be generated due to the project, out of which 2,58,420 TPA will be used in the process and fly ash brick making and 4,87,919 TPA will be supplied to cement plants and balanced will be dumped in the earmarked dump yard. It has been envisaged that an area of 38.02 ha will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

17.0 It has been reported that the Consent to operate from the WB State Pollution Control Board obtained vide Lr. No 205-as-co-s/11/0010, dated 04.08.2016, and valid up to 31.01.2019.

18.0 The Public hearing of the project was held on 30.06.2017 in Municipality Hall of Jamuria under the chairmanship of Sri Kaushik Mukherjee, W.B.C.S (Exe), Dy. Magistrate & Dy. Collector and O.C.J.M, Paschim Bardhhaman for production of 0.85 MTPA steel & 184 MW power Plant under modification cum expansion project of Super Smelters ltd. No issues were raised during Public hearing but there were suggestions. The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Sl.	Points/questions raised by Public	Commitment of PP
1	Steps/measures taken to control air pollution	On line stack monitoring and results are being sent to server of CPCB n regular basis.
2	Measures taken for tree plantation both inside and outside the premises	In last 3 to 4 years 8,000 saplings have been planted both within and outside premises. July has been identified as plantation month
3	Management to contribute to local schools and roads	Necessary CSR programs are being conducted and will be conducted in future for benefit of local people.
4	Provide job to local youth	Industry provides skilled training program for technical grade, the benefits which can be availed by local people. Different training program for employees are being conducted on regular basis.
5	What measures taken towards "Swasthya mission" and "Nirmal Bangala Abhijan"	Necessary CSR programs are being conducted and will be conducted in future for benefit of local people.
6	Bore well water should not be used for plant as ground water level is very low.	Total requirement of water to be met from Ajay river & municipality supply, also for water conservation & rain water harvesting measures are being adopted.
7	Health check-up camp to be organised in locality	We are already providing health check-up facilities to our employees, we would look into providing health check-up facilities to locality also.

19.0 An amount of 7000 Lakhs (2.5 %of Project cost) has been earmarked for Enterprise Social commitment based on public hearing issues. The details of ESC proposed are as follows:

ESC activities base on Public hearing suggestions	Year-1	Year-2	Year-3	Year-4	Year-5	Total in Rs lakhs

Air pollution control	3050	1000	1000	-	-	5050
Waste water management	200	300	450	-	-	950
Construction of village roads and maintenance for 5 years	250	250	150	30	30	710
EMS & Training	90	25	25	25	25	190
Ambulance –ICU on wheels	100	-	-	-	-	100
Total						7,000

20.0 The capital cost of the project is Rs 2,800 Crores and capital cost for environment protection measures is proposed as Rs 525 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 220 Lakhs. The employment generation from the modification cum expansion project is about 2,000. The details of capital cost for environment protection measures and annual recurring cost towards the environmental protection measures is as follows:

EMP Measures	Capital cost in Rs lakhs	Annual operating cost in Rs Lakhs
Solid waste management	100	35
Environmental monitoring	235	65
Occupational health	170	56
Safety & Disaster Management	50	35
Green Belt Development.	140	85
Total	525	276

21.0 Greenbelt will be developed in 38.02 Ha which is about 33% of the total acquired area. A 100m wide green belt consisting of at least 3 tires around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no of 95,500 saplings will be planted and nurtured in 38.02 hectares in 5years.

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

23.0 The EIA/EMP has been prepared by EIA Consultant Organization M/s Global Tech Enviro Experts Pvt Ltd, Bhubaneswar, Odisha-751014, Accreditation No. : 78

Observations of the committee:

24.0 The committee observed that the PP obtained Environmental Clearance separately from SEIAA, West Bengal for Induction Furnace (2x25T) in 2009 and from this Ministry for DRI based Integrated Steel Plant in 2008. Whereas, the Environmental Clearance for Induction Furnace should have obtained from the Ministry as part of the EC for DRI based Integrated Steel Plant. The Committee also observed that the PP has changed the configurations of DRI integrated steel Plant without prior intimation to the Ministry. Further, the Committee made the following observations in EIA report:

1. Non-compliance of ToRs prescribed for EIA report

2. EIA report submitted was not found to be as per the generic structure of the EIA Notification 2006.
3. Non-submission of the closure report of non-compliances from the Ministry's Regional Office.

Recommendations of the committee:

25.0 Therefore, the Committee rejected the EIA report in its present form.

28.22 Production Capacity Enhancement of Writing and Printing Grades of Paper (140 TPD to 170 TPD) and installation of Co-Generation Power Plant (10 MW) of M/s Naini Group of Industries at 7th KM Stone, Moradabad Road, Kashipur, District Udham Singh Nagar, Uttarakhand [Online proposal No. IA/UK/IND/58928/2016; MoEFCC File No. J-11011/58/2013-IA-II(I)] – Environmental Clearance under Clause 7(ii) of EIA Notification.

1.0 **M/s Naini Group of Industries** made online application vide proposal no. **IA/UK/IND/58928/2016**, dated **18th January 2018** along with copies of EIA/EMP report seeking environmental clearance under the provisions of clause 7(ii) of the EIA Notification, 2006 for the production Capacity Enhancement of Writing and Printing Grades of Paper (140 TPD to 170 TPD) and installation of Co-generation Power Plant (10 MW). The proposed project activity is listed at Sl. No. 5(i) Pulp & paper industry excluding manufacturing of paper from waste, under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level as Category "A".

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

2.0 The project of M/s Naini Tissues Limited located at 7th K.M. stone, Moradabad road, Tehsil Kashipur, District Udham Singh Nagar, State Uttarakhand was initially received in the Ministry on 11th September, 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 11th meeting held on 26th - 27th September, 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 24th January, 2017 vide Lr. No. J-11011/58/2013-IA II (I).

3.0 The project of M/s. Naini Tissues Limited located in 7th K.M. Stone, Moradabad Road, Tehsil Kashipur, District Udham Singh Nagar, Uttarakhand State is for Production Capacity enhancement of Writing and Printing Grades of Paper (140 TPD to 170 TPD) and installation of Co-Generation Power Plant (10 MW). The existing project was accorded environmental clearance vide lr.no. J-11011/58/2013-IA II (I) dated 18th December, 2015 from MoEFCC, New Delhi. The status of compliance of earlier EC was obtained from Regional Office, Dehradun vide Lr. No. NC.RO/ENV/IND/UK/57/2015/2106 dated 21/03/2017. There is no non-compliances reported by Regional officer. The proposed capacity for products for existing site area as below:

Particulars	Existing Capacity	Capacity for proposed enhancement& installation	Total Capacity After enhancement & installation
Writing & printing grades of paper	140 TPD	30TPD	170 TPD

Co-Gen power plant *(biomass based)*	Nil	10 MW	10 MW

4.0 The total land required for the project is 20.92 ha (industrial land), out of which 6.9 Hectares is developed as greenbelt/plantation. No forestland is involved. The entire land has already been acquired for the plant. No river passes through the plant area. It has been reported that no such water body exist around the project for which modification / diversion in the existing natural drainage pattern at any stage has been proposed. Water bodies like Dhandi Nallah (adjacent in West direction), Pachhana Nala (~ 1.5 km in East direction), Dhela River (~1.5 km in SSE direction) and Tumaria River (~1.5 km in North direction) are present in the 10 km radius study area.

5.0 The topography of the area is flat and reported to lie between 29°11'47.23" to 29°12'06.90"N Latitude and 78°53'25.18" to 78°53'40.13"E Longitude in Survey of India topo sheet No. 53 K/16& 53K/15 at an elevation of 235 m AMSL. The ground water table reported to ranges between 3-5.25 m below the land surface during the post-monsoon season and 1.99-6.89 m below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the stage of groundwater development is reported to be 99.63% and thereby these are designated as critical areas.

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

7.0 The basic raw material used for paper making is bagasse, wheat straw & imported wood pulp. Steps involved in paper making are as given below: -

Steps involved in paper making		Waste generation & Management
1. Pulping process		
a.	Raw material preparation (Bagasse & Wheat straw)	• Discarded pith generation (burnt as fuel in boiler) & waste water after washing (treated in ETP). • Generation of black liquor (to recover soda ash). • Waste water as effluent generated due to washing of pulp (treated in ETP).
b.	Cooking in Continuous digester	
c.	Unbleached Pulp washing, refining, screening and cleaning	
d.	Bleaching, Washing and Cleaning	
e.	Imported soft wood pulp slushing	
2.	Stock Preparation	-
3.	Paper Making	White water generation (reused in pulp mill)
4.	Converting/Finishing	-
5.	Boiler operation	• Particulate matter • Boiler ash (Given to nearby farmers).

8.0 The targeted production capacity of the writing and printing grades of paper is 170 tonnes per day. The raw material for the plant i.e. bagasse, wheat straw and imported soft wood pulp procured from suppliers and transportation done by road. All chemicals other than Oxygen gas (self-generated) procured from local vendors by road. Fuel i.e. rice husk procured from local suppliers and transportation done by road.

9.0 The fresh water requirement of the existing project is 7595 m^3/day and for the proposed expansion the fresh water requirement will remain same. The source is ground water. The permission for drawl of groundwater is obtained from CGWA vide Lr. No. 21-4(71)/UR/CGWA/2014-1774 dated 24th November, 2015.

10.0 . The power requirement of the project is estimated as 153000 KVA. Existing source of power is Uttarakhand Power Corporation Limited and total power after enhancement will be sourced from proposed co-generation power plant of 10 MW capacity and D.G. sets (*for emergency*).

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, 2016 to February, 2017 and the data submitted indicated: PM_{10} (63.3 μg/m^3 to 95.2 μg/m^3), $PM_{2.5}$ (28.4 to 48.3 μg/m^3), SO_2 (7.8 to 15.4 μg/m^3) and NO_x (17.3 to 29.6 μg/m^3). The results of the modelling study indicated that the maximum increase of GLC for the proposed project is 1.07 μg/m^3 with respect to PM_{10}.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.39 to 7.62, Total Hardness: 132.0 to 296.0 mg/l, Chlorides: 8.62 to 53.23 mg/l, Fluoride: 0.33 to 0.61 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 4 locations (Dhela River, Dhandi Nallah, Thakurdwara Distributary and Pachhana Nala). pH: 7.15 to 7.95; DO: 2.5 to 5.4 mg/l and BOD: 14.4 to 18.6 mg/l, COD from 40.4 to 51.2 mg/l.

13.0 Noise levels are in the range of 47.9 to 63.4 Leq dB(A) for daytime and 40.3 to 53.3 Leq dB(A) for night time.

14.0 No R&R is involved, as the proposed enhancement & installation will be done on the existing plant premises.

15.0 It has been reported that a total of 8962.4 m^3 /day of effluent will be generated due to the project, out of which 3981.3m^3/day will be used after tertiary treatment in plant activities & greenbelt development, 4866.07 m^3/day will be discharged in Dhandi Nallah and 115 m^3/day will be evaporation losses. Black liquor generated in the pulp section of the plant is being/will be incinerated and processed in CRP for the recovery of soda ash which is being/will be sold to soap & glass manufacturers. ETP sludge which mainly constitutes of cellulosic fibres will be collected on polythene lined RCC platform inside the premises and use in board making. The generated traces of lime sludge from calcium hypochlorite preparation plant, is being mixed with cement & mortar for repairing of building/plaster work. Used oil is being/will be sold to recyclers authorized by CPCB and hazardous chemical containers will be returned to the vendors itself. It has been envisaged that an area of 6.9 ha has been developed as greenbelt around the plant site to attenuate the noise levels and trap the dust generated due to the project development activities.

16.0 It has been reported that the Consent to Operate from the Uttarakhand Environment Protection and Pollution Control Board obtained vide Lr. No UEPPCB/HO/Con-N-2/2017/131 dated 3rd May, 2017 and consent is valid up to 31st March, 2018.

17.0 The company has applied for enhancement and installation under Section 7(ii) which includes exemption from public consultation because the proposed enhancement & installation is less than 25% of the existing capacity which will be attained through improvement in

efficiency of existing plant and machinery. Moreover, the biomass based power plants are exempted from the requirement of prior EC up to 15 MW capacity. Thus, ToR was approved without the conduction of public hearing. Other components of public consultation have been carried out and advertisement for the public hearing was published in newspapers Rashtriya Sahara and Hindustan dated 29th Dec., 2017. No objection letter is also received from State Pollution Control Board (UEPPCB), Gram Pradhan and villagers regarding no issues related to enhancement & installation activity.

18.0 An amount of 150 Lakhs (2.5 % of Project cost) has been earmarked for Enterprise Social Commitment. The details of ESC proposed are as follows:

S. No.	Enterprise Social Commitment Activities	1st Year (lakhs)	2nd Year (lakhs)	3rd year (lakhs)	4th Year (lakhs)	5th Year (lakhs)	Total (lakhs)
1.	Education	6	6	6	6	6	30
2.	Health	6	6	6	6	6	30
3.	Sanitation program under Swachh Bharat Mission	5	5	5	5	5	25
4.	Infrastructure development	8	8	8	8	8	40
5.	Miscellaneous	5	5	5	5	5	25
Sub Total		30	30	30	30	30	150
Grand Total Rs. 150 lakhs (1.5 Crores) i.e. 2.5% of the total cost of the project							

19.0 The capital cost of the project is Rs. 60 Crores and the capital cost for environmental protection measures is proposed as Rs. 10 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 24 Lakhs. The employment generation from the proposed enhancement & installation is 20 persons directly and 80 persons indirectly. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

S. No.	Description	Capital Cost (in Crores)	Recurring Cost / annum (in Lakhs)
1.	Air Pollution Control	5.0	5.0
2.	Water Pollution Control	2.0	8.0
3.	Noise Pollution Control	1.0	2.0
4.	Environmental Monitoring and Management	1.0	4.0
5.	Others	1.0	5.0
Total		10 Crores	24 lakhs/annum

20.0 Greenbelt has already been developed in 6.9 Ha which is about 33% of the total acquired area. A 5-10 m wide greenbelt, consisting of at least 2 tiers around plant boundary has been developed as greenbelt and green cover as per CPCB/MoEFCC, New Delhi guidelines. Local and native species have been planted with a density of 1500 trees per hectare. Total no. of 8524 trees are present and nurtured in 6.9 hectares.

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

22.0 The EIA /EMP has been prepared by Environment consultant J. M. Environet Pvt. Ltd. Accredited vide NABET/EIA/1619/RA 0069.

23.0 The committee advised to provide detailed for Enterprise Social Commitment plan. Accordingly, the PP submitted the plan which is as follows:

S. No.	Major activities	1st Year	2nd Year	3rd Year	Total Amount
	Education				
1.	Infrastructure related support to schools such as construction of class rooms, anagwadis, teaching aid materials etc.	8.0	8.0	8.0	24.0
2.	Construction of toilets facility in schools	5.0	5.0	5.0	15.0
3.	E-Learning modules in nearby schools	3.0	3.0	3.0	9.0
Sub Total		***16.0***	***16.0***	***16.0***	***48.0***
	Health				
1.	Mobile Ambulance	3.0	3.0	3.0	9.0
2.	Infrastructural support to existing hospitals/ health centre	4.0	4.0	4.0	12.0
Sub Total		**7.0**	**7.0**	**7.0**	**21.0**
	Water & Sanitation programs				
1.	Provision of drinking water through overhead tank & bore well	4.0	4.0	4.0	12.0
2.	Providing closed defecation facilities for nearby villages	3.0	3.0	3.0	9.0
Sub Total		***7.0***	***7.0***	***7.0***	***21.0***
	Infrastructure development				
1.	Construction of soak pits and septic tanks in PHC	4.0	4.0	4.0	12.0
2.	Construction of community centers	4.0	4.0	4.0	12.0
3.	Installation of solar panels in nearby villages	5.0	5.0	5.0	15.0
4.	Installation of hand pumps in nearby villages	4.0	4.0	4.0	12.0
Sub Total		***17.0***	***17.0***	***17.0***	***51.0***
	Environment				
1.	Plantation of trees in nearby villages, Schools, Hospital & Panchayat	3.0	3.0	3.0	9.0
Sub Total		**3.0**	**3.0**	**3.0**	**9.0**
Grand Total		**50.0**	**50.0**	**50.0**	**150.0**

24.0 After detailed deliberations, the committee recommended for EC for the proposed expansion from 140 TPD to 170 TPD and installation of 10 MW biomass based cogeneration power plant under clause 7(ii) subject to following specific condition in addition to the conditions stipulated in earlier EC:

1. The PP shall meet the discharge standards of irrigation

2. PP shall install the solar panels in the vacant area and clarifiers.

3. An amount of Rs 150 Lakhs proposed towards Enterprise Social Commitment (ESC) shall be utilized as capital expenditure in project mode. The project shall be completed

in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

4. Green belt shall be developed in 6.90 Ha equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

5. The Capital cost of Rs. 10.00 Crores and annual recurring cost of Rs. 24 lakhs per annum towards the environmental protection measures shall be provided for separately. The funds so provided shall not be diverted for any other purpose.

6. Kitchen waste shall be composted or converted to biogas for further use.

28.23 Expansion of Ductile Iron Pipe Plant (2,00,000 TPA To 5,50,000 TPA) by M/s Rashmi Metaliks Limited, located at Village Gokulpur, Post Office Shyamraipur, District Paschmi Mednipur, West Bengal [Online proposal No. IA/WB/IND/60075/2016; MoEFCC File No. J-11011/237/2016-IA.II(I)] – Environmental Clearance.

1.0 **M/s Rashmi Metaliks Limited** made online application vide proposal no. **IA/WB/IND/60075/2016**, dated **11th January 2018** along with copies of EIA/EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous), under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level as Category "A".

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

2.0 The proposed expansion of Ductile Iron Pipe Plant (2,00,000 TPA To 5,50,000 TPA) of **M/s Rashmi Metaliks Limited**, is located at Village Gokulpur, Post Office Shyamraipur, District Paschmi Mednipur, West Bengal was initially received in the Ministry on 31st October, 2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 13th meeting held on 24th November, 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 31st January, 2017 vide Ref. File No J-11011/237/2016-IA.II (I).

3.0 The project of **M/s Rashmi Metaliks Limited**, is located at Village Gokulpur, Post Office Shyamraipur, District Paschim Mednipur, West Bengal is for expansion of its existing Ductile Iron Pipe Plant from 0.2 to 0.55 million tons per annum (million TPA). The existing project was accorded environmental clearance vide Memo No. EN/2567/T-II-1/047/2009 dated 9-10-2009 from Department of Environment, West Bengal & Memo No.962/ EN/T-II-1/047/2009 from SEIAA, West Bengal dated 17.04.2015. The Status of compliance of earlier EC was obtained from Regional Office, Bhubaneshwar vide Lr. No. 110-238/EPE/118 dated 11th January, 2018. The regional officer reported certain non-compliances such as irregular submission of six monthly reports; safety measures not up to the mark; storage of raw material in open space, poor housekeeping; non-paving of internal roads; no full-fledged ETP; non-submission of expenditure on CSR details; etc. The proposed expansion of Ductile Iron Pipe Plant is as below:

Sr. No	Plant	Existing (TPA)	Proposed (TPA)	Total (TPA)

1	Ductile Iron Pipe	2,00,000	3,50,000	5,50,000

4.0 The total land of M/s Rashmi Metaliks Limited is 58.27 Hectares (144 acres). The existing Ductile Iron Pipe Plant is located on 6.07 Hectares (15 acres) of land and expansion of DI Pipe Plant will take place within the RML premises for which 4.05 Hectares (10 acres) of land will be needed within the 58.27 Hectares of land. No additional land is required for the proposed expansion project. The land is industrial in nature. No forest land involved. The entire land has been acquired for the project. The river Kangsavati passes at a distance of 4.5 km from the project site. Modification / diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lies between Latitude 22°21‘28.57"N to 22°22‘0.88"N & Longitude - 87°17‘12.15"E to 87°17‘55.48"E in Survey of India topo sheet No. 73 N/7 at an elevation of 33.5 m AMSL. The depth to water as measured in the open wells is between 11 and 12 feet below the land surface. The water occurring in deeper zones is under pressure and is reported usually to rise to within 25 to 30 feet below the land surface. The total thickness of the aquifer in the study area varies from 3.1 to 17.1 m.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The authenticated list of flora and fauna provided through the Chapter-3.0, Section-3.12 reporting presence of flora and fauna in the study area.

