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

Summary record of the thirteenth (13th) meeting of re-constituted expert appraisal committee held during 27-29th November, 2019 for environmental appraisal of Industry-I sector projects constituted under the provisions of Environmental Impact Assessment (EIA) notification, 2006.

The thirteenth meeting of the Expert Appraisal Committee (EAC) for Industry-1 Sector constituted as per the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-1 Sector Projects was held during 27-29th November, 2019 in the Ministry of Environment, Forest and Climate Change. The list of participants is annexed.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim. The minutes of 12h meeting held during 21-23rd October, 2019 were confirmed by the EAC as already uploaded on PARIVESH. However, the following corrections have been made on the uploaded minutes with respect to item no. 12.17 and 12.18 as below:

<table>
<tr><th>S. No.</th><th>For</th><th>Read as</th></tr>
<tr><td>1</td><td>Agenda Item No.: 12.17, Para 12.17.2</td><td>The Project Proponent submitted reply to the Additional Details Sought on 03.10.2019 .and the replies are given below:
<table>
<tr><th>S. No.</th><th>Additional Details Sought</th><th>Reply</th></tr>
<tr><td>1</td><td>Explore the possibility for recycling the effluents and prepare action plan for using the same in the plant in accordance with the requirement of Notification, S.O. 3086 7th October, 2016.Explore the possibility for recycling the effluents.</td><td>As per committee’s suggestion, after expansion, freshwater requirement has been further reduced from 4135 KLD to 4050 KLD (20.25 kl/ton of paper) against the CPCB Charter standard of 25 kl/ton of paper.
Fresh water requirement for existing 100 TPD kraft paper was 2430 KLD (24.3 kl/tonne of paper) whereas after expansion to 200 TPD, the freshwater requirement will be 4050 KLD (20.25 kl/tonne of paper). Hence, overall reduction in freshwater requirement i.e. 4.05 kl per ton of paper.
In compliance to above notification, after expansion company will treat 3476 KLPD of effluent in ETP and will be using 285 KLPD within plant premises and remaining 3191 KLPD will be used for irrigation in nearby villages agricultural land for which irrigation network has already been proposed.
Request: During NO NEED period</td></tr>
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S. No.	For	Read as		
				(such as, monsoon / crop pattern / no need by farmers), the company should be allowed to discharge treated wastewater into adjacent Bakshi drain conforming to EP Act for land discharge.
		2.	No additional groundwater abstraction is allowed. It is required to explore the possibility for using surface water and water from rainwater harvesting and storage and other surface sources.	Existing freshwater requirement for 100 TPD kraft paper is 2430 KLPD and additional freshwater requirement for proposed 100 TPD is 1620 KLPD. So, total freshwater requirement after expansion is 4050 KLPD. CGWA permission has already been obtained vide letter no. CGWA/NOC/IND/ORIG/2019/5380 and valid from 22.05.2019 to 21.5.2021 and the company is/will be complying all the terms and conditions. The company tried to explore the possibility of using surface water and approached the concerned department for permission of water withdrawal from river Garrah. They expressed their inability for permission due to non-availability of water in the river. Regarding rainwater harvesting, the company has proposed for collection of rainwater, roof top water in storage ponds, reservoir and use the collected water as fresh water for various requirements within industry.
		3	The estimated emissions from recovery boiler and power plant shall be revisited	Unit I is not proposing chemical recovery boiler as well as power plant. Both will be installed in Unit II as a part of expansion. So, this point is not applicable.
		4	As the usage of pet coke is not permitted, alternative plan should be submitted.	Unit I is not proposing pet coke usage. So, this point is not applicable.
		5	Certified Compliance	KR Pulp and Papers Limited (Unit I) is operational based on NOC and