7.0 Ductile Irons Pipes manufacturing process inter alia include Molten Hot Metal preparation and Chemistry correction; Magnesium treatment; Centrifugal Casting; Core Making; Mold Maintenance; Heat Treatment by Annealing Furnace; Zinc Coating; Hydraulic Pressure Testing; Cement Motor Lining; Bitumen Coating; and Finishing. A ductile iron pipe is produced with centrifugal casting method. The molten ductile iron is poured into a rapidly spinning water-cooled mould and centrifugal force results in an even spread of iron around the circumference.

8.0 The details of Raw materials required along with estimated quantity, sourced from and mode of transport is as given below:

Sr. No.	Name of the Raw Materials	Source (TPA)	Mode of Transportation	Estimated Quantity (TPA)
1	Pig Iron/ Hot Metal	Rashmi Metaliks Ltd., Kharagpur; Orissa Metaliks Pvt. Ltd., Kharagpur	Through Crane/ conveying System	3,75,000
2	Mold Powder	Local Market	Road	949
3	Refractory (WH-A+K)	Local Market	Road	2065
4	Ferro Silicon	Rashmi Cement Limited, Jhargram	Road	1050
5	Inoculants	Local Market	Road	336
6	Magnesium	Local Market	Road	595
7	Slag Coagulant	Local Market	Road	485
8	Zinc	Local Market	Road	662

9	Runner Coat	Local Market	Road	1789
10	Bitumen/ Epoxy Paint	WRAS* Approved Vendor	Rail/ Road	1472 KL

9.0 The solid waste generated along with existing and proposed quantity and disposal scheme as follows:

Sl	Particulars	Existing Quantity in TPA	Proposed Quantity in TPA	Total Quantity in TPA	Disposal Scheme
1	Core Sand & Slag	5429	10500	15929	Used for land filling
2	Cement Slurry	572	7324	7896	Sold to Brick Manufacturer
3	From APC Devices –Mg & Zn Dust	83	117	200	Used in sinter plant
4	Scrap	Variable	-	-	Used in the process

10.0 The daily make up water requirement for the entire existing plant is 1065 m^3/day and additional water requirement for the proposed expansion project is about 830 m^3/day. Thus, the total water requirement will be 1895 m^3/day. The raw water will be sourced from Kangsabati River and bore wells. The permission for drawl of groundwater / surface water is obtained from concerned authority.

11.0 The existing power requirement of the entire project is 30 MW and an additional power of 10 MW will be required for its DIP expansion project. Power will be sourced from WBSEDCL supply system & Captive Power Plant.

12.0 Baseline Environmental Studies were conducted during summer season i.e. from March, 2017 to May, 2017. Ambient air quality monitoring has been carried out at 8 locations and the data submitted indicated: PM10 (70.8 μg/m^3 to μg/m^3 to 82.8 μg/m^3 μg/m^3), $PM_{2.5}$ (29.8 μg/m^3 to 32.2 μg/m^3), SO2 (7.5 to 14.6 μg/m^3) and NOx (16.4 to 27.0 μg/m^3). The results of the modeling study indicated that the maximum increase of GLC for the proposed project is 4.04 μg/m^3 (NE direction) with respect to PM.

13.0 Ground water quality has been monitored in 9 locations in the study area and analyzed. pH: 6.9 to7.6, Total Hardness: 192 to 219 mg/l, Chlorides: 65 to 90 mg/l, Fluoride: 0.28 to 0.49 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 10 locations – 2 Kangsabati river water samples and 8 pond water samples. For Kangsabati River water, pH: 7.1 to 7.3; DO: 6.9 to 7.1 mg/l and BOD: 3 mg/l. For 8 pond water samples, pH: 6.9 to 7.8; DO: 5.9 to 6.6 mg/l and BOD: 4 to 8 mg/l.

14.0 Noise levels are in the range of 54.7 – 71.6 dB(A) for day time and 44.1 – 59.2 dB(A) for night time.

15.0 No R&R is involved.

16.0 It has been reported that a total of 17941 TPA of waste will be generated due to the project, out of which 10500 will be used for land filling, 7324 TPA will be sold to the brick manufacturar, 117 TPA will be used in Sinter Plant. The proposed DIP project shall be installed within the existing plant occupying total land area of 58.27 hectares. 27% of the total plant area is covered under Green Belt. Remaining 6% area will be covered with more plantation to attenuate the noise levels and trap the dust generated due to the project development activities.

17.0 Consent to establish is obtained from West Bengal State Pollution Control Board vide memo no. 56-2N-28/2009 (E) dated 19-01-2016 and Consent to operate is obtained from West Bengal State Pollution Control Board vide memo no. 5825-3888/WBPCB (HRO)-K/2014 (Unit-I) dated 16/03/2017 is valid up to 31-3-2022.

18.0 The Public hearing of the project was held on 29th August 2017 at Mahasakli Manasangha, Salkui, P.O. Malkalpur) near B.D.O. office), Kharagpur-1, Dist. Paschim Mednipur, West Bengal under the chairmanship of Mr. S.K Meena, I.A.S, Additional District Magistrate (G) & DLLRO, Paschim Medinipur for production of 0.55 million TPA of ductile iron pipes. The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Sl. No	**Issues raised during PH**	**Response by project proponent (After PH)**	**Action Plan proposed**	**Budgetary provision as on 09-12-2017**
1.	To give the Mouza detail of the proposed project.	M/s. Rashmi Metaliks limited stated the audience that the project location is at Khidirpur Mouza, Village- Gokulpur, Shyamraipur.	Not Applicable	Nil
2.	To develop nearby village, development of village/ local road & improve road nearby existing Rashmi Metaliks plant, contribute to local infrastructure development by providing playing & health facilities. He also requested them to give priority to local people for employment in their proposed project. He requested the project proponent to give assurance/commitments regarding the same.	RML stated that road nearby existing plant is being repaired periodically and in future more focus will be given to develop the local roads. RML in past given priority to the local people for employment opportunity based on their qualification for their existing plants / units.	Proper emphasis will be laid on the development of the local roads. The company will develop facilities for primary health in the surrounding villages. The existing practice will be adopted. The company Will give preference to the local people for the employment in its proposed project, based on their qualification.	Rs 160 lacs have been allocated for the construction of road and Rs. 20 lacs are allocated for developing primary health facilities in the surrounding villages as per Enterprise Social Commitment, in connection with the proposed project. Besides, Rs. 15 lacs are earmarked against training to unemployed educated local youth for skill development.
3.	To develop nearby village, improve local road conditions & develop a service road along the NH-6 Bombay Road. He also requested them to give priority to local people for employment in their proposed project as per their skill. Extensive greenery needed to be developed.	Already stated above regarding the development of the local village roads. However, it will be difficult for the company to construct new approach road nearby existing plant along with NH – 6, because the land belongs to NHAI and NHAI has proposal for increasing the lane of existing NH-6 Highway.	Will give employment priority to the local people based on their academic qualification. Action has already been taken by management of RML for developing Green Belt by undertaking extensive plantation programme. Besides, the company has also	Rs 160 lacs have been allocated for the construction of roads in the villages as a part of ESC. Rs. 40 lacs have been allocated as CAPEX and Rs. 4 lacs as OPEX for the greenbelt development inside the plant area for environmental

		Greenbelt development inside the plant premises is a regular activity.	planned for the development of parks and tree plantation in the nearby areas.	protection measures for the project. Besides, Rs. 20 lacs are allocated for the development of park and tree plantation in the nearby areas as per ESC.
4.	To give job to the land loser and develop nearby school & village under their corporate Social responsibility (CSR) Scheme.	The proposed expansion will take place within the existing plant premises, so no additional land is be required. The local people will be given employment opportunity based on their qualification. The company has been providing necessary help to the nearby school & village through CSR program. The same will continue in future also.	The company has identified certain areas, to be considered for imparting the CSR activities in the context of the local scenario of the area.	ESC expenditure incurred for Rashmi Group during 2016-17 is Rs168 lacs. For the proposed project,2.5 % of the project cost i.e., Rupees 413lacsshall be utilized over a period of 5 years against Enterprise Social Commitment. Rs. 21 lacs have been allocated for the financial support to the local school.
5.	To operate their pollution control device for the proposed project efficiently and continuously during process activities, emphasis on improvement of the local road condition. He however emphasized on the need to control pollution.	The company has already installed the necessary Pollution Control devices in its existing operational plant. In the proposed project also, various control devices shall be installed for the control of pollutants, to be generated.	For the proposed plant, adequate control measures like installation of bag filters, dust suppression system& to keep the emission within the permissible limit. OCEMS (online Continuous Emission Monitoring System) will be installed and will be connected to CPCB server as per CPCB guideline to keep track of real time emission. The plant will be designed as zero liquid discharge plant.	Adequate fund i.e., CAPEX (RS. 7 crores) and OPEX (Rs 70 Lacs) has been allocated for environmental mitigation measures, out of which 2.7 crores are earmarked as capital expense on air pollution control systems.
6.	Issues related to the regular working of existing air pollution control system, red water coming out of the existing operational plant, and also raised question on Public hearing announcement procedure.	There is efficient operation of the respective Air Pollution Control devices in the existing plant, which contain the resultant emission levels of various pollutants within the permissible limit.	To control red water discharge, the company management engaged experts & technical persons and after detail study, it has been finalized	Expenditure already incurred by management of Rashmi Metaliks Limited in civil works for construction of storm water

	No proper publicity was done.	The plant is designed as zero liquid discharge plant. However, during monsoon due to heavy rain, storm water is discharged outside the plant. Announcement for public hearing was made with mention of venue and date.The same has been captured through various photographs.	that a storm water reservoir will be made where the excess water will be collected, which will be used for dust suppression and controlling fugitive emission. The initial step for construction of storm water reservoir has already been taken by the management.	reservoir to arrest effluent discharge is rupees 5.6 Lacs..
7.	To give the Mouza detail of the proposed project. He also stated that within 10 Km area habitation is there, but project proponent is misguiding the local people by stating no habitation is there.	M/s. Rashmi Metaliks limited stated to the audience that the project location is at Khidirpur Mouza, Village-Gokulpur, P.O-Shyamraipur. The proposed expansion project will be installed within the existing plant premises. So, no additional land will be required.	Not Applicable.	Nil
8.	Strongly objected to proposed project. Polluted water is being discharged from the existing unit creating pollution and damaging crops. Local people are being forced to give up their land. No CSR work is being done. The upcoming project will come within 500 m. of densely populated area. Green belt is being totally destroyed. The area is being devastated due to the operation of the industry. Deputation has placed before the administrative authorities. The Air pollution control device is not being operated. Effluent (red water) is discharged from the existing operational plant, dust Emission problem from the existing unit, frequent accidents problem nearby plant, land procuring procedure, C.S.R fund utilization, safety and welfare of the workers of	The local land owners sell their land for industrialization after various discussions and proper negotiation only. The upcoming project will be set up within the existing premises so the local people will not be get affected. RML has been undertaking various CSR activities since long and ensure the same will continue in future. The plantation is done on regular basis. The existing APC devices are efficiently operated to contain the pollutants' concentrations withinthe permissible levels, which is also cross checked by West Bengal Pollution Control Board. The water comes out from the plant due to over flooding of heavy rain water in monsoon season. The company management engaged experts to overcome this problem.	To control red water discharge, management engaged experts & technical persons and after detail study it has been finalized that a storm water reservoir will be made where the excess water will be collected, which will be used for dust suppression and controlling fugitive emission. The initial step for construction of storm water reservoir has already been taken by the management.	ESC expenditure incurred for Rashmi Group during 2016-17 is 168 lacs. For the proposed project, rupees 413 lacs are earmarked, which will be utilized in 5 years. Besides, adequate fund i.e., CAPEX (RS. 7 crores) and OPEX (Rs 70 Lacs) has been allocated for environmental mitigation measures. Expenditure already incurred by management of Rashmi Metaliks Limited in civil works for construction of storm water pond to arrest effluent discharge is rupees 5.6 Lacs.

	the unit and not providing jobs to the local people. He also stated that within 10 Km area habitation is there, but project proponent is misguiding by stating no habitation is there near by the plant area.	Land is procured for Expansion of Industry to generate Employment, develop the socio economic of the area. The industry was commissioned in the year 2007 at Gokulpur, Shyamraipur, district PaschimMednipur. After setting up of the industry, the socio economic condition of this area has very much improved.		
9.	Happy with the past C.S.R activities carried out by project proponent like organizing Blood Donation camps, Eye Checkup Camps, providing ambulance services to the accident victims, supporting/funding nearby school. While addressing the above said statement he said that he came to know about this Public hearing after getting leaflet that was distributed by project proponent. In addition to this, he said that the huge direct/indirect job opportunities is being created in the existing operational plant and mentioned that both direct and indirect employment will be generated due to the proposed project.	Stated the actual CSR activities and motive of RML.	Not Applicable	Nil

19.0 The company proposes to invest on the Enterprise Social Commitment (ESC) activities. For this purpose, the company proposes to 4.13 Crores, which is 2.5% of the total project cost (Rs. 165 Crores). This fund shall be utilized over a period of 7 years. Company has identified certain areas, to be considered for implementing the ESC activities in the context of the local scenario of the area:

PROPOSED ESC ACTIVITIES	INVESTMENT (IN LACS)							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
Construction of W/C/Toilet (2) each for 6 schools. (@ Rs. 7.00 Lakhs per set of 2 Toilets)	7	7	7	7	7	7	-	42.0
Drinking Water Infrastructure (Tubewell in nearby villages – 10 nos. @ Rs. 1.5 Lakhs)	3	3	3	1.5	1.5	1.5	1.5	15.0

Construction of metal consolidation road (10 km) in villages ((@Rs. 16 Lakhs per km)	25	25	24	24	24	19	19	160.0
Development of Community Hall – Total 4 nos. (@ Rs. 10 Lakhs per Hall)	7	7	7	5	5	4.5	4.5	40.0
Local Village Pond upgradation - 3 ponds (@ Rs. 5 Lakhs per Pond)	3	3	2	2	2	2	1	15.0
Street Lighting (solar) provision at suitable public places – 50 nos. (@ Rs. 0.5 Lakhs per Solar Light)	4	4	4	4	3	3	3	25.0
Financial Support to the Local School for extension of building / class room	4	4	4	3	2	2	2	21.0
Construction of charitable Dispensary	3	2	1	1	1	1	1	10.0
Primary health for the surrounding villages	4	3	3	3	3	2	2	20.0
Financial Support to Local Temple	6	6	4	4	4	3	3	30.0
Training to unemployed educated local youth for skill development.	3	2	2	2	2	2	2	15.0
Developments of parks, plantation of trees in the nearby area.	4	4	3	3	2	2	2	20.0
TOTAL								413

20.0 The capital cost of the project is Rs 165 Crores and the capital cost for environmental protection measures is proposed as Rs 700 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 70 Lakhs. The employment generation from the proposed project / expansion is 600 (regular), 500 (on contractual) basis. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

Sl. No.	Description	Capital cost, Rs. Lakhs	Recurring cost per annum, Rs. Lakhs
1	Air Pollution Control Systems	270	27
2	Water conservation & Pollution Control	120	12
3	Solid Waste Management System	70	7
4	Green belt development	40	4
5	Noise Reduction Systems	80	8
6	Occupational Health Management	70	7
7	Risk Mitigation & Safety Plan	30	3
8	Environmental Management Department	20	2
TOTAL		700	70

21.0 The proposed DIP project shall be installed within the existing plant occupying total land area of 58.27 hectares. 27% of the total plant area is covered under Green Belt. Remaining 6% area will be covered with more plantation.

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

23.0 After deliberations, the committee observed that non-compliances reported by Regional Officer was not closed; Transfer of hot metal from Orissa Metaliks Limited (Group Company of Rashmi Metaliks) is proposed which involve Environmental and safety Issues; several non-compliances of ToRs prescribed for EIA report.

24.0 EIA/EMP prepared by EIA Consultant: M/s Envirotech East Private Limited, Kolkata vide Accreditation No.: NABET/EIA/1011/010

25.0 Therefore, the Committee sought revised EIA report incorporating following:

1. Closure report of all non-compliances of earlier EC conditions reported by RO, MoEFCC

2. Revised table of issues raised during PH, commitment of PP, time bound action plan along with fund provision.

3. Revised ESC programme based on the issues emerged during PH and social impact assessment. The activity shall be for asset creation and capacity building in CAPEX mode.

4. Revised Corporate Environmental Policy addressing the standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions to the board of directors directly; hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions

5. EIA report shall be revised as per the generic structure given in EIA Notification 2006 and compliance to all the ToRs.

6. Detailed Hazard Identification and Risk Assessment (HIRA) and project specific/site specific HIRA;

7. Based on HIRA, the detailed DMP inter alia including EP&RP for proposed hot metal transport from the group company.

8. In EIA report, Criteria for selection of sampling location, interpretation of baseline data and revised socio-economic and ecology and biodiversity report shall be furnished.

9. Revised air quality modelling for normal, abnormal and emergency situations shall be carried out

28.24 Expansion of Sponge Iron Plant (6,00,000 TPA to 13,20,000); Ferro Alloy Plant (72,000 TPA to 1,44,000) with Briquette plant and addition of New Steel Melting Shop-(9,00,000 TPA) with Slag crushing unit, Hot Rolling Mill- (5,50,000 TPA, Cold Rolling Mill with Pickling line & Galvanizing line- (3,00,000 TPA), Lime Dolime Plant- (200 TPD), Oxygen Plant- (200 TPD) CPP- [45 MW to 159 MW (50 MW Coal &Dolochar Mix based and 109 WHRB] of M/s Rashmi Cement Limited at Mouja-Jitusole (J.L No. – 702 & 703), Junglekhas (J.L No. – 731) and Baghmundi (J.L No. – 928),Village Jitusole, PS-

Jhargram, District- Paschim Midnapore, West Bengal. - [Proposal No IA/WB/IND/69919/2017, File No. J-11011/604/2008-IA.II(I)] – Terms of Reference Regarding – Further consideration based on ADS reply.

1.0 The proponent has made online application vide proposal no**. IA/WB/IND/69919/2017** dated **27th September 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" EIA Notification, 2006 and the proposal is appraised at Central level.

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

2.0 M/s Rashmi Cement Limited proposes to go for expansion of existing manufacturing unit for Sponge Iron Plant with Ferro Alloy Plant and Power Plant. It is proposed to set up the plant for expansion of Sponge Iron Plant (6,00,000 TPA to 13,20,000); Ferro Alloy Plant (72,000 TPA to 1,44,000) with Briquette plant and addition of New Steel Melting Shop-(9,00,000 TPA) with Slag crushing unit, Hot Rolling Mill- (5,50,000 TPA; Cold Rolling Mill with Pickling line & Galvanizing line- (3,00,000 TPA); Lime Dolime Plant- (200 TPD); Oxygen Plant- (200 TPD); CPP- [45 MW to 159 MW (50 MW Coal &Dolochar Mix based and 109 WHRB].