<table>
<tr><th>S. No.</th><th>For</th><th colspan="3">Read as</th></tr>
<tr><td></td><td></td><td></td><td>report of existing EC from Regional Office, MoEF&CC shall be furnished.</td><td>Consent to Operate obtained from Uttar Pradesh Pollution Control Board. CTO (water and air) conditions has been certified by Regional Officer, UPPCB, Bareilly and visit was conducted on 21.1.2019. The certified CTO compliance has been obtained.</td></tr>
<tr><td>2</td><td>Agenda Item No.: 12.18, Para 12.18.2</td><td colspan="3">The Project Proponent submitted reply to the Additional Details Sought on 03.10.2019 .and the replies are given below:
<table>
<tr><th>S. No.</th><th>Additional Details Sought</th><th>Reply</th></tr>
<tr><td>1</td><td>Explore the possibility for recycling the effluents and prepare action plan for using the same in the plant in accordance with the requirement of Notification, S.O. 3086 7th October, 2016.Explore the possibility for recycling the effluents.</td><td>As per committee’s suggestion, freshwater requirement after expansion has been further reduced from 16560 to 15890 KL/D (39.70 KL/ton of paper) against the CPCB Charter standard of 50 KL/ton.
EC was obtained in 2009 for existing 200 TPD writing and printing paper and freshwater requirement was 16560 KLPD i.e. 82.8 m3/ton of paper whereas the company explored possibilities of internal reuse and recycle and brought down the usage to 9940 KLPD i.e. 49.7 m3/ton of paper. Now, the company is proposing expansion from 200 to 400 KLPD and total freshwater requirement per ton of paper is 15890 KLPD (39.7 m3/ton) from existing 49.7 m^3/ton of paper. Hence, overall reduction in freshwater requirement i.e. 10 KL per ton of paper after expansion.
In compliance to above notification, after expansion company will be used internally within process 2010 KLPD whereas 13000 KLPD will be treated in ETP and used for irrigation in nearby villages for which irrigation network has already been proposed
Request- During NO NEED period (such as, monsoon / crop pattern / no need by farmers), the company should be allowed to discharge treated wastewater into adjacent Bakshi drain conforming to EP Act for land discharge.</td></tr>
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S. No.	For	Read as		
		2.	No additional groundwater abstraction is allowed. It is required to explore the possibility for using surface water and water from rainwater harvesting and storage and other surface sources.	The company has reduced the water consumption from 16560 to 9940 KLD for current operation (i.e. 49.7 KL/ton) since the last EC obtained in 2009 by installation of Anaerobic Treatment System, imported from Netherland, the pioneer country in wastewater treatment. Additional water requirement for proposed 200 TPD is 5950 KLPD (29.75 m3/ton of paper). So, total freshwater requirement after expansion will be 15890 KLPD (39.7 m3/ton of paper). The CGWA permission for ground water withdrawal has already been obtained vide letter no. CGWA/NOC/IND/REN/2/2019/5562 and validity is from 22/05/2018 to 20/05/2023 and the permission has been obtained after compliance of all the terms and conditions only. Regarding surface water possibility, the company tried to explore and approached the concerned department for permission of water withdrawal from River Garrah. They expressed their inability for permission due to non-availability of water in the river. Regarding rainwater harvesting, the company has already made provisions for collection of rain water, roof top water in storage ponds, reservoir and uses the collected water as fresh water for various requirements within industry.
		3.	The estimated emissions from recovery boiler and power plant shall be revisited	Revised estimated emissions for co-generation power plant and chemical recovery boiler are submitted.
		4.	As the usage of pet coke is not permitted, alternative	The Company has proposed pet coke usage only in lime kiln. Pet coke is permitted for use in LIME KILN. (Vide Notification No. G.S.R. 45€ dated 19.1.2018 and Supreme Court orders dated

S. No.	For	Read as		
			plan should be submitted.	13.12.2017).
		5.	Certified Compliance report of existing EC from Regional Office, MoEF&CC shall be furnished.	Certified EC compliance report has been obtained by MoEFCC, Regional Office-Lucknow vide letter no. IV/ENV/UP/IND-120/305/2009/106 dated 24.09.2019. The site visit was conducted on 9.9.2019.

27th November, 2019

13.1 Proposed installation of two induction furnace of 12 MT each to produce 86,400 TPA MS Ingots/Billets in existing plant premises by **M/s. Aditya Industries** located at Village- Rampur Jattan, Nahan Road, Tehsil Kala Amb Tehsil, District Sirmour, **Himachal Pradesh**- [Online Proposal No. **IA/HP/IND/122447/2018**, File No. J-**11011/201/2016-IAII(I)**] **– Environment Clearance - regarding.**

13.1.1 M/s. Aditya Industries has made an online application vide proposal no. IA/HP/IND/122447/2018 dated 21st October 2019 along with copies of EIA/EMP report and Form – 2 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 and Non-ferrous) under Category "B" EIA Notification, 2006. However, due to the applicability of general condition i.e., interstate boundary of Haryana and Himachal Pradesh, the project is being appraised at the Central level as Category 'A'.

Details Submitted by the Project Proponent:

13.1.2 The application of M/s Aditya Industries located in Trilokpur Road, Kala Amb, Village Rampur Jattan, Tehsil Nahan, Distt. Sirmaur, Himachal Pradesh was initially received in the Ministry on 5th May' 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 6th meeting held on 30th May to 1st June 2016 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 11th August' 2016 vide F.No. J-11011/201/2016-IA-II(I).

13.1.3 Based on the ToR prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 19th October 2019 vide Online Application No IA/HP/IND/122447/2018 acknowledgement slip was generated on 08.11.19.