3.0 The existing project was accorded environmental clearance vide File No-. J-11011/604/2008.I A II (I) dated 12.02.2009, got validity extension for next three year till 11th-Feb-2019 and also amendment in EC (inclusion of ferrochrome with ferro alloy within EC approved capacity) vide File No-J-11011/604/2008.I A II (I) dated 07.07.2017. Consent to Operate is accorded by West Bengal State Pollution Control Board vide Co No-102823 issued vide memo No-5683-hl-co-5/10/0399 dated 14-12-2016 validity of CTO is up to 31-Dec-2021. The detail about EC obtained vide File No- J-11011/604/2008.I A II (I) dated 12.02.2009 & 07.07.2017 is as

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

***Note-** We submitted letter to MoEF&CC intimating the proposed changes in configuration of the proposed DRI (sponge plant) to 1 x 600 TPD + 1 x 100 TPD DRI (Sponge Plant) instead of 4 x 100 TPD + 1 x 350 TPD. The sponge iron production is within the EC permission and there will be no increase in pollution load. The company is permitted to do the proposed changes after intimating MOEF&CC under clause 7 (ii) (b) of EIA Notification (amended in November 2016)

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

5.0 The earlier EC of M/s Rashmi Cement Limited was awarded on 48.6 hectare land, out of which 0 ha is an agricultural land, grazing land and Government Land. No forestland is involved. The complete 48.6 hectare land is in possession by M/s Rashmi Cement Limited.

The existing operational plant is located on 17.4 hectare of land and proposed expansion will take place within the RCL premises for which 12.2 hectare of land will be needed within the 48.6 hectare of land. Out of 48.6 hectare already 16.02 hectare (33%) of land is earmarked for green belt development. No additional land is required for the proposed expansion project.

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

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

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

Sr. No	**Plant**	**Existing (TPA)**		**Proposed**		**Total Production Capacity**
		No. of unit	**Production Capacity**	**No. of unit**	**Production Capacity**	
1	DRI (Sponge Plant)	11 x 100 + 1 x 350 + 1 x 600 TPD	6,00,000	4 x 600 TPD	7,20,000 TPA	**13,20,000 TPA**
2	Ferro Alloy Plant (FeMn, SiMn, FeSi / FeCr) with FeCr Briquette plant	6 x 9 MVA	72,000	6 x 9 MVA	72,000 TPA	**1,44,000 TPA**
3	Steel Melting Shop (SMS) with Slag Crushing unit	----	-----	10 x 20 T I.F with LRF, AOD & CCM	9,00,000 TPA	**9,00,000 TPA**
4	Hot Rolling Mill **Product:** (H.R. Coils/ TMT Bar, Wire Rod & Wire/ Structural long product like- Angel, Channel & Beam)	----	-----	----	5,50,000 TPA	**5,50,000 TPA**
5	Cold Rolling Mill/ Wire drawing with Pickling Line & Continuous Galvanizing Line **Product:** (Galvanized Sheet/ Plate /Coils, Flat Sheet/ Checkered Sheet, Strip & Nail)	----	-----	---	3,00,000 TPA	**3,00,000 TPA**
6	Lime Dolime Plant	----	-----	01	200 TPD	**200 TPD**
7	Oxygen Plant	----	-----	01	200 TPD	**200 TPD**
8	Captive Power Plant	WHRB Based	**45 MW WHRB** (28 MW with	64 MW WHRB Based + 50	114 MW	**159 MW**

			existing DRI and 17 MW will be added to new DRI Plant)	MW CFBC)		

9.0 The electricity load of 219 MW for proposed expansion project will be procured from proposed 114 MW Captive Power Plant and the remaining 105 MW will be drawn from WDSEDCL/Open Access. Company has also proposed to install 10 Number DG Set of 720 KVA. At the time of Construction phase power requirement will be met from current operational Captive power plant of Rashmi Cement limited.

10.0 Raw materials requirement for proposed and existing project are Iron Ore, Bentonite, Coaking Coal, Dolomite, Quartzite, Lime, Magnesium Ore, Chromium Ore, etc. Fuel consumption will be mainly Electricity & Diesel (If required).The details are as :

Sr. No.	Name of the Raw Materials	Quantity (TPA)			Source	Mode of Transportation
		Existing	Proposed	Total		
1	Iron ore lump	2,70,000	3,24,000	**5,94,000**	Applied for captive iron ore mines Alternate source: Purchased from Barbil-Joda, Orissa	Train
2	Iron ore Pellet	6,30,000	7,56,000	**13,86,000**	From other unit of group	By Road
3	Non-coking	7,20,000	11,30,000	**18,50,000**	CCL, MCL & Imported Coal	Ship/Train
4	Coke	46,800	46,800	**93,600**	Imported	Ship/Train
5	Dolomite	32160	38160	**70,320**	From Birmitrapur, Orissa /	Train
6	Limestone	--	120000	**120000**	From Birmitrapur, Orissa / Bilaspur, Raipur CG / Katni MP	Train
7	Manganese ore	1,87,000	1,87,000	**3,74,000**	Captive mines in Balaghat,	Train/By Road
8	Chromium Ore	1,58,000	1,58,000	**3,16,000**	Orissa, Jharkhand etc.	Train/By Road
9	Quartzite	18,000	18,000	**36,000**	From Belpahar Orissa / /	Train

11.0 Water Consumption for the proposed expansion project will be 6456 KLD (less water requirement because of use of Air type cooling system for Power Plant) and waste water generation will be 82 KLD. Rashmi Cement Limited has water withdrawal permission for 2060 KLD from SWID and application for withdrawing additional required water will/is made to SWID, West Bengal. 30 KLD Domestic waste water will be treated in Septic Tank followed by Soak Pit and 52 KLD industrial waste water generated will be treated and reused in the process and for green belt development and dust depression after treatment.

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

13.0 The proposal was considered in the 22nd meeting of EAC (Industry-I) held during 11th – 13th September 2017. After detailed deliberation, the committee observed that the company has not engaged any EIA consultant as required under the clause 13 of EIA Notification. The committee opined that EIA Coordinator shall present before the committee for understanding the environmental sensitivity of the project location, environmental issues of the proposal so

as to address in the EIA/EMP. The committee also advised to present the senior officials who can take the decisions from the company during the appraisal.

14.0 The proposal was further considered in the 24th meeting of EAC (Industry-I) held during 13th – 15th November 2017 and the project proponent has made detailed presentation along with EIA Consultant M/s Grass Root Research & Creations Private limited. After detailed deliberations, the committee observed that details of processes, products, raw materials to be used, potential impacts on the environment and proposed mitigation measures which are required to prescribe the specific ToRs were missing in the PFR submitted by the PP and not able to explain to the committee. Therefore, the committee advised to submit revised PFR *inter alia* include details of processes, products, raw materials to be used, potential impacts on the environment and proposed mitigation measures to meet the standards.

15.0 The proposal was again considered in the 27th meeting of EAC (Industry-I) held during 3rd to 5th January 2018. After detailed deliberations, the committee observed that the layout plan presented was not matching with the layout plan approved in the earlier EC; the configuration of the proposed production facilities are not environmentally friendly in terms of pollution load, energy conservation and safety; the proposed layout is very congested for the proposed capacities. Therefore, the committee suggested to re-submit the proposed layout plan matching with the layout plan of existing EC; relook into the configuration of the proposed facilities from the environmental perspective, decongestion and safety. Therefore, the proposal is deferred till the information is submitted by PP.

16.0 Keeping in view the observation of Expert Appraisal Committee, the project configuration was revised. The new project configuration is Expansion of Sponge Iron Plant (6,00,000 TPA to 11,25,000); Ferro Alloy Plant (72,000 TPA to 96,000) with Briquette plant and addition of New Steel Melting Shop- (5,70,000 TPA) with Slag crushing unit, Hot Rolling Mill- (2,50,000 TPA; Cold Rolling Mill with Pickling line & Galvanizing line- (3,00,000 TPA); CPP- [45 MW to 113 MW (25 MW Coal & Dolochar Mix based and 88 WHRB).

17.0 Total project cost for new project configuration is approx **510 Crores** rupees. Proposed employment generation from proposed project will be **1000** direct employment and **2000** indirect employment.

18.0 The targeted production capacity of the proposed proposal is Sponge Iron Plant (6,00,000 TPA to 11,25,000); Ferro Alloy Plant (72,000 TPA to 96,000) with Briquette plant and addition of New Steel Melting Shop- (5,70,000 TPA) with Slag crushing unit, Hot Rolling Mill- (2,50,000 TPA; Cold Rolling Mill with Pickling line & Galvanizing line- (3,00,000 TPA); CPP- [45 MW to 113 MW (25 MW Coal & Dolochar Mix based and 88 WHRB). The Iron ore for the plant would be procured from **Barbil-Joda, Orissa (from our current mines owner like, Rungata Mines, Sirajuddin Mines & TP Sahoo Mines**), and Coal would be procured from **E-Auction or Imported**. The ore transportation will be done through **Rail/ Road**. The proposed capacity for different products for new site area as below:

EC Awarded Dated 12- Feb-2009 & 07-July-2017; Validity-11-Feb-2019								**Proposed Proposal**						**Final Configuration (Total Capacity)**		
As per EC Detail				**Status of Implementation as per EC**		**Yet to be Implement as per EC**	**Under Clause 7 (ii) (b) Cfg. change**	**Surrender unit Detail**		**Proposed Unit Detail**						
Plant	***Config.***	***Cap.***	***Prod.***	***Config.***	***Remark***	***Cfg.***	***Config***	***Plant***	***Config.***	***Plant***	***Config.***	***Cap.***	***Product***	***Plant***	***Config.***	***Capacity***

DRI	14 x 100 TPD + 2 x 350 TPD	600000 TPA	Sponge	10 x 100 TPD + 1 x 350 TPD	Oper.	4 x 100 TPD + 1 x 350 TPD (750 TPD Total)	1 x 600 TPD + 1 x 100 TPD (700 TPD)	DRI	1 x 100 TPD	DRI	3 x 600 TPD	540000 TPA	Sponge Iron	DRI	10 x 100 + 1 x 350 + 4 x 600 TPD	**1125000 TPA**
SAF (Ferro Alloy Plant)	6 x 9 MVA	72000 TPA	Fe Mn, FeSi, SiMn & FeCr	2 x 9 MVA	Oper.	2 x 9 MVA	****	SAF (Ferro Alloy Plant)	2 x 9 MVA	SAF (Ferro Alloy Plant) with FeCr Briquette Plant	4 x 9 MVA	48000 TPA	FeMn, FeSi, SiMn & FeCr	SAF(Ferro Alloy Plant) with FeCr Briquette Plant	8 x 9 MVA	**96000 TPA**
				2 x 9 MVA	Under Constr.					SMS with Slag Crushing	8 x 20 T I.F. with L.R.F, AOD & CCM	570000 TPA	Billets & Slab	SMS with Slag Crushing	8 x 20 T I.F. with L.R.F, AOD & CCM	**570000 TPA**
Power Plant	25 MW	25 MW	Power	28 MW (WHRB)	Oper.	17 MW (WHRB)	****	Power Plant	02 MW (WHRB)	Hot Rolling Mill	****	250000 TPA	H.R. Coils, Plates (Checkered/Flat)/ TMT Bar, Wire Rod & Wire/ Structural long product like- Angel, Channel & Beam	Hot Rolling Mill	****	**250000 TPA**
										Cold Rolling Mill/ Wire Drawing with Pickling Line & Continuous Galvanizing Line	****	300000 TPA	Galvanized Sheet/ Plate / Coils, Flat Sheet/ Checkered Sheet, Strip & Nail	Cold Rolling Mill/ Wire Drawing with Pickling Line & Continuous Galvanizing Line	****	**300000 TPA**
										Captive Power Plant	45 MW WHRB based + 1 x 25 MW CFBC	70 MW	Power	Captive Power Plant	88 MW WHRB based + 1 x 25 MW CFBC	**113 MW**

19.0 The additional electricity load of 145 MW for proposed expansion project will be procured from proposed 70 MW Captive Power Plant and the remaining 75 MW will be drawn from WDSEDCL/Open Access. Company has also proposed to install 10 Number DG Set of 720 KVA. At the time of Construction phase power requirement will be met from existing Captive power plant (43 MW) of Rashmi Cement limited.

20.0 Raw materials requirement for proposed and existing project are Iron Ore, Bentonite, Coaking Coal, Dolomite, Quartzite, Lime, Magnesium Ore, Chromium Ore, etc. The details are as :

Sr. No.	Name of the Raw Materials	Quantity (TPA)			Source	Mode of Transportation
		Existing (After Surrendering Some Unit)	Proposed	Total		
1	Iron ore lump	2,63,250	2,43,000	**5,06,250**	Purchased from Barbil-Joda, Orissa	Train
2	Iron ore Pellet	6,14,250	5,67,000	**11,81,250**	From other unit of group company	By Road
3	Non-coking coal	7,14,000	7,21,200	**14,35,200**	CCL, MCL & Imported Coal	Ship/Train
4	Coke	31,200	31,200	**62,400**	Imported	Ship/Train
5	Dolomite	29,250	28,440	**57,690**	From Birmitrapur, Orissa / Bilaspur, CG	Train
6	Limestone	--	40,279	**40,279**	From Birmitrapur, Orissa / Bilaspur, Raipur CG / Katni, MP	Train
7	Manganese ore	1,24,800	1,24,800	**2,49,600**	Captive mines in Balaghat, MP	Train/By Road
8	Chromium Ore	1,05,600	1,05,600	**2,11,200**	Orissa, Jharkhand etc.	Train/By Road
9	Quartzite	12,000	12,000	**24,000**	From Belpahar Orissa / Bilaspur, Raipur CG	Train

21.0 Water Consumption for the proposed modified expansion project will be 3792 KLD (less water requirement because of use of Air type cooling system for Power Plant) and waste water generation will be 24 KLD. Rashmi Cement Limited has water withdrawal permission for 2060 KLD from SWID and application for withdrawing additional required water will/is made to SWID, West Bengal. 8 KLD Domestic waste water will be treated in Septic Tank followed by Soak Pit and 16 KLD industrial waste water generated will be treated and reused in the process and for green belt development and dust depression after treatment.

22.0 After detailed deliberations, the committee observed that the revised plant layout along with optimized configuration for decongestion is better than previous proposal.

Recommendations of the Committee:

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

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

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

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

4. Certificate of compliance of earlier EC from the Regional office of MoEFCC shall be submitted along with EIA/EMP.

5. The location of staff quarters shall be relocated considering air pollution from the raw material stock yard and plant premises.

6. Detailed Hazard Identification and Risk Assessment (HIRA) and project specific/site specific HIRA considering confined spaces within the plant and its layout.

7. Air quality modelling for normal, abnormal and emergency situations shall be carried out

28.25 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/71871/2017, MoEF&CC File No. J-11011/64/2013-IA-II(I)] – Amendment in EC.

1.0 M/s **Honda Cars India Limited** made online application vide proposal No. **IA/RJ/IND/71871/2017** dated 27th December 2017 seeking amendment in the conditions prescribed in the environmental clearance vide File No. J-11011/64/2013-IA-II(I) issued on 11th August 2017.

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

2.0 M/S Honda Cars India Limited has proposed to enhancement its Aluminum melting capacity from 20,000TPA to 30,000TPA, enhance Propane storage from 50 MT to 100MTand power back up from 4.9 MW to 37.3MW at its existing cars manufacturing plant located at plot no SPL-1Tapukara industrial AREA Tehsil Tijara, District Alwar Rajasthan. The environmental clearance was obtained vide File No. J-11011/64/2013-IA-II(I) issued on 11th August 2017.

3.0 It was requested for following amendments in the said EC:

S.No	Para of EC issued by MoEF &CC	Details as per the EC	To be revised/ read as	Justification/ Reasons
1	Specific condition: Point V	The Project Proponent should install 24x7 air monitoring devices to monitor air emission, as provided by CPCB and submit report to Ministry and its Regional office.	Exempt from the condition of installing 24x7 air monitoring devices, as provided by CPCB	As we are not cover in highly Polluting industries as defined by CPCB, and we use clean fuel. Hence proposed condition is not applicable to us

2	Specific condition: Point XII	All the recommendation made in the charter on corporate responsibility for Environmental Protection (CREP) for the Aluminum Sector shall be strictly implemented.	Exemption from CREP guidelines	As per process: In Casting process melting of Aluminum ingots is done in melting furnace. Molten metal is injected into the mold which contains hollow cavity of desired shape and then allowed to solidify. The solidified part called casting is ejected from the mold to complete the process. As we have only the casting process Hence CREP for the Aluminum Sector shall not applicable to us
3	Specific condition: Point XIII	The gaseous emissions (PM 10, PM2.5, SO2, NOx) from various process units shall conform to the standards prescribed by the concerned authorities from time to time. the particulate emissions from the plant shall not exceed 50 mg/NM3. At no time the emissions level should go beyond the prescribed standards. In the event of failure of any pollution control measures are rectified to achieve the desires efficiency.	Exempt the condition i.e. the particulate emissions from the plant shall not exceed 50 mg/NM3	As process mentioned in Point no 2, Only Aluminum ingots is use in melting furnace and emission standard for particulate emissions as prescribed by RSPCB under our CTO is 150 mg/NM3
4	Specific condition: Point XVI	The existing water requirement is 1677 KLD and additional fresh water requirement is 56 KLD for the proposed expansion project. Therefore, the total withdrawal of groundwater should not exceed 1733 KLD, the PP should obtain required permission from Central Ground water board for withdrawal of aforesaid	The total water requirement will be about 1774 KLD	The water requirement in the proposed project will be mainly for industrial operation, domestic applications and cooling purposes. The total water requirement will be about 1774 KLD. This water will be met from the ground water. CGWA has already granted us permission for 1774 KLD. The

		required quantity of groundwater.		same value was indicated in our EIA report as well.

Observations of the committee

4.0 The committee observed that the modifications sought by PP in the EC conditions needs to be revised to suit to the industry specific. As such, the committee advised to revise and resubmit the proposed modifications for specific condition nos 5 and 12.

5.0 Accordingly the PP has submitted the revised modifications as follow:

Specific Condition No 5: The PP shall monitor Aluminum Oxide emission on monthly basis and submit the report to the respective authorities (RSPCB and MOEFCC) with EC compliance report.

Specific Condition No 12: All the relevant recommendations made in the charter on corporate responsibility for Environmental Protection (CREP) for the Aluminum Sector shall be implemented.

6.0 The committee observed that, the request for the modification of Specific Condition No 13 not accepted as the plant shall meet the standards in view of location in NCR region.

7.0 After detailed deliberation, the committee recommended for amendment/modification of **Specific Condition No 5; Specific Condition No 12 and Specific Condition No 16.**

28.26 Expansion by installation of 1.0 MTPA Steel Plant, 40 MW (2x20 MW) waste heat Recovery, 40 MW coal based captive power plant & 500 TPD Air Separation Plant in the existing ferro alloy plant of M/s The Sandur Manganese & Iron Ores Ltd., located at village Hanumanhalli, Danapur Mandal, Taluk Hospet, District Bellary, Karnataka [Online proposal No. IA/KA/IND/23395/2014; MoEFCC File No. J-11011/205/2014- IA-II(I)] – Environmental Clearance - further consideration.

1.0 M/s The Sandur Manganese & Iron Ores Ltd has made online application vide proposal no. **IA/KA/IND/23395/2014** dated **31st October 2017** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

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

2.0 The proposal for expansion of existing Ferro Alloys Plant to 1.0 MTPA Integrated Steel Plant of M/s Sandur Manganese & Iron Ores Limited comprising of Sinter Plant, Blast Furnace, Coke Oven Plant, SMS, Rebar Mill, Oxygen Plant & WHRB located at villages- Danapur, Danayakankere & Hanumanhalli Tehsil- Hospet, District- Bellary, State- Karnataka was initially received in the Ministry on 14.05.2014 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 21st meeting held during 30th July -1st August 2014 and prescribed ToR to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had

prescribed ToR to the project on 07.04.2015 vide Lr. No J-11011/205/2014-IA.II(I). Amendment in ToR recommended by EAC (Industry -I) in its 14th Meeting on 23.12.2016.