13.1.4 The project of M/s Aditya industries located in Trilokpur Road, Kala Amb, village Rampur Jatan, Tehsil Nahan and Dist. Sirmaur. Himachal Pradesh State is for

Capacity Enhancement of Billets Production from 21600 MTPA to 86400 MTPA by addition of Two Induction Furnace of 12 MT each and Rolled products from 36000 MTPA to 103680 MTPA. The office Memorandum issued by Ministry of Environment and Forests, Government of India dated 24th December 2013, states that the nontoxic secondary metallurgical processing industries involving operation of furnaces only, such as induction and electric arc furnaces, submerged arc furnaces and cupola with capacity <30,000 MTPA doesn't come under the purview of EIA. Hence, EC compliance was not required from Regional Office, MoEF&CC.

13.1.5 The total land required for the project is 1.69 ha, out of which 0 ha is an agricultural land, 0 ha is grazing land and 1.69 ha is others/Private land (0 ha. Government Land). No forestland involved. The entire land has been acquired for the project. It has been reported that no water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

13.1.6 The topography of the area is mainly plain and reported to lie between 30°30'34.18"N to 30°30'37.83"N Latitude and 77°13'2.52"E to 77°13'7.77"E Longitude in Survey of India topo sheet No. H43L2, H43L3 at an elevation of 350m AMSL. The ground water table reported to ranges between 3.76 to 43.98 meter below the land surface during the pre-monsoon season and 2.98 to 37.35meter below the land surface during the post-monsoon season.

13.1.7 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. No Schedule-I species is found in the 10 km radius of the project site.

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

13.1.9 The targeted production capacity of the Billets/Ingots is 288 TPD and MS rolled product is 345 TPD. MS Scrap, Ferro Alloys & MS Billets will be used as basic raw material to manufacture TMT Bar, Girder & Angels. Raw materials will be purchased from open market and transported to site through trucks.

13.1.10 The total fresh water requirement of the project is estimated as 28m^3/day, which will be sourced from the DIC (Industries Department, and Govt. of Himachal Pradesh). Permission is granted by Industrial Area Development Agency, Kala-Amb, Distt-Sirmaur (HP) vide letter No.1101 dated 01/11/2018.

13.1.11 The permission has been obtained from Himachal Pradesh State Electricity Board (HPSEB). In case of Power failure DG set of 325 KVA Capacity would be used.

13.1.12 Baseline Environmental data of steel project M/s J.B Rolling mills, was used (study period Dec'15 to Feb'16) additional one-month study was conducted for June 2016 & from 15th Dec'18 to 16th Jan'19. Ambient air quality monitoring has been carried out at ten locations. PM_{10} value observed were: during 1st December 2015 to 29th February 2016 was 58.10µg/m^3 to 88.70µg/m^3, for June 2016, 43.18 to 87.54 µg/m^3 and 63.71 to 89.31 µg/m^3 during 16th December 2018 to 15th January 2019, $PM_{2.5}$

(21.41 to 48.58µg/m^3) during 1st December 2015 to 29th February 2016, 21.41 to 48.58µg/m^3 during June 2016 and 28.84 to 46.73 µg/m^3 from15th Dec 2018 to 16th Jan 2019, SO_2 values observed during 1st December'15 to 29th February 2016 were 4.10 to 19.90 µg/m^3, during June 2016 values observed were 7.63 to 31.67 µg/m^3 and 8.94 to 20.75 µg/m^3 during 15th December 2018 to 16th Jan 2019 and NOx values observed during 1st December 2015 to 29th February 2016 were 17.50 to 29.80 µg/m^3), during June 2016 values observed were 6.59 to 29.66µg/m^3 and 16.31 to 32.12 µg/m3 15th Dec 2018 to 16th Jan 2019. The results of the modeling study indicate that the maximum increase of GLC for the proposed project is just 2.35287µg/m^3 with respect to the PM_{10}.

13.1.13 Ground water quality has been monitored in eight locations in the study area during 1st Dec 2015 to 28th Feb 2016 and analyzed. pH: 7.15 to 8.55, Total Hardness: 21 to 612 mg/l, Chlorides: 10 to 120 mg/l, Fluoride: BDL (<0.1) mg/l. Heavy metals are within the limits. During June'16 pH:7.13-8.49, Chlorides:12-121 mg/L, Fluoride BDL (<0.1)mg/L During additional one month study from 16th Dec, 2018 to 15th Jan, 2019 parameters such as pH:7.14-8.77, Total Hardness: 59-596 mg/L, Chlorides: 16.44–110.14 mg/L, Fluoride: BDL(<0.1) mg/l. Heavy metals are also within the limits.