2.0 The project of M/s Sandur Manganese & Iron Ores Limited is for expansion of existing Plant to 1.0 MTPA integrated Steel Plant comprising of Sinter Plant, Blast Furnace, Coke Oven Plant, SMS, Rebar Mill, Oxygen Plant & WHRB. Environment Clearance for Existing CPP granted by MoEF & CC, vide letter no-SEIAA:39: IND:2007, dated 3rd Sept 2009. The Status of compliance of earlier EC was obtained from Regional Office, MoEF, Bangalore vide Lr. no. EP/12.1/SEIAA/228/KAR dated 09.10.2017. There are no non-compliances reported by Regional Officer. The proposed capacity for different products for new site is as below:

Sl. No.	Plant/Unit Name	Configuration			Final Annual Production	Final Capacity in MTPA
		Phase-I	Phase-II	Phase III		
1	Blast Furnace	1x 0.4 MTPA BF (Size 400 m^3)	-	1x 0.4MTPA BF (Size 400 m^3)	2 x 400000 TPA	**0.800**
	Pig Casting Machine	1x0.4MTPA	-	-	1 x 400,000 TPA	**0.400**
2	Coke Oven Plant and WHRB	1 x 0.4 MTPA & 2 WHRBs (2x65TPH Steam Generation)	-	-	1 x 400,000 TPA & WHRBs 130TPH Steam Generation	**0.400**
3	Sinter Plant	1 x 50 m^2 ~1600 TPD	-	1 x 50 m^2 ~1600 TPD	2 x 528,000 TPA	**1.056**
4	Energy Optimization Furnace (EOF)	-	1 X 50 T 1602 TPD	1 X 50 T ~1602 TPD	2 x 528,710 TPA	**1.057**
5	Ladle Refining Furnace (LRF) & Vacuum Degasser (VD)	-	1 X 50 T 1602 TPD	1 X 50 T ~1602 TPD	2 x 528,710 TPA	**1.057**
6	Continuous Casting m/c (CCM)	-	1 x 4 Strand 9/16 m radius ~1570 TPD	1 x 4 Strand 9/16 m radius ~1570 TPD	2 x 518,135 TPA	**1.036**
7	Rolling (Rebar Mill)	-	1 x 100 TPH ~1515 TPD	1 x 100 TPH ~1515 TPD	2 x 500,000 TPA	**1.0**
8		1 x 70 TPD	1 x 200 TPD	-	1 x 23100 TPA + 1 x 66000 TPA	-

	Oxygen Plant					

3.0 The total land required for the project is 129.82 ha. There is no agricultural land or grazing land, govt. land 11.45 ha is proposed in the site. Also, no forestland involved in the project. Most of the land has been acquired for the project. There is no river passing through the project site. Major water body – Tungabhadra Reservoir back waters exist near the project site. No modification/ diversion in the existing natural drainage pattern is envisaged.

4.0 The topography of the area is mostly flat and sloping lies between to 15°11'01.97"N to 15°12'10.98"N Latitude and 76° 22'39.45"E to 76° 23'32.53"E Longitude in Survey of India toposheet No. 57 A/8 at an elevation of 517 m AMSL. The ground water table ranges between 7m to 15m below the land surface during the post- monsoon season and 25m to 50m below the land surface during the pre-monsoon season. No ground water will be used for the project.

5.0 There is no National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Elephant Reserve etc. either in the core area or within 10 Km of the project site. The area also does not form any corridor for Schedule-I fauna as per Wildlife (Protection) Act, 1972.

6.0 The process of project showing the basic raw material used and the various processes involved to produce the final output is given in the EMP.

7.0 Management Plan for Waste generated from the proposed expansion is given in following table:

Sl. No.	Items	Description	Quantity	Pollution control
1	**Coke Oven Plant**			
	Coke fines/dust	After Screening from coke & quenching	3-4% of Coke	Charged back as blend mix for sinter production
2	**Sinter Plant**			
	Sinter fines (< 5mm)	After Screening from Blast furnace	10% of Sinter	Charged back as blend mix for sinter production
	Fine Dust	Dust from Bag Filter/ ESP	0.5 Kg/t of Sinter	
3	**Blast Furnace (BF)**			
	Slag	From the Process	320 Kg/t of HM	Sale to local end users/ Cement Plants
	Flue Dust	Dust from Primary dust catcher	10 Kg/t of HM	Charged back as blend mix for sinter production
	Dust	From Gas Cleaning plant (GCP)	0.5 Kg/t of HM	Charged back as blend mix for sinter production
4	**Steel Melting Shop (SMS)**			
	Slag	From the Process	120kg/t of LS	Construction Filling through outside vendors
	CCM Scales	From the CCM	10 Kg/t of Billets	Charged back to sinter production
	Fine Dust	From the furnace & LF	13-21 Kg/t of Billet	Charged back to Sinter Plant

		From the top of SMS Shed	0.5 Kg/t of Billet	
		From the Ladles & CCM	0.25 Kg/t of Billet	
		From Raw material & handling units	0.5 Kg/t of Billet	
5	**Rolling Mills**			
	Mill Scales	From the Process	15 kg/t	Charged back as blend mix for sinter production
Hazardous Waste like used oil, Chemical Containers, Spent Resin will be disposed to Authorized re processors.				

8.0 The targeted production capacity of the expansion plant 1 MTPA. Copy of Coal Linkage for sourcing coal from Singareni Collieries Company Limited, Telangana in form of E-Fuel Supply Agreement is attached as Annexure-12. Iron Ore for the proposed Integrated Steel Plant will be sourced from Captive Mines of SMIORE at district Bellary. The copy of Consent to Operate and Environmental Clearance for both the mines are enclosed as Annexure-10(a),10(b),11(a) &11 (b). The ore transportation will be done through road and rail.

9.0 Fresh water requirement of the project at final stage is estimated at 16440 m^3/day, which will be sourced from Tungabhadra Dam. Agreement executed on 29th January 2015 with Government of Karnataka for supply of water.

10.0 Power requirement for the project is 92 MW. 32 MW will be sourced from existing Coal based CPP and 32 MW from WHRB Steam based power and balance will be sourced from Karnataka Power Transmission Corporation Limited.

11.0 Baseline Environmental Studies were conducted during winter season i.e. from December 2016 to February 2017. Ambient air quality monitoring has been carried out at 8 locations during December 2016 to February 2017 and the data indicates PM_{10} (54.6 µg/m^3 to 102.6 µg/m^3), $PM_{2.5}$ (21.6 to 66.9 µg/m^3), SO_2 (18.8 to 42.8 µg/m^3), NOx (19.4 to 44.0 µg/m^3) and CO (0.2 to 0.61 mg/m^3). The result of the modelling study indicates that the maximum increase of GLC for the proposed project is 0.76282 µg/m^3 with respect to the PM_{10}, 1.65458 µg/m^3 with respect to the SO_2 & 3.86284 µg/m^3 with respect to the NO_X.

12.0 Ground Water Quality has been monitored in 8 locations in the study area and analysed pH 6.94 to 7.26, Total Hardness: 94.0 to 268.0 mg/l, Chlorides 21.99 to 129.95 mg/l, Fluoride: 0.11 to 0.20 mg/l. heavy metals are within the limits. Surface water Quality has been monitored in 8 locations in the study area and analysed pH:7.36 to 7.41; DO 4.6 to 5.22mg/l and BOD: 1.8 to 2.8mg/l, COD 8 to 12.2 mg/l.

13.0 Noise levels are in the range of 41.35 to 58.18 dB(A) for daytime and 24.7 to 41.45 dB(A) for night time.

14.0 There are no people residing in the core zone of the project. No R&R is involved. It has been envisaged that no families are to be rehabilitated for the project.

15.0 Solid waste @ 562Kg/T of steel will be generated due to the project out of 179Kg/T will be used in SMIORE Plant and balance will be supplied to outside vendors for utilization in Cement & construction industries. However, 2.5 Ha is earmarked inside the plant premises for interim solid waste storage & handling. It has been envisaged that an area of 33.92 Ha will

be developed as green belt inside the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

16.0 Consent to Establish for Existing Coal based CPP from SPCB, Karnataka vide letter No. PCB/CEO/SEO/17-Cat/Thermal/Star Metallic 2009-10 on 16.01.2010. Combined Consent to Operate obtained for the existing Ferro Alloys and Power Plant from SPCB, Karnataka vide letter NoAWH-302081on 15.02.2017 and valid up to 30.06.2021.

17.0 The Public Hearing of the project was held on 25.07.2017 at PU collage Ground, Vyasapuri Colony, (Near existing plant), Vyasanakere, Hanumanahalli post, Hospet Taluk, Ballari under the chairmanship of Sri Vijay Mahantesh Danammanavar, KAS, Additional Deputy Commissioner and Additional District Magistrate, Ballari District for expansion of existing plant to 1.0 Million TPA Integrated Steel Plant. A budget of Rs. 70 Crore (approx. 3% of project cost) has been earmarked for implementing Enterprise Social Commitment. This amount includes expenditures to be incurred for addressing Public Hearing issues described in the Public Hearing Action Plan enclosed in Annexure-15.

18.0 The Capital Cost of the Project is Rs.2300 Crores and the capital cost for environmental protection measures is proposed as Rs.40 Crores. The annual recurring cost toward the environmental protection measures is proposed as Rs.8 Crores. The detailed CSR Plan has been provided in Chapter-8, Section-8.2.4 page no.4 to 6. The employment generation from the proposed expansion project is 898.

19.0 Green belt will be developed in 33.92 Ha which is about 38% of the acquired area. A 50-m wide green belt, consisting of at least 3 tiers along the plant boundary will be developed as green belt and green cover as per CPCB/ MoEF and CC, New Delhi guidelines. Local and native species will be planted. Total number of 84775 saplings will be planted and nurtured in 5 years.

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

21.0 After detailed deliberation, the committee observed following:

- The EIA/EMP submitted was not as per the generic structure envisaged in the EIA Notification and also as per the guidelines of the QCI/NABET.
- Declaration of consultant and declaration of the project proponent was not enclosed in the EIA/EMP report.
- Details of EIA Coordinator and all Functional Area Experts (FAEs) involved in the preparation of EIA/EMP was not provided in the prescribed format.
- Scanned signatures of the EC and FAEs were provided in the EIA/EMP report.
- Details of the existing project, reason for operating the existing project on the consent to operate and not obtaining the EC was not explained in the EIA/EMP Report.
- The details provided against ToR Point 1, 3(ii), 3(iii), 3(iv), 3(viii), 3(ix), 6(vii), 6(x), 9(i), 9(ii), 9(iii) and 11 are not satisfactory.
- The proponent has reported presence of schedule-I fauna in the core and buffer zone.
- The DO reported at page 111 i.e. DO more than 5 mg/L wherein the *E.coli* reported as 800 MPN/L at village pond is unrealistic.

- Wet quenching was proposed for coke oven plant.
- No details were provided regarding brick manufacturing plant.

22.0 Therefore, the committee desired following information / clarification for further consideration of the proposal:

i. Revised information on configuration in the tabular form *inter alia* include existing facilities; proposed expansion and total capacity after expansion.

ii. Details of year wise production (actual vis a vis consent) since inception.

iii. Revised information for ToR Point 1, 3(ii), 3(iii), 3(iv), 3(viii), 3(ix), 6(vii), 6(x), 9(i), 9(ii), 9(iii) and 11.

iv. Mist spray / dry fog arrangement at hoppers of the receiving bunkers of coal / raw material,

v. Action plan for 100% utilization of fly ash and BF slag

vi. Brief note on wet quenching vis a vis dry quenching w.r.t. environmental impacts and cost benefit analysis

vii. Soil analysis shall be carried based on land use classification, soil samples would be collected from various category of land use.

viii. Interpretation of the baseline data

ix. Revised study on flora and fauna with clear focus on the flora and fauna of the core area and of an area which fall within10 Kms of the project site.

x. Revised process flow sheet inter alia including the mass balance

xi. Revised corporate environmental policy including a mechanism for reporting of non-compliances/infringements to the Board of Directors at regular intervals and hierarchical system for the same.

xii. Environmental cell with qualified personal and headed by the person directly reporting to the head of the plant.

xiii. Declaration of consultant and declaration of the project proponent shall be enclosed in the EIA/EMP report.

xiv. Details of EIA Coordinator and all Functional Area Experts (FAEs) involved in the preparation of EIA/EMP shall be provided in the prescribed format.

xv. Original signatures of the EC and FAEs shall be provided in the EIA/EMP report.

xvi. Revised action plan including fund provision on the issues raised during the Public hearing

xvii. Revised details of ESC based on the issues raised in the public hearing and need based assessment.

xviii. Detailed Environmental Management Plan *inter alia* including time bound action plan and fund provision.

xix. Greenbelt on 112 Acres out of 321 Acres with local broad-leaved tree species shall be included in the green belt plan.

xx. Permission from the competent authority for additional quantity of water requirement for the proposed project.

23.0 All the information shall be included in the EIA/EMP report and revised EMP shall be submitted. Therefore, the proposal is deferred till the information is submitted by project proponent.

24.0 Accordingly revised EIA/EMP has been submitted by project proponent on 9th January 2018. As per the revised EIA/EMP, project proponent, *inter alia*, submitted:

(i) the statement of inclusion of information in the revised EMP as follows:

Sl. No.	ADS	Reply	Reference in EIA/EMP – Chapter & Page Number
1	Revised information on configuration in the tabular form *inter alia* include existing facilities; proposed expansion and total capacity after expansion.	Configuration of plant including existing & proposed facilities presented in single table	Chapter – 1, page no. 7
2	Details of year wise production (actual vis a vis consent) since inception.	Details presented. At no time actual production exceeded the licensed/consented capacity	Chapter – 1, page no. 2 to 4
3	Revised information for ToR Point		
	1. Executive Summary	Executive Summary Presented as revised	Exe Summary & Chapter -11
	3 (ii) Products with capacities for the proposed project.	Configuration of plant including existing & proposed facilities presented in single table	Chapter – 1, page no. 7
	3 (iii) If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.	Expansion project. Details of earlier EC given. Land is adequate	Chapter – 1, page no. 2, Chapter – 2, page no. 6 to 9
	3(iv) List of raw materials required and their source along with mode of transportation	List of all raw materials and their source and mode of transportation incorporated.	Chapter – 2, page no. 47-48
	3(viii) Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided	Quantitative process flow chart with major equipments and material balance incorporated	Chapter – 2, page no. 44-45
	3(ix) Hazard identification and details of proposed safety systems.	Unit was hazard and risk identified and safety measures incorporated	Chapter – 7, page no. 25-29

	6(vii) Noise levels monitoring at 8 locations within the study area.	Ambient noise levels were measured at 6 (six) locations in and around the proposed project site. Noise Levels observed to be within the prescribed limits.	Chapter – 3, page no. 23-26
	6(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.	Detailed description of flora and fauna incorporated. No Sch – 1 fauna within the study area	Chapter – 3, page no. 45-46; 59-61 and 78-85
	9(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.	Company has a QOEHS policy incorporating the details and procedure and hierarchical system.	Chapter – 10, page no. 7-14 and 1-2
	9(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.		
	9(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.		
	11. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item—wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.	Rs. 70 crores has been earmarked for various capex proposed in 5 years	Chapter – 8, page no. 4 to 7
4	Mist spray / dry fog arrangement at hoppers of the receiving bunkers of coal / raw material	Mist spray / dry fog arrangement at hoppers of the receiving	Chapter – 4, page no. 11 and 26

		bunkers of coal / raw material shall be provided	
5	Action plan for 100% utilization of fly ash and BF slag	41% fly ash will be used in fly ash bricks plant and 59% is proposed to be supplied to cement units. 100% BF slag will be supplied to cement units	Chapter – 4, page no. 36 to 39
6	Brief note on wet quenching vis a vis dry quenching w.r.t. environmental impacts and cost benefit analysis	Modified wet quenching will be followed. Brief note of wet quenching vis a vis dry quenching incorporated.	Chapter – 5, page no. 5 to 9
7	Soil analysis shall be carried based on land use classification, soil samples would be collected from various category of land use.	Soil samples collected based on land use classification and analysed.	Chapter – 3, page no. 29 to 31
8	Interpretation of the baseline data	Baseline data collected for various parameters have been interpreted	Chapter – 3 and Chapter – 3, page no. 64 to 71
9	Revised study on flora and fauna with clear focus on the flora and fauna of the core area and of an area which fall within10 Kms of the project site.	Detailed description of flora and fauna incorporated. No Sch – 1 fauna within the study area	Chapter – 3, page no. 45-46; 59-61 and 78-85
10	Revised process flow sheet inter alia including the mass balance	Process flow chart with material balance incorporated	Chapter – 2, page no. 44-45
11	Revised corporate environmental policy including a mechanism for reporting of non-compliances / infringements to the Board of Directors at regular intervals and hierarchical system for the same.	Company has a QOEHS policy incorporating the details and procedure and hierarchical system.	Chapter – 10, page no. 7-14 and 1-2
12	Environmental cell with qualified personal and headed by the person directly reporting to the head of the plant.	Details of EMC provided	Chapter – 10, page no. 1-2
13	Declaration of consultant and declaration of the project proponent shall be enclosed in the EIA/EMP report.	Declaration of consultant and declaration of the project proponent enclosed in the EIA/EMP report as per OM of MoEF & CC, dated 04.08.2009.	PREFIX TO EIA/EMP

14	Details of EIA Coordinator and all Functional Area Experts (FAEs) involved in the preparation of EIA/EMP shall be provided in the prescribed format.	Details of EIA Coordinator and all Functional Area Experts (FAEs) involved in the preparation of EIA/EMP provided in the prescribed format of NABET & as per OM of MoEF & CC,	PREFIX TO EIA/EMP
15	Original signatures of the EC and FAEs shall be provided in the EIA/EMP report.	Incorporated in the EIA/EMP	PREFIX TO EIA/EMP
16	Revised action plan including fund provision on the issues raised during the Public hearing	Action plan with fund provision for the issues raised in public hearing incorporated.	Chapter – 7, page no. 21 to 23
17	Revised details of ESC based on the issues raised in the public hearing and need based assessment.	Rs. 70 crores has been earmarked for various capex proposed in 5 years	Chapter – 8, page no. 4 to 7
18	Detailed Environmental Management Plan *inter alia* including time bound action plan and fund provision.	EMP with time bound plan and fund provision of Rs. 52 Lakhs for construction period and Rs. 40 Crores for operation phase	Chapter – 10, page no. 5-6
19	Greenbelt on 112 Acres out of 321 Acres with local broad-leaved tree species shall be included in the green belt plan.	112 acres will be under green belt and plantation inside the plant premises	Chapter – 4, page no. 41-42
20	Permission from the competent authority for additional quantity of water requirement for the proposed project.	Water requirement of 16440 m^3/Day from Tungabhadra River downstream of Dam as sanctioned by by the Govt. of Karnataka in the 36th High Level Clearance Committee	Annexure – 4 & 5

(ii) The Statement of main issues raised by the public and response of the project proponent with action plan is as follows:

Sl no	Area of Concern	Names of personnel appraised in PH	Name of village represented	Action plan	budget Rs. in Lakhs

1	Employment for local people	1. Siddesh 2. Venkatesh 3. DK Manjunath 4. Thangaraja 5. Santosh 6. Mugappa 7. Venkatesh 8. Dr Lucky 9. Anitha suresh 10. Kasturiamma 11. Manjunath 12. Premalatha 13. K Parushuram 14. Shashidhar 15. Manjunath 16. Hannurappa 17. KM. Manjayya	Galemmanagudi Danapura Danapura Galemmanagudi Hanumanahalli Galemmanagudi Hospet Hospet Galemmanagudi Hanumannahali Hanumanahalli Danapura Karnataka farmers association. Vyasenekere Ayyanahalli Galemannagudi Danapura	Preference shall be given to qualified and deserved candidates form the local surrounding villages. Adequate training shall be provided for and after employment	500
2	Education facilities and sports facilities	1. Siddesh 2. Lokesh 3. Santosh 4. Jagadish Kuri	Galemmanagudi Maryammanahalli Hanumanahalli Vyasenekere	1. Deserving children will be given preference in Sandur polytechnic 2. SMIORE is already running 16 education institution 3. New school will be built 4. Free distribution of sports kits , uniforms, lab equipment's, school bags	2900
3	Drinking water to local village	1. Vijayendra 2. Shashidhar	Danapura Vyasenekere	Drinking water requirement has been discussed with village panchayat of Danapura, Hanumahalli and vysanekere and Galemannagudi .	250

				Water tanks, pipeline connections shall be provided in these villages	
4	Health care	1. Siddesh 2. Santosh 3. Shashidhar 4. Udayakumar	Galemmanagudi Hanumanahalli Vyasenekere Danapura	Health care centre at Hanumanahalli Regular health camps for surrounding villages 24x7 Ambulance facility made available for all the villages	250
5	Development of grave yard	1. Gaalesh 2. Shashidhar	Galemmanagudi Vyasenekere	Construction of compound wall Provide water facility Built a small temple	50
6	Toilets	. M. Prakash	President Raitha sangha Hospet	Toilets will be constructed to individual houses Public toilets will be constructed for villages and schools	450
7	Up gradation of Temples	1. Jagadish Kuri	Vyasenekere	Provide funds to local villages for festival celebrations and Up gradation of temples	50
8	Green belt development and environment	. Shashidhar . A. Pakkiriswamy . Pampapati	Vyasenekere Danapura Danapura	Green belt shall be developed as per MOEF guidelines in the plant Green belt shall be developed in consultation with	550

				local village panchayats	
9	Basic Infrastructure development	. K.Lokesh . Kichadi kotresh	Mariyammanahalli Gunda	Development of roads and drains Providing solar lighting Construction of labour colony	2000

(iii) A budget of Rs. 70 Crore (approx. 3% of project cost) has been earmarked for implementing Enterprise Social Commitment.