13.1.14 Surface water samples were analyzed from eight locations during 1st Dec 2015 to 28th Feb 2016. pH: 7.52 to 8.2; DO: 10.2 to 10.8 mg/l and BOD: 0.7 to 3.4mg/l, COD:4 to 4.5mg/l, during June'16 pH:7.10 to 7.61, D.O:5.8 to 5.9 mg/l and BOD:<3 to 4.98 mg/l, COD:8.3 to 37.3 mg/land during additional one month study from 16th Dec, 2018 to 15th Jan, 2019 parameters were found as pH: 7.05 to 7.42, DO: 5.5 to 5.8 and BOD: <2 to 4.30 mg/l, COD: 6.45 to 32.27 mg/l.

13.1.15 Noise levels during monitoring period from 1st Dec, 2015 to 28th Feb, 2016 are in the range of 47.52 to 65.27 dB(A)during daytime and 42.18 to 54.85 dB(A)during nighttime, During June'2016 values observed were 48.40- 58.60 at day time and 41.80-50.20 at Night time & during additional one month study from 16th Dec, 2018 to 15th Jan, 2019 are in the range of 47.18 – 65.25dB (A) at day time and 43.69 - 54.88 dB (A) at night time.

13.1.16 No R&R is involved. It has been envisaged that no families to be rehabilitated.

13.1.17 It has been reported that a total of 17 TPD of Slag, 9 TPD of Mill Scale and 1 TPD of APCD dust will be generated due to the project, out of which mill scale waste will be sold to the market, slag after metal extraction will be sent to paver block industry for interlock block making. APCD waste will be sent to TSDF site for proper disposal. It has been envisaged that an area of 0.57ha. 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.

13.1.18 It has been reported that the Consent to Operate from the Himachal Pradesh State Pollution Control Board obtained vide Certificate No. HSPCB/PCB-ID12767/2070-72 dated 09/08/2018. This consent is valid up to 31/03/2021.

13.1.19 The Public hearing of the project was held on 19.06.2018 at Project site under the chairmanship of District Collector, Sirmaur District for production of86400MTPAof

Billets/Ingots and 103680 MTPA of MS rolled products (TMT Bar, Girders& Angels *etc*). The issues raised during public hearing are employment, pollution control and Providing Health Facility. The issues raised during public hearing and response of the project proponent with action plan are tabulated below:

Issues Raised	**Commitment**	**Budgetary provision**
The project proponent will have to ensure that the water used in the company is fully recycled and sound insulator should be installed in D.G set.	The company manager said that they will run pollution control instruments continuously and they will be repaired from time to time.	They will provide the air pollution control devices based on latest technology, DG set will be having acoustic enclosure and the cooling water will be recycled 100%.
Company is not managing the vehicle parking in right way. The company's vehicles are parked on the outskirts of the company, so the people around them have trouble. Apart from this, the waste water is discharged by the company in the fields. The company will have to ensure that this messy water should get discharged in P.W.D. drain.	It was told by the management that no waste water will be discharged by the company and the waste water will be recycled. The water will be used by the company to cool the furnaces only. The assurance was given by the company management that their vehicles will not cause any problem to the local people living around.	The project proponent/ representative of unit assured that they will park their vehicles within their premises and cooling water will be recycled 100%.
The villagers requested the company to provide the Ambulance service to the local peoples.	The project proponent also has assured that they will provide the company's ambulance to local peoples during emergency.	Rs. 1.5 **Lakhs** allotted by PP for Healthcare under CER Budget.
Company shall plant more trees to control the pollution.	The Project proponent has planted 720 nos. of plants in the plant area, also assured that they will plant more trees in the area to control pollution.	Rs. 15 Lakhs of Greenbelt development allotted under EMP budget.

13.1.20 An amount of Rs. 11.50 lakhs (1% of expansion Project cost) has been earmarked for Corporate Enterprises Responsibility based on public hearing issues. The details of CER proposed are as follows:

S.No.	Description	Amount to be spent		Total (Rs.in Lakhs)
		First Year	Second Year	
1	Employment (Vocational Training for Skill development for self-employment like Sewing, Pickle making, Craft for youth of nearby villages)	2.00	1.50	3.50
2	Health Camp (Health, Eye etc. check up camp will be organized for villagers)	1.00	0.50	1.50
3	Educational Facility (Distribution of School dress, books, Furniture, water cooler etc.)	2.00	1.50	3.50
4	Community Development (Rain water harvesting structure & maintenance of street light)	2.00	1.00	3.00
	Total	7.00	4.50	11.50

13.1.21 The capital cost of the project is Rs.11,46.31 Lakh (including capacity enhancement) and the capital cost for environmental protection measures is proposed as Rs 224.5 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 66.5 Lakhs. The detailed CER plan has been provided in the EIA report in its page No. 194 in chapter 8. The employment generation from the proposed project / capacity enhancement is 210. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental management is as follows:

S.No.	Particulars	Capital Cost (in lacs)	Recurring Cost per annum (in lacs)
1.	Air Pollution Control Devices (Bag Filters, online continuous emission monitoring system etc.)	150	30
2.	Water Pollution Control Measures	40	10
3.	Noise Pollution Control Measures	20	05
4.	Environment Monitoring and Management	0	10
5.	Occupational Health	0	06
6.	Green Belt Development	4.5	1.5
7.	Rain Water Harvesting	10	04
Total		**224.5**	**66.5**

13.1.22 Rs 15.00 Lakhs shall be earmarked for green belt development as an activity for EMP. This will be done in consultation with Forest Department as well as with the concerned village Panchayat.

13.1.23 Greenbelt will be developed in 0.57 Ha which is about 33 % of the total acquired area. A 10m 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 2000 trees per hectare. Total no. of 2040 saplings will be planted and nurtured in 0.57 hectares in 5 years of which 720 no. of plants have already been planted.

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

13.1.25 **Consultant:** Shivalik Solid Waste Management Limited, 1st Floor, SCO 20-21, Near Hotel Dolphin, Baltana, Zirakpur, Punjab 140604, Certificate No. NABET/EIA/1922/RA 0128, Sr. No. 140, Rev. 78, Oct 15, 2019.

Observations of the Committee:

13.1.26 The project is located within 10 km from interstate boundary of Haryana and Himachal Pradesh States. Though the project activity is covered under Category- B, due to the applicability of general condition in the EIA Notification, 2006, the project is appraised at central level as Category –A.

Recommendations of the Committee:

13.1.27 In view of the forgoing and after detailed deliberations, the committee recommended the project for grant of Environmental Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 for induction furnaces and rolling mills.

i. Minimum 10 m wide green belt shall be developed around the boundary of the factory. The total green belt area shall not be less than 33% of the total area.
ii. PP shall adopt hot charging practices. Only in case of emergency re-heating furnace shall be used with Furnace Oil as fuel.
iii. No coal usage shall be permitted in the reheating furnace.
iv. Monitorable ground water recharge system shall be adopted and the amount of rain water recharged shall be more than the water consumed annually.
v. Zero liquid recharge shall be adopted.
vi. Particulate matter emission from the stacks shall be less than 30mg/Nm^3.
vii. Check dam shall be constructed on the drains emerging from the plant and leading to the rivulets.
viii. CER of Rs.11.5 lakhs shall be spent in two years.
ix. Dedicated Environment Management Cell shall be set up.

13.2 Expansion of Total Production Capacity and augmentation of integrating melting and rolling facility (from 54,000 TPA to 92,500 TPA) **by M/s. Kundlas Loh Udyog Ltd** located at Village Balyana, Post Barotiwala, Tehsil Baddi, **District Solan, Himachal Pradesh**- [Proposal No. IA/HP/IND/65822/2017, MoEF&CC File No. J-11011/350/2017-IA.II(I)] **– Re-consideration for Environment Clearance based on ADS reply - regarding.**

13.2.1 The project was considered in the 7th meeting of Re-constituted EAC (Industry – 1) held on 30thMay'2019 at item no. 7.15. There were certain observations made by the EAC on the proposed Project. The relevant minutes are given below:

M/s. Kundlas Loh Udyog has made an online application vide proposal no. IA/HP/IND/87362/2017 dated 6th February, 2019 along with copies of EIA/EMP report and Form – 2 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 and Non-ferrous) under Category "B" EIA Notification, 2006. However, due to the applicability of general condition i.e., interstate boundary of Haryana and Himachal Pradesh at distance of 3.16 Km in west direction, the project is being appraised at the Central level as Category 'A'.

Proceedings of the meeting held on 29-31st May, 2019

The application of M/s. Kundlas Loh Udyog located at Vill. Baliana, Tehsil Baddi, Distt. Solan, Himachal Pradesh was initially received in the Ministry on 30th June 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 20th meeting on 10th to 12th July, 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 19th September 2017 vide F.No. J-11011/350/2017-IA-II(I).

Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 6th February, 2019 vide Online Application No. IA/HP/IND/87362/2017.

The project of M/s Kundlas Loh Udyog located at Vill. Baliana, Tehsil Baddi, Distt. Solan, Himachal Pradesh State is for expansion and augmentation of melting and rolling facility from 54000 TPA to 92500 TPA and replacement of existing Induction Furnace having 6 MT/heat capacity with 12 MT/heat capacity and addition of one more Induction furnace having 12 MT/heat capacity. Total capacity of two Induction furnaces proposed is 24 MT/heat.