Proposed ESC Activities (based on public hearing issues and need based assessment) & Budget

Sl. No.	**Activities**	**Details**	**Fund Allocation in Lakhs**	Year 1 Rs. in Lakhs	Year 2 Rs. in Lakhs	Year 3 Rs. in Lakhs	Year 4 Rs. in Lakhs	Year5 Rs. in Lakhs
1	Rural Sanitation	Providing Drainage and Sanitation / toilets in nearby villages	500	100	100	100	100	100
2	Provision of Drinking water facilities for	Dhanapur, Hanumanahalli and Galliyammana Gudi villages.	250	100	50	35	35	30
3	Supporting Education Programme	• Constructing school building for Girls residential school and PU college at Hospet • Construction of building for Vedapatashala at Hospet, • Providing laboratory equipments to the following school, 1) Govt Higher Primary school Dhanapur,	2800	1050	915	410	265	160

		2) Govt High School Dhanapur 3) Govt Primary High School Galemmanagudi 4) Anganavadi Kendra etc.						
4	Rural Health Programme	• Health center at Hanumanahalli. • Ambulance for 24 x 7 Facility for surrounding villages.	250	100	40	40	40	30
5	Promotion of Sports	Sports equipment and Kit to schools 1) Govt Higher Primary school Dhanapur, 2) Govt High School Dhanapur 3) Govt Primary High School Galemmanagudi 4) Govt school hanumanahalli etc.	100	20	20	20	20	20
6	Promotion of cultural/religious faith	• Build temples for Local festival • Build boundary wall around graveyard	50	25	25			

7	Roads and Infrastructure	• Development of approach road from villages to Highway. • Providing Solar Street Light to surrounding villages. • Providing Solar Lighting system for house hold in surrounding villages. • Construction of Labor colony.	2500	600	600	500	400	400
8.	As per local body recommendation	Green belt along roads and plantation in villages and other requirement of the area as envisaged by local bodies	550	150	100	100	100	100
	Total	(approx 3.0 % of the project cost Rs. 2300 Cr)	**7000 Lakhs ~ 70.00 Crores**	**2145**	**1850**	**1205**	**960**	**840**

Proposed ESC activities will be implemented within a span of 5 years along with implementation of the plant

(iv) The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

Sl.	**Particulars**	**Time frame (implementation)**	**Capital cost (Rs. in Crores)**	**Recurring cost (Rs. in Crores)**
1	Air pollution control • Covered Shed, Dust Suppression System, Covering of RM in yards • Enhancement of efficiency of existing APCD etc.	18 – 24 month after CTE	15.0	3.5
2	Water pollution control • Rain water harvesting • Bunding along yards / storage • Conservation measures etc.	18 – 24 month after CTE	5.0	0.5
3	Noise pollution control • Providing isolation to high noise equipments • Noise barriers as required	18 – 24 month after CTE	2.0	0.5
4	Solid waste management • Boundry of area, water sprinklers	2 – 3 month after CTO	5.0	1.0

	• Proper storage and handling system			
5	Environment monitoring • In house laboratory and • Capacity building for monitoring & analysis	1 – 2 month After CTO	3.0	0.5
6	Occupational health	1 year after CTO	5.0	1.0
7	Green belt & plantation	1 - 5 years after CTE	5.0	1.0
Total			**40.0**	**8.0**

Recommendations of the Committee:

25.0 After detailed deliberations, the committee recommended for environmental Clearance subject to following specific conditions in addition to any other conditions by the ministry:

1. An amount of Rs 70.00 Crores proposed towards Enterprise Social Commitment (ESC) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

2. Green belt shall be developed in 33.92 Ha with a native tree species in accordance with CPCB guidelines. The 15-m wide greenbelt shall *inter alia* cover the entire periphery of the plant.

3. The Capital cost of Rs. 40.00 Crores and annual recurring cost of Rs. 8.0 Crores towards the environmental protection measures shall be provided for separately. The funds so provided shall not be diverted for any other purpose.

4. Kitchen waste shall be composted or converted to biogas for further use.

28.27 Modernisation of existing 150 TPD wastepaper based Writing and Printing Paper Plant to Agro Residue Based Writing and Printing Paper Plant and Installation of 12.5 MW Cogen power plant of M/s Satia Industries Limited at village Rupana, District Muktsar, Punjab [Online proposal No. IA/PB/IND/61921/2015; MoEF&CC File No. J-11011/196/2014-IA.II(I)] – Environmental Clearance – Further consideration.

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

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

2.0 The Project Proponent (PP) informed that proposed modernisation of existing 150 TPD wastepaper based writing and printing paper plant to agro residue based writing and printing paper plant and installation of 12.5MW Co-gen Power Plant of **M/s Satia Industries Ltd**., located at Village Rupana, Taluka and District Muktsar, Punjab, was initially received in the

Ministry on 1st December 2015 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006.

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

4.0 The PP informed that the project of M/s Satia Industries Ltd., located at Village Rupana, Taluka and District Muktsar, Punjab Stateis presently operating 150 TPD agro residue based writing and printing paper plant (Unit-I), 150 TPD wastepaper based writing and printing paper plant (Unit-II), 12.5 MW Captive Co-Generation Plant, 5 MW Condenser based Power Plant including 5 MW standby. Now it is proposed to replace the existing 150 TPD wastepaper based writing and printing paper plant (Unit-II) with 150 TPD agro residue based writing and printing paper plant and replace 5 MW Condenser based Power Plant with 12.5 MW Captive Co-Generation Plant. The details of expansion as follows:

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

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

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

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

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

9.0 PP informed that the process of project showing the basic raw materials will be used are wheat straw, sarkanda, baggase, cotton sticks to produce the final output. ETP sludge, boiler ash and lime sludge are generated as waste during the process. The targeted paper production capacity of Unit No. 2 will remain the same i.e.150 TPD. Paper will be made from agro-residues which will be procured locally. The water requirement of the project is estimated as 16500 m^3/day, which shall be met through Arniwala Canal which is 2.5 km from the mill and is already connected with the industry.

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

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

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

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

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

15.0 It has been reported that a total of 246.7 TPD of waste will be generated due to the project, out of which 10 TPD of ETP sludge waste will be used by Paperboard mill and 63.75 TPD of boiler ash and 173 TPD of lime sludge shall be dumped to low lying areas in the surrounding areas on requests of farmers. It has been envisaged that an area of 74500 m^2 for green belt around the periphery has been developed as green belt to attenuate the noise levels and trap the dust generated due to the project development activities. It was reported that rain water will be harvested through 2500 m^3 reservoir.

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

17.0 The Public hearing of the project was held on 19.10.2016 under chairmanship of Shri Kulwanth Singh, IAS, Additional Deputy Commissioner, Sri Muktasar Sahib for

modernization of 150 TPD writing and printing paper from waste paper to agro residue based and 12.5 MW Co-Gen power plant. The issues raised in the Public Hearing inter alia include generation of employment; infrastructure development; utilisation of agricultural residue, etc.

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

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

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

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

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

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

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

office to the effect that the action plan for closure of non-compliances. Therefore, the proposal is deferred till the certificate is submitted to the ministry.

24.0 The project proponent has submitted the reply to the above ADS.

The detais of ESC is as follows:

S. No.	**Activity**	**Budget (Rs. in Lakhs)**
1.	Construction of School Library in a private school	50.00
2.	Community hall/Dispensary in Village Rupana of in consultation with Gram Panchayat	25.00
3.	Construction of Computer lab equipped with 30 PC and other necessary facilities in DAV School Muktasar. Budget for this Activity	40.00
4.	Facilities including sports, audio visual Aids and AC in the Multipurpose Hall	55.00
5.	School building and infrastructure for Blind School in Muktsar	20.00
6.	Skill Development as per "Skill Council for Green Jobs"	80.00
Total		**270.00**

Details of Environmental Cost is as follows:

Particulars	**Unit**	**Amount/Annum**	**Remarks**
75 TPH Boiler ESP Power	50 KWH	35.0 Lakhs	The total recurring cost of 75 TPH boiler for Pollution control device (ESP)
Conveying system	75 KWH	50.0 Lakhs	
Maintenance Hammers		5.0 Lakhs	
Maintenance Emitting Electrodes		5.0 Lakhs	
Maintenance Collecting Electrodes		15.0Lakhs	
Total		110 Lakhs	
Recovery Boiler ESP Power	60 KWH	40.00 Lakhs	The total recurring cost of Chemical Recovery Boiler for Pollution Control device (ESP)
Maintenance Hammers		5.0 Lakhs	
Maintenance Emitting Electrodes		5.0 Lakhs	
Maintenance Collecting Electrodes		15.0Lakhs	
Total		**65.00 Lakhs**	

RO and ETP	350 KWH	200 Lakhs	The total recurring cost of operation and Maintenance of ETP etc.
SS pipe line for air distribution system		5.0 Lakhs	
Diffuser cleaning and changing		5.00 Lakhs	
RO plant operation & maintenance		5.0 Lakhs	
Total		**205 Lakhs**	
GRAND TOTAL		**380 Lakhs**	

25.0 After detailed deliberations including issues relating to non-compliance reported by regional officer and action plan submitted by PP, the committee Recommendations of the Committee recommended for environmental Clearance subject to following specific conditions in addition to any other conditions by the ministry:

1. An amount of Rs 270.00 Lakhs proposed towards Enterprise Social Commitment (ESC) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

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

3. The Capital cost of Rs. 38.00 Crores and annual recurring cost of Rs. 1.5 Crores towards the environmental protection measures shall be provided for separately. The funds so provided shall not be diverted for any other purpose.

4. Kitchen waste shall be composted or converted to biogas for further use.

28.28 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) – Further consideration.

1.0 **M/s Jindal Stainless Limited** made application vide online proposal no. **IA/OR/IND/20365/2007** dated **21st April, 2017** for seeking environmental clearance for demerger of present company Jindal Stainless Limited (JSL) into three different companies on Composite Scheme of Arrangement amongst Jindal Stainless Limited (JSL), Jindal United Steel Limited (JUSL) and Jindal Coke Limited (JCL) at Kalinga Nagar Industrial Complex (KNIC), Jajpur Road, Dist- Jajpur, Odisha.

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

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 amendment to the 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 to the Parent Company, M/s. Jindal Stainless Limited (JSL). 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 in the name of JSL.

3.0 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. 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.

4.0 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.

5.0 Therefore, now, M/s Jindal Stainless Limited proposed for demerger of present company Jindal Stainless Limited (JSL) into three different companies on Composite Scheme of Arrangement amongst Jindal Stainless Limited (JSL), Jindal United Steel Limited (JUSL) and Jindal Coke Limited (JCL) at Kalinga Nagar Industrial Complex (KNIC), Jajpur Road, Dist- Jajpur, Odisha and transfer 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) dated 1st Nov 2007 for proposed units.

6.0 As per the granted by the MoEFCC vide J-13011/5/2006-IA.II(T), dated 30th November, 2006, the status of existing & proposed installations as on date are as follows:

Sl. No	Facility	Capacity as per EC accorded to M/s. JSL, vide EC No: J-11011/155/2005-1A II (I), dated 5th August, 2005 & Amendment vide EC No: J-11011/281/2007-1A II (I), dated 1st November, 2007	Existing Installation Pre-Demerger under Jindal Stainless Limited, JSL (Parent Company)	Post-Demerger			Remarks
				Parent Company (Jindal Stainless Limited, JSL)	New Company-1 (Jindal Coke Limited, JCL)	New Company-2 (Jindal United Steel Limited, JUSL)	
1	Sinter Plant	1 X 180 m^2	-	1 X 180 m^2	-		No Change
2	Coke Oven battery (Recovery Type)	2 X 0.425 MTPA	0.425 MTPA	-	0.425 MTPA	-	No Change
3	Blast Furnace PCM SGP	1 X 1600 m^3 2 X 1800 TPD 1 X 401200 TPY	-	1 X 1600 m^3 2 X 1800 TPD	-	-	No Change

				1 X 401200 TPY			
4	Stainless Steel Making Unit	1.6 MTPA	1.6 MTPA	1.6 MTPA	-	-	No Change
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 6 X 60 MVA Fe-Cr Plant 2 X 27.6 MVA Fe-Mn Plant 4 X 27.6 MVA Si-Mn Plant	-	-	No Change
6	Secondary Refinning	2 X 120 T LRF	120 T LRF	2 X 120 T LRF	-	-	No Change
7	CCP Plant	2 X 1 Strand Slab Caster	1 X 1 Strand Slab Caster	2 X 1 Strand Slab Caster	-	-	No Change
8	Hot Strip Mill	1.6 MTPA	1.6 MTPA	-	-	1.6 MTPA	No Change
9	Cold Rolling Mill	0.8 MTPA	0.8 MTPA	0.8 MTPA	-	-	No Change
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 12 MW from BF Gas 5 X 13 MW From Ferro Alloys Plant	-	-	No Change
11	Lime Plant	5 X 300 TPH Lime Kiln	-	5 X 300 TPH Lime Kiln	-	-	No Change
12	Oxygen Plant	2 X 425 TPD Oxygen Plant	1 x 425 TPD Oxygen Plant	2 x 425 TPD Oxygen Plant	-	-	No Change
13	Raw Material preparation Plant	Matching the Production Facilities	Installed	Matching the Production Facilities	-	-	No Change
14	Coal Based CPP	4 X 125 MW Coal Based CPP	2 X 125 MW Coal Based CPP	4 X 125 MW Coal Based CPP	-	-	No Change
15	AFBC Boiler	--	1 X 50 TPH AFBC Boiler	1 X 50 TPH AFBC Boiler	-	-	No Change

7.0 The land area acquired for the integrated Steel Complex of JSL is of 502.016 Hectares. Out of total land of 502.016 Ha, 185.54 Ha of land is used for plantation and green belt. This is almost 37.0 % of total plant area. No additional requirement of land has been envisaged. The category of present land use is industrial and it will continue to be industrial use only. After De-merger, the land details of the Parent Company (JSL) and two more new companies namely M/s. Jindal Coke Limited (JCL) and Jindal United Steel Limited (JUSL) are as follows:

M/s. Jindal Stainless Limited (JSL)	:	318.02 Ha
M/s. Jindal Coke Limited (JCL)	:	29.336 Ha
M/s. Jindal United Steel Limited (JUSL)	:	154.66 Ha

8.0 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.

9.0 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.

10.0 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.

11.0 The gross annual requirement of raw material for the projects for EC already granted are as follows :

Sl. No	Raw Materials in (MTPA)	Parent Company (Jindal Stainless Limited, JSL)	New Company-1 (Jindal Coke Limited, JCL)	New Company-2 (Jindal United Steel Limited, JUSL)
i.	Chrome Ore	6,30,000	-	-
ii.	Coal	16,50,000	6,30,000	-
iii.	Coke	1,45,000	-	-
iv.	Lime	90,000	-	-
v.	Quartzite	37,000	-	-
vi.	Crude Steel Slab	-	-	18,00,000

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

13.0 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.

14.0 The proposal was considered in the 20th meeting of EAC (Industry-I) held during 10th – 12th July 2017. After deliberations, the committee observed that there is a violation regarding installation of a standby boiler 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. 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.

15.0 The application made under the provisions of SO 804 (E), dated 14th March 2017 was considered in the 1st meeting of Expert Appraisal Committee for projects related to Violation of Environmental Clearance held on 22nd June, 2017. After detailed deliberations, the expert committee noted that the EC granted to PP provided two sets of WHRB to feed steam to 13 MW turbo generator (TG) set for utilization of waste heat of Ferro Alloys plant inside the premises. In the year 2010, it was proposed to install one 50 TPH AFBC boiler to supplement the required steam for the process use. There being no requirement of prior EC for the standalone AFBC boiler, the project proponent applied directly for Consent to Operate from

the SPCB. During inspection by the SPCB in August, 2013, the project proponent was asked to stop the construction/installation of the boiler, and to obtain the EC and the Consent to Establish for the same first. The same was closed down on 15th November, 2013 in the presence of SPCB and remains closed till date. The project proponent applied to SEAC on 31st January, 2014 for grant of EC. After being advised by the SEAC in its meetings held on 22nd March & 2nd July, 2014, applied to MoEF&CC on 25th March, 2015 for amendment in the EC for Integrated Steel Plant. In response to the fresh request for Consent to Establish, permission was granted by the SPCB on 2nd May, 2016 after depositing the levy of Rs.5 lakhs. The EAC in its meeting held on 30th August, 2016 asked to apply for fresh ToR due to validity period expired of the earlier EC dated 1st November, 2007 for the Integrated Steel Plant. The proposal for fresh ToR for 50 TPH boiler along with expansion of CRM from 0.8 MTPA to 1 MTPA was considered by the EAC (Industry-II) in its meeting on 27th October, 2016. During the meeting, the case was tagged with the violation of the EIA Notification, 2006 and was not taken forward.

16.0 The EAC, after detailed deliberations in the 1st meeting of Expert Appraisal Committee for projects related to Violation of Environmental Clearance held on 22nd June, 2017 on the proposal in terms of the provisions of the MoEF&CC Notification dated 14th March, 2017, observed that installation of a standby boiler to supplement steam to run the TG set, neither contributes to increase in production of the Integrated Steel Plant nor may be termed as expansion or modernization of the existing project/activity, but as an auxiliary facility to meet the target production. The Committee also noted that the installation of 50 TPH AFBC boiler has been closed down w.e.f. 15th November, 2013, and the project proponent has already deposited the levy of Rs.5 lakhs imposed by SPCB. Further, as per the records and information available, it seems that the boiler was not commissioned and not operated, and thus no ecological damage. The Committee opined that the case may not be considered as violation of the EIA Notification, 2006 and thus not in the domain of the Committee. However, the Ministry may seek inputs from the SPCB for the factual status/documentary evidence for further consideration of the EAC, if so required.

17.0 Since the Expert Appraisal Committee for projects related to Violation of Environmental Clearance in its meeting held on 22nd June, 2017 opined that the case may not be considered as violation of the EIA Notification, 2006, the competent authority directed to refer the present application of demerger of present company Jindal Stainless Limited (JSL) into three different companies to Expert Appraisal Committee (Industry-I) for deliberation on environmental issues involved in the proposal.

18.0 The committee observed that several components envisaged in the earlier EC were not implemented within the validity period of EC. Therefore, the project proponent shall submit revised table for de-merger of the already implemented units only to the proposed three companies. The project proponent unable to present before the committee regarding applicability of the specific and general conditions imposed in the original ECs to new companies.

19.0 The Committee, therefore, asked the PP to submit complete information, as sought earlier, in the form of following two matrices:

- Against each specific and general conditions imposed in the original ECs, the responsibility of the compliance should be clearly indicated against each unit including the original PP and as well as the new companies. In case any condition partially applicable, shall indicate the portion of the original condition applicable to the new company.

- 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, facilities proposed to transfer, location of the project in terms of coordinates of each node of the boundary of split unit, the brief description of nature of operations, raw material required, final products, pollutants, mitigation measures, water requirement, power requirement, manpower employed, capital cost of the project, capital cost provided for implementation of EMP, recurring cost towards EMP, etc., should be indicated

20.0 Accordingly, the project proponent submitted following information:

A. SPLIT OF THE FACILITIES/UTILITIES/ACTIVITIES DUE TO DEMERGER OF EXISTING FACILITIES AMONG THE COMPANIES NAMELY M/s. JINDAL STAINLESS LIMITED (PARENT COMPANY) & NEW COMPANIES NAMELY M/s. JINDAL UNITED STEEL LIMITED AND M/s. JINDAL COKE LIMITED AT KALINGANAGAR INDUSTRIAL COMPLEX, DUBURI, JAJPUR ROAD UPON TRANSFER OF ENVIRONMENT CLEARANCE EARLIER GRANTED TO M/s. JINDAL STAINLESS LIMITED VIDE EC NO. J-11011/281/2007-I A (II) I, DATED. 1st NOVEMBER, 2007 & VIDE EC NO. J-11011/155/2005-I A (II) I, DATED 05th AUGUST, 2005:

1. Title of the Project :

PARENT COMPANY M/s. Jindal Stainless Limited (JSL)	**NEW COMPANY-1 M/s. Jindal Coke Limited (JCL)**	**NEW COMPANY -2 M/s. Jindal United Steel Limited (JUSL)**
1.6 MTPA integrated Stainless Steel Plant with 1 X 0.425 MTPA Coke Oven Battery (Recovery Type with Wet Quenching) and other auxiliary & By-Product Facilities along with 1 X 1.6 MTPA Hot Strip Mill (HSM) along with Other Ancillary and Plate Finishing Facilities located at Kalinga Nagar Industrial Complex, Tehsil Sukinda, district Jajpur in Odisha.	1 X 0.425 MTPA Coke Oven Battery (Recovery Type with Wet Quenching) and other auxiliary & By-Product Facilities located at Kalinga Nagar Industrial Complex, Tehsil Sukinda, district Jajpur in Odisha.	1 X 1.6 MTPA Hot Strip Mill (HSM) along with Other Ancillary and Plate Finishing Facilities located at Kalinga Nagar Industrial Complex, Tehsil Sukinda, district Jajpur in Odisha.

2. **Details of the Split of the facilities/utilities/activities/ancillary unit:**

Name of Units	Capacity as per EC accorded to M/s Jindal Stainless Limited (JSL)	Existing Installation Pre-Demerger under Jindal Stainless Limited, JSL (Parent Company)	PARENT COMPANY M/s. Jindal Stainless Limited (JSL)	NEW COMPANY-1 M/s. Jindal Coke Limited (JCL)	NEW COMPANY -2 M/s. Jindal United Steel Limited (JUSL)
Sinter Plant	1 X 180 m^2	-	-	-	-

Coke Oven battery (Recovery Type)	2 X 0.425 MTPA	0.425 MTPA	-	0.425 MTPA	-
Blast Furnace PCM SGP	1 X 1600 m^3 2 X 1800 TPD 1 X 401200 TPY	-	-	-	-
Steel Making Shop (SMS)	1.6 MTPA	0.8 MTPA	0.8 MTPA	-	-
Ferro Alloys Plant (Semi Closed SAF)	180 TPH Chromite Briquetting Plant 6 X 60 MVA SAF 6 X 27.6 MVA SAF	126 TPH Chromite Briquetting Plant 2 X 60 MVA SAF & 3 X 27.6 MVA SAF	126 TPH Chromite Briquetting Plant 2 X 60 MVA SAF & 3 X 27.6 MVA SAF	-	-
Hot Strip Mill (HSM)	1.6 MTPA	1.6 MTPA	-	-	1.6 MTPA
Cold Rolling Mill (CRM)	0.8 MTPA	0.8 MTPA	0.8 MTPA	-	-
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	-	-
Lime Plant	5 X 300 TPH Lime Kiln	-	-	-	-
Oxygen Plant	2 X 425 TPD Oxygen Plant	425 TPD Oxygen Plant	425 TPD Oxygen Plant	-	-
Raw Material preparation Plant	Matching the Production Facilities	Installed	Matching the Production Facilities	-	-
Coal Based CPP	4 X 125 MW Coal Based CPP	2 X 125 MW Coal Based CPP	2 X 125 MW Coal Based CPP	-	-

Sl. No.	**Description**	**PARENT COMPANY M/s. Jindal Stainless Limited**	**NEW COMPANY-1 M/s. Jindal Coke Limited (JCL)**	**NEW COMPANY -2 M/s. Jindal United Steel Limited (JUSL)**

		(JSL)		
3	Location of the Project in terms of co-ordinates of each node of the boundary	Kalinga Nagar Industrial Complex, Danagadi, Duburi, Jajpur – 755026 The site is located in the Survey of India Topo-Sheet No. 73 L/1 and the geographic co-ordinates of the site are given below; Latitude: 20^0 56'58" to 20^0 58' North Longitude: 86^0 02' 17" to 86^0 03' 53" East Details of Coordinates Annexed as **Annexure: I**.	Kalinga Nagar Industrial Complex, Danagadi, Duburi, Jajpur – 755026 The site can be located in the Survey of India Topo-Sheet No. 73 L/1 and the geographic co-ordinates of the site are given below; Latitude :20^0 56'24.979" to 20^0 57'29.915" North Longitude : 86^0 02' 01.788" to 86^0 03' 23.363" East Details of Coordinates Annexed as **Annexure :II**.	Kalinga Nagar Industrial Complex, Danagadi, Duburi, Jajpur – 755026 The site can be located in the Survey of India Topo-Sheet No. 73 L/1 and the geographic co-ordinates of the site are given below; Latitude : 20^0 57'36.794" to 20^0 58'02.505" North Longitude : 86^0 02' 48.258" to 86^0 03' 18.251" East Details of Coordinates Annexed as **Annexure: III**.
4	Process Description	Raw Materials namely Chrome Ore, Coal, lime, dolomite are received at CRMHS area for further feed into plant process. Chrome Ore and other raw materials are feed into Submerged Arc Furnace of Ferro Alloy plant in the form of briquette to produce Ferro Alloy. The liquid Ferro Chrome Metal is sent to SMS for production of Crude Steel in the form of Slab. The hot rolled coils received from JUSL are further rolled in cold condition at Cold Rolling Mill to get thinner grade of cold rolled products and	Coal is carbonized in Coke ovens to produce Metallugical Coke which is used as reducing agent in Ferro Alloy Plant. Some part has been sold in open market. Coke Breeze is sold off.	The crude steel slab received from SMS of JSL are further heated in reheat furnaces of Hot Strip Mill and rolled in hot mills to get flat product in the form of coil and finished Plates. Partly sent for final dispatch as per customer requirement and partly sent to CRM of JSL for making cold rolled products.

		processed to meet the requirement of the customers. Power requirement is met through existing 2 x 125 MW Captive Power Plant.		

5. Raw Materials Required in TPA :

Sl. No	Raw Materials in (MTPA)	PARENT COMPANY M/s. Jindal Stainless Limited (JSL)	NEW COMPANY-1 M/s. Jindal Coke Limited (JCL)	NEW COMPANY -2 M/s. Jindal United Steel Limited (JUSL)
i.	Chrome Ore	6,30,000	-	-
ii.	Coal	16,50,000	6,30,000	-
iii.	Coke	1,45,000	-	-
iv.	Lime	90,000	-	-
v.	Quartzite	37,000	-	-
vi.	Crude Steel Slab	-	-	16,00,000

Sl.	Description	PARENT COMPANY M/s. Jindal Stainless Limited (JSL)	NEW COMPANY-1 M/s. Jindal Coke Limited (JCL)	NEW COMPANY -2 M/s. Jindal United Steel Limited (JUSL)
6	Final Products	Ferro Alloy , Crude Steel, Cold Rolled Coil	Coke	Hot Rolled Coil and Finished Plate.
7	Pollution Control Measures	Air : Bag Filers, Water Sprinkling System, Scrubbers	Air : Bag Filers, Water Sprinkling System,	Air : Bag Filers, Water Sprinkling System, Scrubbers
		Water : ETP, STP leading to ZLD.	Water : BOD Plant (ZLD)	Water : ETP (ZLD)
		Noise : Silencers, Low Speed Fans	Noise : Silencers, Low Speed Fans	Noise : Silencers, Low Speed Fans
8.	Waste Disposal (Solid/HW)	**SOLID WASTE** Fly Ash generated from CPP is being 100 % utilized by sending it to brick manufacturers and asbestos manufacturers. SMS Slag and Ferro Alloy slag are being processed in Metal Recovery	**SOLID WASTE** Coke breeze generated is being sold to other steel plant. **HAZARDOUS WASTE** BOD Sludge generated from BOD plant is being reused in Coke Oven Battery. Tar storage Tank Residue generated is	**SOLID WASTE** Mill Scale generated from HSM is being dumped within the plant premises for future use. **HAZARDOUS WASTE** Used Oil & Waste Oil are sent to Authorised Recyclers as per HW guidelines.

		Plant/Jigging Plant for metal recovery. Residual slag are used in low lying area filling inside plant premises. Furnace scale & Shot blaster dust from CRM, Bag filter dust and Caster dust from SMS are being reused in Briquette Plant of Ferro Alloy Complex. **HAZARDOUS WASTE** CRM ETP Sludge generated from CRM is being sent to CHWTSDF at Sukinda, Odisha for secured land filling. Flue gas residue (Bag filter dust) from SAF of Ferro Alloy Plant are being reused 100% in briquette plant.. Used Oil & Waste Oil are sent to Authorised Recyclers as per HW guidelines.	being reused in Coke Oven Battery. Used Oil & Waste Oil are sent to Authorised Recyclers as per HW guidelines.	
9	Water Consumption	27960 KLD	720 KLD	1200 KLD
10	Power Consumption	210 MWH	4 MWH	40 MWH
11	Manpower Employed	Permanent : 2562 Contractor : 3439	Permanent : 118 Contractor : 445	Permanent : 556 Contractor : 374
12	Capital Cost of Project	Rs. 6714 Cr.(Actual) Rs. 3325 Cr. (Projected)	Rs. 493 Cr. (Actual) Rs. 244 Cr. (Projected)	Rs. 2413 Cr. (Actual) Rs. 1195 Cr. (Projected)
13	Capital Cost towards EMP	Rs. 240 Cr.	Rs. 38 Cr.	Rs. 28 Cr.
14	Recurring cost towards EMP	Rs. 36 Cr.	Rs. 6 Cr.	Rs. 4 Cr.

B. RESPONSIBILITY MATRIX for transfer of 1 X 0.425 MTPA Coke Oven Battery (Recovery Type with Wet Quenching) along with other auxiliary and By-Product

Facilities to M/s. JINDAL COKE LIMITED (JCL) and 1 X 1.6 MTPA Hot Strip Mill (HSM) along with Other Ancillary and Finishing Facilities to M/s. JINDAL UNITED STEEL LIMITED (JUSL) from Environment Clearance vide EC No. J-11011/281/2007-I A (II) I, dated 1st November, 2007 & vide EC No. J-11011/155/2005-I A II (I) dated 05th August, 2005 accorded to M/s. JINDAL STAINLESS LIMITED (JSL) at KalingaNagar Industrial Complex, Duburi, Jajpur, Odisha:

A. Environment Clearance vide EC No. J-11011/155/2005-I A II (I) dated 05th August, 2005 :

Sl. No.	Environment Clearance Condition EC No. J-11011/155/2005-I A II (I), dated 05th August,2005	Parent Company	New Company -1	New Company -2
		M/s. Jindal Stainless Limited (JSL)	M/s. Jindal Coke Limited (JCL)	M/s. Jindal United Steel Limited (JUSL)
SPECIFIC CONDITION				
i	The gaseous emissions from the various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.	The gaseous emissions from the various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.	The gaseous emissions from the various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.	The gaseous emissions from the various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.
ii	There shall be no discharge of process effluent. As reflected in the EIA/EMP report, the waste water generation from the various units namely, blast furnace, steel melting shop, DM water plant, pickling line, blow down from captive power plant, oxygen plant, BF circuit and fume extraction unit shall be recycled. Effluent from the slab caster and rolling mill other than the pickling line shall be routed through	There shall be no discharge of process effluent. As reflected in the EIA/EMP report, the waste water generation from the various units namely, steel melting shop, DM water plant, pickling line, blow down from captive power plant, oxygen plant and fume extraction unit shall be recycled. Effluent from the slab caster and rolling mill other than the pickling line shall be routed through settling pits	There shall be no discharge of process effluent. As reflected in the EIA/EMP report, the waste water generation from Coke Oven Plant shall be recycled. Effluent from Coke Oven Plant shall be treated in BOD Plant and shall be reused. However, the effluent during the monsoon season shall be discharged after conforming to the prescribed standards into the Gandha Nalla. The domestic waste water after	There shall be no discharge of process effluent. As reflected in the EIA/EMP report, the waste water generation from the Hot Strip Mill shall be recycled. Effluent from Hot Strip Mill shall be treated in ETP and shall be reused. However, the effluent during the monsoon season shall be discharged after conforming to the prescribed standards into the Gandha Nalla. The domestic waste water after

	settling pits with oil and grease trap and shall be reused. The clarified water from the sludge pond shall be used for green belt development and dust suppression. However, the effluent during the monsoon season shall be discharged after conforming to the prescribed standards into the Gandha Nalla. The domestic waste water after treatment in STP shall be used for green belt development.	with oil and grease trap and shall be reused. The clarified water from the sludge pond shall be used for green belt development and dust suppression. However, the effluent during the monsoon season shall be discharged after conforming to the prescribed standards into the Gandha Nalla. The domestic waste water after treatment in STP shall be used for green belt development.	treatment in STP shall be used for green belt development.	treatment in STP shall be used for green belt development.
iii	In plant control measures for checking fugitive emissions from spillage/ raw materials handling shall be provided. Further, specific measures like provision of dust suppression system consisting of water sprinkling, dust extraction system consisting of suction hoods, fans and bag filters shall be installed at material transfer points, blast furnace stock house and other enclosed raw material handling areas and the steel melting shop. Data on fugitive emissions shall be regularly monitored and records maintained.	In plant control measures for checking fugitive emissions from spillage/ raw materials handling shall be provided. Further, specific measures like provision of dust suppression system consisting of water sprinkling, dust extraction system consisting of suction hoods, fans and bag filters shall be installed at material transfer points, and other enclosed raw material handling areas and the steel melting shop. Data on fugitive emissions shall be regularly monitored and records maintained.	In plant control measures for checking fugitive emissions from spillage/ raw materials handling shall be provided. Further, specific measures like provision of dust suppression system consisting of water sprinkling, dust extraction system consisting of suction hoods, fans and bag filters shall be installed at material transfer points, and other enclosed raw material handling areas of Coke Oven Plant. Data on fugitive emissions shall be regularly monitored and records maintained.	In plant control measures for checking fugitive emissions shall be provided. Further, specific measures like provision of dust suppression system, dust extraction system consisting of suction hoods, fans and bag filters shall be installed at Plate Finishing Shop. Data on fugitive emissions shall be regularly monitored and records maintained.
iv	The company shall install waste heat recovery boilers to recover the waste heat and generate power from the steam produced by the waste heat boilers.	The company shall install waste heat recovery boilers to recover the waste heat and generate power from the steam produced by the waste heat boilers.	Not Applicable.	Not Applicable.
v	The particulate emissions from the waste heat recovery boiler shall be controlled by installation of ESP and particulate emissions shall not exceed 50 mg/ Nm^3. Further, the company shall install bag filter to control the	The particulate emissions from the waste heat recovery boiler shall be controlled by installation of ESP and particulate emissions shall not exceed 50 mg/ Nm^3. Further, the company shall install bag filter to control the emissions from the blast	The company shall install Bag filter to control the emissions from the coal crusher section, charging fume car section, of Coke Oven Plant. The cooled and cleaned Coke Oven gas shall be burnt as a fuel.	The company shall install Bag Filter to control the emissions from the shot blaster section of Hot Strip Mill.

	emissions from the blast furnace stove, blast furnace, lime plant, steel melting shop and ferro alloys plant. The blast furnace and SMS gas shall be routed through gas cleaning plant after cooling. The cooled and cleaned gas shall be burnt as a fuel for power generation. The exhaust gases shall be discharged through stacks of adequate height.	furnace stove, blast furnace, lime plant, steel melting shop and ferro alloys plant. The blast furnace and SMS gas shall be routed through gas cleaning plant after cooling. The cooled and cleaned gas shall be burnt as a fuel for power generation. The exhaust gases shall be discharged through stacks of adequate height.		
vi	Solid waste generated from converter scrap (12,203 TPA), SS scrap from slab caster (33,000 TPA), scrap from stickle mill (15,300 TPA), scrap from drape line (26,200 TPA), Scrap from CR slitting line(17,300 TPA), and cut to length line (37,800 TPA) will be recycled. About 4,19,035 TPA of solid waste generated in the form of iron ore fines (1,69,900 TPA), blast furnace slag (2,12,500 TPA), BF scrap (15,435 TPA) scales from slab caster (16,500 TPA) and scales from steckel mill (4,700 TPA) will be sold to the scrap dealers except for BF slag which will be sold to the cement manufacturers. The BF GCP sludge (17,493 TPA) will be disposed off within the plant premises and converter slag (1,56,192 TPA) will be used for road construction. Besides ferro manganese slag will be used for silica manganese manufacturing. Ferro chrome and silica manganese slag will be granulated and shall be used for road construction. Pickling sludge will be treated and reused in smelter. Process dust and	Solid waste generated from converter scrap (12,203 TPA), SS scrap from slab caster (33,000 TPA), scrap from stickle mill (15,300 TPA), scrap from drape line (26,200 TPA), Scrap from CR slitting line(17,300 TPA), and cut to length line (37,800 TPA) will be recycled. About 4,19,035 TPA of solid waste generated in the form of iron ore fines (1,69,900 TPA), blast furnace slag (2,12,500 TPA), BF scrap (15,435 TPA) scales from slab caster (16,500 TPA) and scales from steckel mill (4,700 TPA) will be sold to the scrap dealers except for BF slag which will be sold to the cement manufacturers. The BF GCP sludge (17,493 TPA) will be disposed off within the plant premises and converter slag (1,56,192 TPA) will be used for road construction. Besides ferro manganese slag will be used for silica manganese manufacturing. Ferro chrome and silica manganese slag will be granulated and shall be used for road construction. Pickling sludge will be treated and reused in smelter. Process dust and scales shall be utilized in smelting furnaces. Used	Solid Waste generated as Coke Breeze (20,000 TPA), from Coke Oven Plant shall be sold off.	Solid Waste generated as Mill Scale (28,000 TPA), from Hot Strip Mill will be dumped within the plant premises for future use.