The total land required for the project is 0.779 ha., out of which 0 ha is an agricultural land, 0 ha is grazing land and 0.779 ha. is others/Private land (0 ha. Government Land). No forest land involved. The entire land has been acquired for the project. It has been reported that no water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

The topography of the area is mainly plain and reported to lies between 30054'56.380"N to 30055'0.789"N Latitude and 76049'58.503''E to 76050'04.130''E Longitude in Survey of India topo sheet No. H43K13 at an elevation of 448 m AMSL. The ground water table reported to ranges between 3.02 to 27.57 meter below the land surface during the post-monsoon season and 5.01 to 28.76 meter below the land surface during the pre-monsoon season.

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. No Schedule-I species is found in the 10 km radius of the project site.

The targeted production capacity of the Billets/Ingots is 288 TPD and MS rolled product is 280 TPD. MS Scrap, Ferro Alloys & MS Billets will be used as basic raw material to manufacture TMT Bar, Garter & Angels. Raw materials will be purchased from open market and transported to site through trucks.

The total fresh water requirement of the project is estimated as 65 m3/day, which will be sourced from the Borewell. Water requirement will be met through HP Ground Water Authority, Govt. of Himachal Pradesh). Application submitted on dated 31.05.2017.

The power requirement of the project is estimated to be 11000 KVA; the permission has been obtained from the Himachal Pradesh State Electricity Board (HPSEB).

Baseline Environmental Studies were carried out during Post-Monsoon season. Ambient air quality monitoring at 8 locations during 1st October, 2017 to 31st December, 2017 indicated: PM_{10} (60.59 µg/m^3 to 87.57 µg/m^3), $PM_{2.5}$ (30.02 to 58.93 µg/m^3), SO_2 (6.25 to 16.15 µg/m^3) and NOx (17.55 to 33.34 µg/m^3). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is just 1.23 µg/m^3 with respect to the PM_{10}.

Ground water quality has been monitored in 8 locations in the study area and analyzed. pH: 7.41 to 7.84, Total Hardness: 190.87 to 239.81 mg/L, Chlorides: 25.48 to 33.98 mg/L, Fluoride: 0.27 to 0.78 mg/L. Heavy metals are within the limits. Surface water samples were analyzed from 8 locations. pH: 7.7 to 7.85; DO: 4.5 to 6.5 mg/L and BOD: 3.28 to 28.07 mg/l, COD: 20.74 to 116.14 mg/L.

Noise levels are in the range of 58.3 to 65.03 dB(A) for day time and 50.61 to 58.4 dB(A) for night time.

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

It has been reported that a total of 21 MTPD of Slag, 11 MTPD of Mill Scale and 0.8 MTPD of APCD dust will be generated due to the project, out of which mill scale waste will be sold to the market, slag will send to paver industry for interlock block making after metal extraction and APCD waste will be send to TSDF site for proper disposal. Zinc metal recovery from APCD dust is under consideration for implementation. It has been envisaged that an area of 0.257 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.

It has been reported that the Consent to Operate from the Himachal Pradesh State Pollution Control Board obtained vide Certificate No. HSPCB/PCB-ID15312/8069-71 dated 23/09/2018 and consent is valid up to 31/03/2021.

The Public hearing of the project was held on 04.07.2018 at Project site under the chairmanship of ADM, Solan District for production of 288 TPD of Billets and 280 TPD of MS rolled products (TMT Bar, Girders & Angels etc). The issues raised during public hearing are employment, pollution control and Providing Health Facility. The issues raised during public hearing and response of the project proponent with action plan are tabulated below:

S. No	Name of the person	Issues raised	Action Plan		
			Commitment	**Time Frame**	**Budget**
1	Sh. Balbir Thakur Block Chairman Doon Distt. Solan	Smoke emission from these kinds of iron and steel units. emphasized upon further improvisation in the air pollution control devices	Smoke generated from induction furnace shall be passed through Air pollution control devices to prevent any adverse impact on the environment; he informed that pulse jet bag filter is proposed as APCD, its efficiency 99.9%. APCD dust having some concentration of Zinc and same will be sold to authorized recycler for zinc recovery. Monitoring and analysis of smoke emission will be done regularly.	Implemented parallel with implementation of the proposed project.	**Rs. 40 Lakhs** is earmarked for APCD and Rs. 4 Lakhs/ annum as recurring cost
2	Dr. R N Thakur Deputy Director Agriculture, Distt. Solan	He said that Soil texture analysis, Bulk density etc. has been got analyzed from which laboratory? He also asked the consultant regarding the source of topographical features mentioned in the EIA Report	The analysis has been done by Shivalik Solid Waste Management laboratory at Nalagarh which is NABL Accredited and MoEF&CC recognized Laboratory. Representative of Kundlas Loh udyog informed that the requisite data was procured from the geological survey of India,	-----	-----