	scales shall be utilized in smelting furnaces. Used refractory bricks shall be sold of and AOD slag shall be dumped within the plant premises.	refractory bricks shall be sold of and AOD slag shall be dumped within the plant premises.		
vii	The company shall conduct TCLP test for the ferro chrome slag which shall be used for road construction. If the chromium concentration in the ferro chrome slag exceeds the prescribed standards, the waste shall be handled and disposed off in accordance with Hazardous Wastes (Management and Handling) Rules, 2003.	The company shall conduct TCLP test for the ferro chrome slag which shall be used for road construction. If the chromium concentration in the ferro chrome slag exceeds the prescribed standards, the waste shall be handled and disposed off in accordance with Hazardous Wastes (Management and Handling) Rules, 2003.	Not Applicable	Not Applicable
viii	Green belt shall be developed in an area of 135 ha. of plant area within and around the plant premises as per the CPCB guidelines.	Green belt shall be developed in an area of 135 ha. of plant area within and around the plant premises as per the CPCB guidelines.	Green belt shall be developed within and around the plant premises as per the CPCB guidelines.	Green belt shall be developed within and around the plant premises as per the CPCB guidelines.
ix	The company shall develop rainwater-harvesting structures to harvest the rain water for utilization in the lean season as well as to recharge the ground water table.	The company shall develop rainwater-harvesting structures to harvest the rain water for utilization in the lean season as well as to recharge the ground water table.	The company shall develop rainwater-harvesting structures to harvest the rain water for utilization in the lean season as well as to recharge the ground water table.	The company shall develop rainwater-harvesting structures to harvest the rain water for utilization in the lean season as well as to recharge the ground water table.
x	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
xi	Recommendations made in the CREP should be implemented.	Recommendations made in the CREP should be implemented.	Recommendations made in the CREP should be implemented.	Recommendations made in the CREP should be implemented.
GENERAL CONDITION				
i	The project authorities must strictly adhere to the stipulations made by the Orissa State Pollution Control Board and the State Government.	The project authorities must strictly adhere to the stipulations made by the Orissa State Pollution Control Board and the State Government.	The project authorities must strictly adhere to the stipulations made by the Orissa State Pollution Control Board and the State Government.	The project authorities must strictly adhere to the stipulations made by the Orissa State Pollution Control Board and the State Government.

ii	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.
iii	At least four ambient air quality-monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the State Pollution Board. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the State pollution Control Board/Central Pollution Control Board once in six months.	At least four ambient air quality-monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the State Pollution Board. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the State pollution Control Board/Central Pollution Control Board once in six months.	Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the State pollution Control Board/Central Pollution Control Board once in six months.	Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the State pollution Control Board/Central Pollution Control Board once in six months.
iv	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.
v	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels

	Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).		should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
vi	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development- activities in the surrounding village like community development programmes, educational programmes, drinking water supply and health care etc.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development- activities in the surrounding village like community development programmes, educational programmes, drinking water supply and health care etc.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report for Coke Oven Plant.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report for Hot Strip Mill.
vii	The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.
viii	The Regional office of this Ministry at Bhubaneswar/ Central Pollution Control Board/ State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The Regional office of this Ministry at Bhubaneswar/ Central Pollution Control Board/ State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The Regional office of this Ministry at Bhubaneswar/ Central Pollution Control Board/ State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The Regional office of this Ministry at Bhubaneswar/ Central Pollution Control Board/ State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.

ix	The Project Proponent shall inform the public that the project has been accorded environment clearance by the Ministry and the copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office.	The project proponent shall inform the public that the project has been accorded environment clearance by the Ministry and the copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office.	Not Applicable	Not Applicable
x	The Project Authorities should inform the Regional Office as well as the Ministry, the date of financial closure and the final approval of the project by the concerned authorities and the date of commencing the land development work.	The Project Authorities should inform the Regional Office as well as the Ministry, the date of financial closure and the final approval of the project by the concerned authorities and the date of commencing the land development work.	Not Applicable	Not Applicable
5.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
6.0	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.
7.0	The above conditions will be enforced, inter-alia under the provisions of the	The above conditions will be enforced, inter-alia under the provisions of the	The above conditions will be enforced, inter-alia under the provisions of the Water	The above conditions will be enforced, inter-alia under the

	Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	(Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

B. Environment Clearance vide. EC No. J-11011/281/2007-I A (II) I, dated. 1st November, 2007 :

Sl. No.	Environment Clearance Condition EC No. J-11011/281/2007-I A (II) I, dated 1st November,2007	Parent Company M/s. Jindal Stainless Limited (JSL)	New Company -1 M/s. Jindal Coke Limited (JCL)	New Company -2 M/s. Jindal United Steel Limited (JUSL)
SPECIFIC CONDITION				
i	The industry shall follow coke oven standards as per E(P)A Notification. VOCs from the coke oven shall be monitored and controlled as per CPCB guidelines.	Not Applicable	The industry shall follow coke oven standards as per E(P)A Notification. VOCs from the coke oven shall be monitored and controlled as per CPCB guidelines.	Not Applicable
ii	Electrostatic precipitator (ESP) shall be provided to Sinter Plant and gas cleaning plant (GCP) to blast furnace (BF) to control gaseous emissions from all the vents/ stacks within 50 mg/Nm^3. Bag filter shall be provided to BF, Lime Plant, Steel Melting Shop (SMS), Ferro-Alloy Plant etc. On-line continuous monitoring system shall be installed to monitor various pollutants and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB. Dust suppression system shall be installed at raw material handling areas, material transfer points and solid waste dumps to control fugitive emissions. Water sprinkling shall be done on the roads to control fugitive emissions.	Electrostatic precipitator (ESP) shall be provided to Sinter Plant and gas cleaning plant (GCP) to blast furnace (BF) to control gaseous emissions from all the vents/ stacks within 50 mg/Nm^3. Bag filter shall be provided to BF, Lime Plant, Steel Melting Shop (SMS), Ferro-Alloy Plant etc. On-line continuous monitoring system shall be installed to monitor various pollutants and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB. Dust suppression system shall be installed at raw material handling areas, material transfer points and solid waste dumps to control fugitive emissions. Water	Bag filter shall be installed to control the emissions from the coal crusher section, charging fume car section, of Coke Oven Plant. On-line continuous monitoring system shall be installed to monitor various pollutants and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB. Dust suppression system shall be installed at raw material handling areas, material transfer points and solid waste dumps to control fugitive emissions. Water sprinkling shall be done on the roads to control fugitive emissions.	Bag Filter shall be installed to control the emissions from PFS. On-line continuous monitoring system shall be installed to monitor various pollutants and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB. Dust suppression system shall be installed at raw material handling areas, material transfer points and solid waste dumps to control fugitive emissions. Water sprinkling shall be done on the roads to control fugitive emissions.

		sprinkling shall be done on the roads to control fugitive emissions.		
iii	Total requirement of the water from Brahamani river shall not exceed 72, 696 m^3/day or 43.66 cusecs as per permission accorded by the Department of Water Resources, Govt. of Orissa. No ground water shall be used for the plant. All the treated waste water shall be recycled and reused in the process and 'Zero' discharge shall be strictly adopted as per direction of OPCB. Water from BF GCP shall be sent to a clarifier/thickener and overflow shall be used in Pig Casting Machine. Phenolic effluent from Coke oven complex shall be treated in the ETP of BOD Plant and recycled and reused for quenching of coke. Acidic/ alkaline effluent from DM water plant shall be neutralized and reused in the plant. Blow down from different sources shall be used for slag granulation. Backwash from Filtration plant shall be collected in sludge pond and over flow shall be used for dust suppression and irrigation of green belt. Ammonia, phenol and cyanide in the effluent should be treated. Cyanide shall meet the standard of 0.2 ppm. TDS in the effluent discharged shall not be more than 2100 mg/l. The domestic wastewater after treatment in STP shall be used for green belt development.	Total requirement of the water from Brahamani river shall not exceed 72, 696 m^3/day or 43.66 cusecs as per permission accorded by the Department of Water Resources, Govt. of Orissa. No ground water shall be used for the plant. All the treated waste water shall be recycled and reused in the process and 'Zero' discharge shall be strictly adopted as per direction of OPCB. Water from BF GCP shall be sent to a clarifier/thickener and overflow shall be used in Pig Casting Machine. Acidic/ alkaline effluent from DM water plant shall be neutralized and reused in the plant. Blow down from different sources shall be used for slag granulation. Backwash from Filtration plant shall be collected in sludge pond and over flow shall be used for dust suppression and irrigation of green belt. TDS in the effluent discharged shall not be more than 2100 mg/l. The domestic wastewater after treatment in STP shall be used for green belt development.	No ground water shall be used for the plant. All the treated waste water shall be recycled and reused in the process and 'Zero' discharge shall be strictly adopted as per direction of OPCB. Phenolic effluent from Coke oven complex shall be treated in the ETP of BOD Plant and recycled and reused for quenching of coke. Ammonia, phenol and cyanide in the effluent should be treated. Cyanide shall meet the standard of 0.2 ppm. TDS in the effluent discharged shall not be more than 2100 mg/l. The domestic wastewater after treatment in STP shall be used for green belt development.	No ground water shall be used for the plant. All the treated waste water shall be recycled and reused in the process and 'Zero' discharge shall be strictly adopted as per direction of OPCB. Effluent from Hot Strip Mill shall be treated in ETP and shall be reused. TDS in the effluent discharged shall not be more than 2100 mg/l. The domestic wastewater after treatment in STP shall be used for green belt development.
iv	Coke oven by-product effluent shall be treated as per notified standards and only treated effluents after meeting the norms shall be used for coke quenching. No fresh water shall be used for this purpose.	Not Applicable.	Coke oven by-product effluent shall be treated as per notified standards and only treated effluents after meeting the norms shall be used for coke quenching. No fresh water shall be used for this purpose.	Not Applicable.

v	Ground water monitoring around the solid waste disposal site/ secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.	Ground water monitoring around the solid waste disposal site/ secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.	Ground water monitoring around the solid waste disposal site/ secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.	Ground water monitoring around the solid waste disposal site/ secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.
vi	Solid waste shall be disposed off in secured landfill designed as per the specifications of the CPCB. Iron ore fines, mill scales, scales from slab caster, sinter plant dust, dust from gas cleaning plant, coke breeze, sludge from gas cleaning plant and blast furnace, sludge from thickener and dust from steel melting shop (SMS) shall be recycled and reused in sinter plant. SMS scrap shall be recycled in SMS. Scrap from different sources like slab caster stickle mill, DRAP line, CR slitting line, CRM etc. shall be recycled in Chromium plant. SMS slag shall be used for land filling. Ferro Manganese slag shall be used for Si-Mn production. Slag from Si-Mn plant (54000 TPA) and Fe-Cr plant shall be dumped.	Solid waste shall be disposed of in secured landfill designed as per the specifications of the CPCB. Iron ore fines, mill scales, scales from slab caster, sinter plant dust, dust from gas cleaning plant, coke breeze, sludge from gas cleaning plant and blast furnace, sludge from thickener and dust from steel melting shop (SMS) shall be recycled and reused in sinter plant. SMS scrap shall be recycled in SMS. Scrap from different sources like slab caster stickle mill, DRAP line, CR slitting line, CRM etc. shall be recycled in Chromium plant. SMS slag shall be used for land filling. Ferro Manganese slag shall be used for Si-Mn production. Slag from Si-Mn plant (54000 TPA) and Fe-Cr plant shall be dumped.	Solid waste shall be disposed of in secured landfill designed as per the specifications of the CPCB. Coke breeze from Coke Oven Plant shall be sold off.	Solid waste shall be disposed of in secured landfill designed as per the specifications of the CPCB. Mill scales from Hot Strip Mill (HSM) shall be dumped within the plant premises for future use.
vii	Green belt shall be developed in 135 ha., out of total 526.09 ha. area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Green belt shall be developed in an area of 135 ha. out of total plant area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Green belt shall be developed within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Green belt shall be developed within and around the plant premises as per the CPCB guidelines in consultation with DFO.
viii	As proposed, modified wet quenching for 1st and 2nd coke oven batteries as per CPCB guidelines and dry quenching in 3rd and 4th batteries shall be adopted during the expansion.	Not Applicable.	As proposed, modified wet quenching for 1st and 2nd coke oven batteries as per CPCB guidelines and dry quenching in 3rd and 4th batteries shall be adopted during the expansion.	Not Applicable.
GENERAL CONDITIONS				

i	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OPCB) and the State Government.	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OPCB) and the State Government.	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OPCB) and the State Government.	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OPCB) and the State Government.
ii	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.
iii	The gaseous emissions from various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit. NO_x burners shall be installed to control NO_x levels.	The gaseous emissions from various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit. NO_x burners shall be installed to control NO_x levels.	The gaseous emissions from various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	The gaseous emissions from various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.
iv	At least four ambient air quality- monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its	At least four ambient air quality- monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be	Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar/ OPCB/ CPCB once in six months.	Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar/ OPCB/ CPCB once in six months.

	Regional Office at Bhubaneswar/ OPCB/ CPCB once in six months.	regularly submitted to this Ministry including its Regional Office at Bhubaneswar/ OPCB/ CPCB once in six months.		
v	In-plant control measures for checking fugitive emissions from all the vulnerable sources like Coke oven area, Sinter Plant, Blast Furnace area etc. Further, specific measures like water sprinkling shall be carried out at the stock piles of raw material, stacker reclaimer, conveyor transfer points and vibrating screens etc. Dust extraction system and bag filters shall be provided to the sinter plant stock house, BF and Ferro-alloys handling area in steel melting shop etc. Fume extraction system in steel refining units shall also be provided. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed and height conforming to the standards for induction furnaces in the industry shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.	In-plant control measures for checking fugitive emissions from all the vulnerable sources like Sinter Plant, Blast Furnace area etc. Further, specific measures like water sprinkling shall be carried out at the stock piles of raw material, stacker reclaimer, conveyor transfer points and vibrating screens etc. Dust extraction system and bag filters shall be provided to the sinter plant stock house, BF and Ferro-alloys handling area in steel melting shop etc. Fume extraction system in steel refining units shall also be provided. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed and height conforming to the standards for induction furnaces in the industry shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.	In-plant control measures for checking fugitive emissions from all the vulnerable sources of Coke oven area, shall also be provided. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed and height conforming to the standards for induction furnaces in the industry shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.	In-plant control measures for checking fugitive emissions from all the vulnerable sources of Hot Strip Mill area, shall also be provided. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed and height conforming to the standards for induction furnaces in the industry shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.
vi	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.

vii	The overall noise levels in and around the plant area shall be kept within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EIA Rules, 1989 viz. 75 dBA (daytime) and 70 (dBA) night time.	The overall noise levels in and around the plant area shall be kept within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EIA Rules, 1989 viz. 75 dBA (daytime) and 70 (dBA) night time.	The overall noise levels in and around the plant area shall be kept within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EIA Rules, 1989 viz. 75 dBA (daytime) and 70 (dBA) night time.	The overall noise levels in and around the plant area shall be kept within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EIA Rules, 1989 viz. 75 dBA (daytime) and 70 (dBA) night time.
viii	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
ix	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
x	Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.	Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.	Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.	Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.
xi	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report. Further, the company shall undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report. Further, the company shall undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report for Coke Oven Plant.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report for Hot Strip Mill.
xii	The project authorities shall utilize Rs. 46.00 Crores earmarked for the environment pollution control measures judiciously	The project authorities shall utilize Rs. 36.00 Crores earmarked for the environment pollution control measures	The project authorities shall utilize Rs. 6.00 Crores earmarked for the environment pollution control measures judiciously to implement the	The project authorities shall utilize Rs. 4.00 Crores earmarked for the environment

	to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for other purpose.	judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for other purpose.	conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for other purpose.	pollution control measures judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for other purpose.
xiii	The Regional Office of this Ministry at Bhubaneswar/ CPCB/ OPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The Regional Office of this Ministry at Bhubaneswar/ CPCB/ OPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The Regional Office of this Ministry at Bhubaneswar/ CPCB/ OPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The Regional Office of this Ministry at Bhubaneswar/ CPCB/ OPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.
xiv	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OPCB/ Committee and may also be seen at Website of the Ministry Of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OPCB/ Committee and may also be seen at Website of the Ministry Of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office.	Not Applicable.	Not Applicable.
xv	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by	Not Applicable.	Not Applicable.

	and the date of commencing the land development work.	the concerned authorities and the date of commencing the land development work.		
xvi	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
xvii	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions
xviii	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.
5.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
6.0	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.
7.0	The above conditions shall be enforced, inter-alia under the provisions of the Water	The above conditions shall be enforced, inter-alia under the provisions of the	The above conditions shall be enforced, inter-alia under the provisions of the Water	The above conditions shall be enforced, inter-alia under the

	(Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	(Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

21.0 The Committee recommended for trifurcation of environmental clearance granted earlier with the following matrix of responsibilities of implementation of EC conditions among the three companies.

A. Environment Clearance vide EC No. J-11011/155/2005-I A II (I) dated 05th August, 2005 :

Sl. No.	Environment Clearance Condition EC No. J-11011/155/2005-I A II (I), dated 05th August,2005	Parent Company M/s. Jindal Stainless Limited (JSL)	New Company -1 M/s. Jindal Coke Limited (JCL)	New Company -2 M/s. Jindal United Steel Limited (JUSL)
SPECIFIC CONDITION				
iv	The company shall install waste heat recovery boilers to recover the waste heat and generate power from the steam produced by the waste heat boilers.	The company shall install waste heat recovery boilers to recover the waste heat and generate power from the steam produced by the waste heat boilers.	Not Applicable.	Not Applicable.
v	The particulate emissions from the waste heat recovery boiler shall be controlled by installation of ESP and particulate emissions shall not exceed 50 mg/ Nm^3. Further, the company shall install bag filter to control the emissions from the blast furnace stove, blast furnace, lime plant, steel melting shop and ferro alloys plant. The blast furnace and SMS gas shall be routed through gas cleaning plant after cooling. The cooled and	The particulate emissions from the waste heat recovery boiler shall be controlled by installation of ESP and particulate emissions shall not exceed 50 mg/ Nm^3. Further, the company shall install bag filter to control the emissions from the blast furnace stove, blast furnace, lime plant, steel melting shop and ferro alloys plant. The blast furnace and SMS gas shall be routed through gas cleaning plant after cooling. The cooled and cleaned gas shall be burnt as a fuel for power generation. The exhaust gases shall be	Not Applicable.	Not Applicable.

	cleaned gas shall be burnt as a fuel for power generation. The exhaust gases shall be discharged through stacks of adequate height.	discharged through stacks of adequate height.		
vii	The company shall conduct TCLP test for the ferro chrome slag which shall be used for road construction. If the chromium concentration in the ferro chrome slag exceeds the prescribed standards, the waste shall be handled and disposed off in accordance with Hazardous Wastes (Management and Handling) Rules, 2003.	The company shall conduct TCLP test for the ferro chrome slag which shall be used for road construction. If the chromium concentration in the ferro chrome slag exceeds the prescribed standards, the waste shall be handled and disposed off in accordance with Hazardous Wastes (Management and Handling) Rules, 2003.	Not Applicable	Not Applicable