S. No	Name of the person	Issues raised	Action Plan		
			Commitment	**Time Frame**	**Budget**
			Chandigarh and satellite image obtained from Hyderabad.		
3	Dr. Sobnath, Department of Fisheries, Distt. Solan	He asked consultant regarding the provision for the treatment for Liquid and solid waste to be generated from expansion activities and its impact on the local rivers and other water bodies.	No liquid waste generated from the process as whole water shall be recirculated in closed loop. Proper treatment of domestic waste water will be done which will be treated in STP (8 KLD) and used within the premises for plantation. As far as solid waste is concerned there will be two types of solid waste. i.e. Slag (Non-Hazardous) and APCD dust (Hazardous). The crushed slag after extraction of metallic contents and in combination with other constituent materials shall be used for pebbles manufacturing and APCD dust shall be disposed to TSDF facility.	Implemented parallel with implementation of the proposed project. --- 	**Rs. 4 Lakhs** is earmarked for STP and Rs. 1 Lakhs/ annum as recurring cost Rs. 1.00 Lakhs is earmarked in EMP Budget
4	h. Ramesh Verma, Joint Director, Deptt. Of Industries,	Clarification regarding the enhanced power load and proposed production	Power load enhanced from 4210.53 KVA to 11000 KVA and permission obtained from	------	-------

S. No	Name of the person	Issues raised	Action Plan		
			Commitment	**Time Frame**	**Budget**
	Baddi	capacities. Er. A. K Sarda advised the project proponent to apply and obtained all requisite permission after obtaining Environment Clearance	HPSEB. The existing production capacity is 54000 MTPA (rolled product) but unit being operated with a single induction furnace with capacity 20000 MTPA (billets) which will be enhanced to 92000 MTPA (billets and rolled products)		
5	Sh. Vivek Chandel, ADM cum Chairman	The chairman raised the issue regarding plantation done under Pollution Abating Plantation Abhiyan "PAPA" Within and outside the premises, He advised the project proponent to plant more trees which finally result into a model green buffer around the unit. HE also asked about the mechanism for use of slag in brick manufacturing	Project proponent informed that 150 nos. plants were planted under Pollution Abating Plantation Abhiyan "PAPA" and assured that more plant will be carried out. 33 % of the total plant area will be developed as a Greenbelt. Greenbelt development programme also organized in nearby village's school and gram panchayat land. The brick manufacturing shall be executed after adopting the technology approved and	6 months 8-10 months Implemented parallel with implementation of the proposed project.	Rs. 2.50 Lakhs is earmarked in EMP Budget Rs. 4.00 Lakhs is earmarked in CER Budget Rs. 3.00 Lakhs is earmarked in EMP Budget

S. No	Name of the person	Issues raised	Action Plan		
			Commitment	**Time Frame**	**Budget**
		and to ensure procedure to be adopted its use by brick kiln industries. He also raised the issue regarding Rain Water Harvesting to be implemented by the project proponent	permitted by State Pollution Control Board. Approx. 3610.47 m^3/year will be harvested inside the plant premises and RWH pit (12mx10mx20m) will developed for storage of rain water.		
6	Pradhan Gram Panchyat	He welcomed everyone in the Public Hearing and said that they don't have any objection w.r.t expansion proposal however he emphasized that the plant shall be operated in the same manner as being run in the past beside resulting into no adverse impact on environment. He requested project proponent to contribute in C.S.R activities as usual.	He reiterated that they shall be bound to adhere pollution control norms beside their contribution to C.S.R activities in similar ways as implemented in the past.	After complete implementation of proposed project	2% from profit make by industry.

An amount of Rs. 13.5 lakhs (more than 1% of Project cost) has been earmarked for Corporate Enterprises Responsibility based on public hearing issues. The details of CER proposed are as follows:

S. No.	Description	Amount to be spent	
		First Year	Second Year
		Rs.in Lakhs	Rs.in Lakhs
1	**Employment** (Vocational Training for Skill development for self-employment like Sewing, Pickle making, Craft and in-plant training for welding, fabrication and maintenance of appliances for youth of nearby villages)	**0.60**	**0.40**
2	**Greenbelt Development** (Plantation in and around the project site, nearby villages and schools)	**2.50**	**1.50**
3	**Health Camp** (Health, Eye etc. check up camp will be organized for villagers)	**0.90**	**0.60**
4	**Educational Facility** (Distribution of School dress, books, Furniture, water cooler, renovation of toilets in schools etc.)	**2.50**	**1.50**
5	**Community Development** (Rain water harvesting structure & maintenance of street light)	**2.00**	**1.00**
Sub Total		**8.50**	**5.00**
Total		**Rs. 13.5**	