B. Environment Clearance vide. EC No. J-11011/281/2007-I A (II) I, dated. 1st November, 2007 :

Sl. No.	Environment Clearance Condition EC No. J-11011/281/2007-I A (II) I, dated 1st November,2007	Parent Company M/s. Jindal Stainless Limited (JSL)	New Company -1 M/s. Jindal Coke Limited (JCL)	New Company -2 M/s. Jindal United Steel Limited (JUSL)
SPECIFIC CONDITION				
i	The industry shall follow coke oven standards as per E(P)A Notification. VOCs from the coke oven shall be monitored and controlled as per CPCB guidelines.	Not Applicable	The industry shall follow coke oven standards as per E(P)A Notification. VOCs from the coke oven shall be monitored and controlled as per CPCB guidelines.	Not Applicable
ii	Electrostatic precipitator (ESP) shall be provided to Sinter Plant and gas cleaning plant (GCP) to blast furnace (BF) to control gaseous emissions from all the vents/ stacks within 50 mg/Nm^3. Bag filter shall be provided to BF, Lime Plant, Steel Melting Shop (SMS), Ferro-Alloy Plant etc. On-line continuous monitoring system shall be installed to monitor various pollutants and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB. Dust suppression system shall be installed at raw material handling areas, material transfer points and solid waste dumps to control fugitive emissions. Water sprinkling shall be done on	Electrostatic precipitator (ESP) shall be provided to Sinter Plant and gas cleaning plant (GCP) to blast furnace (BF) to control gaseous emissions from all the vents/ stacks within 50 mg/Nm^3. Bag filter shall be provided to BF, Lime Plant, Steel Melting Shop (SMS), Ferro-Alloy Plant etc. On-line continuous monitoring system shall be installed to monitor various pollutants and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB. Dust suppression system shall be installed at raw material handling areas, material transfer points and solid waste dumps to control fugitive	Bag filter shall be installed to control the emissions from the coal crusher section, charging fume car section, of Coke Oven Plant. On-line continuous monitoring system shall be installed to monitor various pollutants and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB. Dust suppression system shall be installed at raw material handling areas, material transfer points and solid waste dumps to control fugitive emissions. Water sprinkling shall be done on the roads to control fugitive emissions.	Bag Filter shall be installed to control the emissions from PFS. On-line continuous monitoring system shall be installed to monitor various pollutants and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB. Dust suppression system shall be installed at raw material handling areas, material transfer points and solid waste dumps to control fugitive emissions. Water sprinkling shall be done on the roads to control fugitive emissions.

	the roads to control fugitive emissions.	emissions. Water sprinkling shall be done on the roads to control fugitive emissions.		
iii	Total requirement of the water from Brahamani river shall not exceed 72, 696 m^3/day or 43.66 cusecs as per permission accorded by the Department of Water Resources, Govt. of Orissa. No ground water shall be used for the plant. All the treated waste water shall be recycled and reused in the process and 'Zero' discharge shall be strictly adopted as per direction of OPCB. Water from BF GCP shall be sent to a clarifier/thickener and overflow shall be used in Pig Casting Machine. Phenolic effluent from Coke oven complex shall be treated in the ETP of BOD Plant and recycled and reused for quenching of coke. Acidic/ alkaline effluent from DM water plant shall be neutralized and reused in the plant. Blow down from different sources shall be used for slag granulation. Backwash from Filtration plant shall be collected in sludge pond and over flow shall be used for dust suppression and irrigation of green belt. Ammonia, phenol and cyanide in the effluent should be treated. Cyanide shall meet the standard of 0.2 ppm. TDS in the effluent discharged shall not be more than 2100 mg/l. The domestic wastewater after treatment in STP shall be used for green belt development.	Total requirement of the water from Brahamani river shall not exceed 72, 696 m^3/day or 43.66 cusecs as per permission accorded by the Department of Water Resources, Govt. of Orissa. No ground water shall be used for the plant. All the treated waste water shall be recycled and reused in the process and 'Zero' discharge shall be strictly adopted as per direction of OPCB. Water from BF GCP shall be sent to a clarifier/thickener and overflow shall be used in Pig Casting Machine. Acidic/ alkaline effluent from DM water plant shall be neutralized and reused in the plant. Blow down from different sources shall be used for slag granulation. Backwash from Filtration plant shall be collected in sludge pond and over flow shall be used for dust suppression and irrigation of green belt. TDS in the effluent discharged shall not be more than 2100 mg/l. The domestic wastewater after treatment in STP shall be used for green belt development.	No ground water shall be used for the plant. All the treated waste water shall be recycled and reused in the process and 'Zero' discharge shall be strictly adopted as per direction of OPCB. Phenolic effluent from Coke oven complex shall be treated in the ETP of BOD Plant and recycled and reused for quenching of coke. Ammonia, phenol and cyanide in the effluent should be treated. Cyanide shall meet the standard of 0.2 ppm. TDS in the effluent discharged shall not be more than 2100 mg/l. The domestic wastewater after treatment in STP shall be used for green belt development.	No ground water shall be used for the plant. All the treated waste water shall be recycled and reused in the process and 'Zero' discharge shall be strictly adopted as per direction of OPCB. Effluent from Hot Strip Mill shall be treated in ETP and shall be reused. TDS in the effluent discharged shall not be more than 2100 mg/l. The domestic wastewater after treatment in STP shall be used for green belt development.
iv	Coke oven by-product effluent shall be treated as per notified standards and only treated effluents after meeting the norms shall be used for coke quenching. No fresh water shall be used for this purpose.	Not Applicable.	Coke oven by-product effluent shall be treated as per notified standards and only treated effluents after meeting the norms shall be used for coke quenching. No fresh water shall be used for this purpose.	Not Applicable.

v	Ground water monitoring around the solid waste disposal site/ secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.	Ground water monitoring around the solid waste disposal site/ secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.	Ground water monitoring around the solid waste disposal site/ secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.	Ground water monitoring around the solid waste disposal site/ secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.
vi	Solid waste shall be disposed off in secured landfill designed as per the specifications of the CPCB. Iron ore fines, mill scales, scales from slab caster, sinter plant dust, dust from gas cleaning plant, coke breeze, sludge from gas cleaning plant and blast furnace, sludge from thickener and dust from steel melting shop (SMS) shall be recycled and reused in sinter plant. SMS scrap shall be recycled in SMS. Scrap from different sources like slab caster stickle mill, DRAP line, CR slitting line, CRM etc. shall be recycled in Chromium plant. SMS slag shall be used for land filling. Ferro Manganese slag shall be used for Si-Mn production. Slag from Si-Mn plant (54000 TPA) and Fe-Cr plant shall be dumped.	Solid waste shall be disposed of in secured landfill designed as per the specifications of the CPCB. Iron ore fines, mill scales, scales from slab caster, sinter plant dust, dust from gas cleaning plant, coke breeze, sludge from gas cleaning plant and blast furnace, sludge from thickener and dust from steel melting shop (SMS) shall be recycled and reused in sinter plant. SMS scrap shall be recycled in SMS. Scrap from different sources like slab caster stickle mill, DRAP line, CR slitting line, CRM etc. shall be recycled in Chromium plant. SMS slag shall be used for land filling. Ferro Manganese slag shall be used for Si-Mn production. Slag from Si-Mn plant (54000 TPA) and Fe-Cr plant shall be dumped.	Solid waste shall be disposed of in secured landfill designed as per the specifications of the CPCB. Coke breeze from Coke Oven Plant shall be sold to the parent company (JSL) for recycling.	Solid waste shall be disposed of in secured landfill designed as per the specifications of the CPCB. Mill scales from Hot Strip Mill (HSM) shall be sold to the parent company (JSL) for recycling.
vii	Green belt shall be developed in 135 ha., out of total 526.09 ha. area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Green belt shall be developed in an area of 135 ha. out of total plant area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Green belt shall be developed within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Green belt shall be developed within and around the plant premises as per the CPCB guidelines in consultation with DFO.
viii	As proposed, modified wet quenching for 1st and 2nd coke oven batteries as per CPCB guidelines and dry quenching in 3rd and 4th batteries shall be adopted during the expansion.	Not Applicable.	As proposed, modified wet quenching for 1st Coke oven battery as per CPCB guidelines shall be adopted.	Not Applicable.
GENERAL CONDITIONS				
i	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution

	Board (OPCB) and the State Government.	Board (OPCB) and the State Government.	Board (OPCB) and the State Government.	Control Board (OPCB) and the State Government.
ii	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.
iii	The gaseous emissions from various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit. NO_x burners shall be installed to control NO_x levels.	The gaseous emissions from various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit. NO_x burners shall be installed to control NO_x levels.	The gaseous emissions from various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit. NOx burners shall be installed to control NOx Levels	The gaseous emissions from various process units shall conform to the load/ mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.
iv	At least four ambient air quality- monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar/ OPCB/ CPCB once in six months.	At least four ambient air qualities- monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar/ OPCB/ CPCB once in six months.	At least four ambient air qualities- monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar/ OPCB/ CPCB once in six months.	At least four ambient air qualities- monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar/ OPCB/ CPCB once in six months.

v	In-plant control measures for checking fugitive emissions from all the vulnerable sources like Coke oven area, Sinter Plant, Blast Furnace area etc. Further, specific measures like water sprinkling shall be carried out at the stock piles of raw material, stacker reclaimer, conveyor transfer points and vibrating screens etc. Dust extraction system and bag filters shall be provided to the sinter plant stock house, BF and Ferro-alloys handling area in steel melting shop etc. Fume extraction system in steel refining units shall also be provided. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed and height conforming to the standards for induction furnaces in the industry shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.	In-plant control measures for checking fugitive emissions from all the vulnerable sources like Sinter Plant, Blast Furnace area etc. Further, specific measures like water sprinkling shall be carried out at the stock piles of raw material, stacker reclaimer, conveyor transfer points and vibrating screens etc. Dust extraction system and bag filters shall be provided to the sinter plant stock house, BF and Ferro-alloys handling area in steel melting shop etc. Fume extraction system in steel refining units shall also be provided. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed and height conforming to the standards for induction furnaces in the industry shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.	In-plant control measures for checking fugitive emissions from all the vulnerable sources of Coke oven area, shall also be provided. De-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed and height conforming to the standards shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.	In-plant control measures for checking fugitive emissions from all the vulnerable sources of Hot Strip Mill area, shall also be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.
vi	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.
vii	The overall noise levels in and around the plant area shall be kept within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise	The overall noise levels in and around the plant area shall be kept within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all	The overall noise levels in and around the plant area shall be kept within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc.	The overall noise levels in and around the plant area shall be kept within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers,

	generation. The ambient noise levels should conform to the standards prescribed under EIA Rules, 1989 viz. 75 dBA (daytime) and 70 (dBA) night time.	sources of noise generation. The ambient noise levels should conform to the standards prescribed under EIA Rules, 1989 viz. 75 dBA (daytime) and 70 (dBA) night time.	on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EIA Rules, 1989 viz. 75 dBA (daytime) and 70 (dBA) night time.	enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EIA Rules, 1989 viz. 75 dBA (daytime) and 70 (dBA) night time.
viii	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
ix	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
x	Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.	Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.	Recommendations made in the CREP guidelines issued for the steel plants / Coke ovens shall be implemented.	Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.
xi	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report. Further, the company shall undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report. Further, the company shall undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report for Coke Oven Plant.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report for Hot Strip Mill.
xii	The project authorities shall utilize Rs. 46.00 Crores earmarked for the environment pollution control measures judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so	The project authorities shall utilize Rs. 36.00 Crores earmarked for the environment pollution control measures judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds	The project authorities shall utilize Rs. 6.00 Crores earmarked for the environment pollution control measures judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated	The project authorities shall utilize Rs. 4.00 Crores earmarked for the environment pollution control measures judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the

	provided shall not be diverted for other purpose.	so provided shall not be diverted for other purpose.	herein. The funds so provided shall not be diverted for other purpose.	conditions stipulated herein. The funds so provided shall not be diverted for other purpose.
xiii	The Regional Office of this Ministry at Bhubaneswar/ CPCB/ OPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The Regional Office of this Ministry at Bhubaneswar/ CPCB/ OPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The Regional Office of this Ministry at Bhubaneswar/ CPCB/ OPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The Regional Office of this Ministry at Bhubaneswar/ CPCB/ OPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.
xiv	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OPCB/ Committee and may also be seen at Website of the Ministry Of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OPCB/ Committee and may also be seen at Website of the Ministry Of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OPCB/ Committee and may also be seen at Website of the Ministry Of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OPCB/ Committee and may also be seen at Website of the Ministry Of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office.
xv	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
xvi	The Ministry may revoke or suspend the clearance, if implementation of any of the	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any

	above conditions is not satisfactory.			of the above conditions is not satisfactory.
xvii	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions
xviii	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.
5.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
6.0	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.
7.0	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public (Insurance) Liability Act,	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management &

	with their amendments and rules.	1991 along with their amendments and rules.	and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

28.29 Up gradation of Wet Iron Ore Grinding System to Beneficiation Circuit in existing 1.2 MTPA Iron Ore Pellet Plant located at Halavarthi Grampanchayat, Tehasil & District Koppal, Karnataka by M/s MSPL [Online Proposal No. IA/KA/IND/71698/2017; MoEFCC File No. J11011/383/2014.IA-II(I)] – Terms of Reference.

1.0 M/s MSPL made online application vide proposal no. **IA/KA/IND/71698/2017** dated **20th December 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. 2(b) Mineral beneficiation under category 'A' of the Schedule of EIA Notification, 2006 and the proposal is appraised at the Central Level.

2.0 M/s MSPL Limited (MSPL) has Proposed Upgradation of Wet Iron Ore Grinding System to Beneficiation Circuit. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 19th December 2017 vide Online Application No. IA/KA/IND/71698/2017.

3.0 The existing project was accorded environmental clearance vide F.N. J-11011/383/2014-IA.II (I) Dated: 23rd September 2016. Karnataka State Pollution Control Board has granted consent for operation, combined consent order no. combined consent order no. KSPCB/SEO/MINES/2010-11/673, Dated: 08.12.2010 and renewal by order No. AWH-301242 DTD. 20/10/2016 is VALID UP TO 30.06.2021.

4.0 The proposed Beneficiation Circuit will be linked with Operation 1.2 MTPA Pellet Plant located at Survey no. 2, 8, 9, 12 to 15, 132, 136 & part of 5, 6, 7, 16, 17 Village Halavarthi, District Koppal Karnataka.

5.0 The area required for the proposed Beneficiation Circuit is 200 m2 which is a part of 16.59 Ha. Total 45.73 Ha is in possession which is in Industrial Use. No forestland involved. The entire land has been acquired for the project. Of the total area 6.07 ha land is used for green belt development.

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

7.0 Total project cost is approx. 75 Crore rupees. Total manpower requirement after upgradation of the project will be 351.

8.0 Upgradation of Wet Iron Ore Grinding System to Beneficiation Circuit. The overall production of Pellet Plant will remain same i.e. 1.2 MTPA. The ore for the plant would be procured from Captive Iron Ore Mines located in Tahsil Sandur in Bellary District. In addition

to this Low Grade Iron Ore Fines will be procure from Market / E-Auction if required. The ore transportation will be done through Tarpaulin covered Trucks/ Dumper by road.

9.0 The power requirement for the proposed Modification and Pellet Plant is 15 MW and will be met by the Karnataka State Electricity Board sanctioned quota.

10.0 Proposed raw material for proposed upgradation is Low Grade Iron Ore Fines. The requirement of iron ore fines will be met from Captive Mines located in Tahsil Sandur in Bellary District. In addition to this Low Grade Iron Ore Fines will be procure from Market / E-Auction if required.

11.0 The water requirement for the pellet plant with fine ore beneficiation is 1594.06 m3/day. (66.5 m3/Hr) and it will be sourced from Tungabhadra Dam. Domestic waste water will be treated in Packaged Type STP. Installation of tailing filters is proposed in the circuit to recover the water for reuse.

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

13.0 It was informed that the instant proposal is to use low grade iron ore fines from captive mines and other mines for conservation of mineral and value addition as part of waste management.

14.0 EIA Consultant: Pollution & Ecology Control Services, Nagpur NABET No. : 112

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

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

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

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

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

v. The sufficient and suitable land shall be demarcated for the disposal of tailings.

28.30 Setting up of Cement grinding Plant (OPC, PSC AND PPC-6 MTPA) and Captive Power Plant (2x30 MW) located at Village Mora, Tehasil Choryasi, District Surat, Gujarat of M/s ABG Energy Gujarat Limited [Online Proposal No. IA/GJ/IND/19839/2009; MoEFCC File No. J-11011/583/2008-IA.II(I)]- Extension of validity of Environmental Clearance.

1.0 M/s ABG Energy Gujarat Limited made online application vide **IA/GJ/IND/19839/2009 dated 11th November 2017 seeking extension of validity of EC granted vide File No. J-11011/583/2008-IA.II(I) on 7th July 2009.**

2.0 The chronology submitted by PP is

Sr. No.	Activity	Date
1.	EC application	20th October 2008
2.	TOR presentation	6th to 8th January 2009
3.	TOR issued	27th January 2009 , File No. J-11011/853/2008-IA.II (I)
4.	Public hearing	7th May 2009
5.	Final EIA report submission	12th May 2009
6.	EC presentation	16th June 2009
7.	EC Letter	7th July 2009 File No. J-11011/853/2008-IA.II (I)
8.	Application for EC Split	4th August 2009
9.	EC of separate power plant issued	22nd Nov 2010 File No. J-11011/853/2008-IA.II (I)
10.	1st EC Extension Application for CPP in Thermal committee	5th October 2017
11	EC Extension Meeting for CPP at Thermal Committee	26th October 2017
12	Minutes of Thermal committee held on 26/10/2017.	Committee noted that the proposal for setting up of cement grinding unit and 2x30 MW have been dealt by EAC (Industry) and the EC has been granted by the Industry division of the Ministry. Though the separate EC has been issued by the Industry division for Captive Power Plant, it appears that the EIA studies have been carried out while granting combined EC. Committee felt that it is appropriate that the validity of extension of the said EC may be dealt by Industry-I Sector of IA Division and accordingly, the proposal is returned.
13	2nd EC Extension Application for CPP in Thermal committee	11th November 2017
14	Compliance status of the EC from the Regional Office of MoEF&CC	Under process
15	Amendment required. (In case of amendment)	Not required

3.0 The progress reported as on date is as follows:

Sr. No.	Activity	% Completion
1	Boiler I Internal & External hydro test completed	100
2	Boiler I Refractory application 87MT completed out of 160MT	52
3	Boiler I ID,SA & PA Fan erection & half grouting work completed	
a	ID Fan 02nos Erection work completed, alignment work is pending	80

b	SA&PA Fan bottom casing erection work completed	100
4	Main steam piping up to Common Steam header work	90
5	Feed Piping from Boiler feed pump outlet to Boiler I inlet	80
6	ESP I Inlet & outlet funnel with GD Screen erection is completed, Collecting electrode erection & alignment work is completed ,Overall ESP I erection	90
7	Boiler II Pressure parts 90% erection is completed	100
	# Down comer link erection & fitment work is pending.	60
8	ESP II Inlet & outlet funnel with GD Screen erection	100
9	TG Deck I & II Civil work is Completed	100
10	Turbine I packer plate grouting work completed	100
11	Electrical HT panel erection & VFD panel erection completed	100
12	DCS & all instrument Panel s erection work is completed	100
13	Cable cellar tray erection work	90
14	Dearator Storage tank , Dearator erection & welding work completed	100
15	Chimney RCC wall completed up to 31.0Mtr height	35

4.0 The proposal was placed in the agenda of the 26th meeting held during 11th to 13th December 2017. However, the PP did not attend the meeting.

5.0 After detailed deliberations, the Committee observed that the EC validity was expired for the power plant which was not installed till date. Therefore, the Committee rejected the proposal for extension of validity of Environmental Clearance of the power plant.

ANNEXURE –I

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

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

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

4. Site Details

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

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

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

6. **Environmental Status**

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

7. Impact Assessment and Environment Management Plan

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

of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

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

vi. Measures for fugitive emission control

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

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

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

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

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

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

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

8. Occupational health

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

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

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

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

9. Corporate Environment Policy

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. 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).

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

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.

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

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

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

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

ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCBshall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

****

ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

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

--

ADDITIONAL ToRS FOR PELLET PLANT

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

–

ADDITIONAL ToRs FOR CEMENT INDUSTRY

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

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

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

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

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

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

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

****

LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

--

COKE OVEN PLANT

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

5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.

--

ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

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

--

INDUCTION/ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE

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

--

METALLURGICAL INDUSTRY (FERROUS AND NON-FERROUS)

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

--

Executive Summary

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

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

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

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

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

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

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

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

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

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

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

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

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

xiii. CSR plan with proposed expenditure.

xiv. Occupational Health Measures

xv. Post project monitoring plan

LIST OF PARTICIPANTS OF EAC (I) IN 28TH MEETING OF EAC (INDUSTRY-I) HELD ON 05TH TO 07TH FEBRUARY 2018

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

****