The capital cost of the project is Rs 1019.75 Lakh and the capital cost for environmental protection measures is proposed as Rs 56 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 7.50 Lakhs. The employment generation from the proposed project / expansion is 321. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental management is as follows:

S.No	Title	Capital Cost Rs. Lacs	Recurring Cost Rs. Lacs (Annum)
1	Air Pollution Control	40.0	4.0
2.	Water Pollution Control/ sewage Treatment Plant	2.0	1.0
3.	Noise Pollution Control (Including cost of Landscaping, Green Belt)	5.0	1.0
4.	Solid Waste Management	1.0	00
5.	Environment Monitoring and	2.0	0.5

	Management (Including Establishment of Laboratory)		
6.	RWH	3.0	0.50
7.	Miscellaneous (Appointment of Consultants, occupational health & safety measure)	3.0	1.0
	Total	**56.00**	**8.00**

Greenbelt will be developed in 0.257 Ha which is about 33 % of the total acquired area. A 10 m wide greenbelt, consisting of at least 2 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 1500 trees per hectare. Total no. of 500 saplings will be planted and nurtured in 0.257 hectares in 5 years.

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

Name of the consultant: M/s. Shivalik Solid Waste Management Limited, Zirakpur [S.No. 138, List of QCI Accredited Consultant Organizations (Alphabetically) Rev. 74, Maarch 07, 2019].

The project was considered in the 5thmeeting of Re-constituted EAC (Industry – 1) held on 27th– 29thMarch, 2019 at item no. 5.1. There were certain observations were made by the EAC on the proposed Project.

i. The EIA/EMP report submitted by the project proponent is inadequate and not as per the QCI/NABET norms. Further, permission from the Competent Authority for ground water extraction and power supply has not been obtained.
ii. All quantities related to raw material, utilities, products and solid waste should be in same unit, i.e., tons/annum.
iii. Detailed plan for rainwater harvesting should be furnished.
iv. Explore the feasibility of water withdrawal from nearby river and submit action plan accordingly.
v. HIRA is not project specific.
vi. The existing re-heating furnace shall be decommissioned and there will be no change in caster two numbers and one number rolling mills
vii. EIA report should be recast as per the Appendix-III of EIA Notification 2006.
viii. After detailed deliberations, the committee, for want of aforesaid clarifications / documents, returned the proposal in the present form.

Project Proponent submitted Reply to the above observations to MoEF&CC on 06.05.2019.

Sr. No	Observation	Reply
1.	The EIA/EMP report submitted	Complied as per NABET norms.

	by the project proponent is inadequate and not as per the QCI/NABET norms. Further, permission from the Competent Authority for ground water extraction and power supply has not been obtained	An application for water withdrawal permission for existing borewell is submitted as per CGWA Public Notice dated 14.11.2018, and also for expansion has been submitted to Himachal Pradesh Ground water Authority, I&PH (Irrigation & Public Health) department on 31.05.2017 and the application is under process. A latest communication about site inspection report from I&PH Department has been received vide letter No. 1946 dated 06.04.2019 and application still under process for grant the water permission (all communication letter with IP&H department. Extension of Existing Power Load of 4442 KVA to 7400 KVA has been granted in favour of M/s KundlasLoh Udyog by HPSEB vide letter No. 3108 dated 26.05.2018 and an application has been submitted to HPSEB for remaining power load which is under processing.
2.	All quantities related to raw material, utilities, products and solid waste should be in same unit, i.e., tons/annum.	All quantities are given in same unit and incorporated in EIA report.
3.	Detailed plan for rainwater harvesting should be furnished.	The expected total rainwater available will be around 3610.47 m^3/year and same will be stored in a Pit of size 12mX10mX20m. Detailed Plan for rainwater harvesting has been prepared and submitted.
4.	Explore the feasibility of water withdrawal from nearby river and submit action plan Accordingly.	The water withdrawal from nearby river is not possible as the nearest river Sirsa is flowing at distance of 4 km in the east direction and is a seasonal river. Therefore, water is not available for round the year.
5.	HIRA is not project specific.	Site Specific HIRA is prepared and included in the EIA Report.
6.	The existing re-heating furnace shall be decommissioned and there will be no change in caster two numbers and one number rolling mill.	Noted & Complied. In this regard, an undertaking was submitted by the project proponent.
7.	EIA report should be recast as per the Appendix-III of EIA Notification 2006	Complied

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

Consultant: Shivalik Solid Waste Management Limited, Certificate No. NABET/EIA/1619/RA 0040.Sr. No. 140, Rev. 75, April10, 2019

Observations of the Committee (7th meeting held during 29-31st May 2019):

Permission for abstraction of ground water is yet to be obtained by the Project Proponent. There is no mention of Monitoring of quantum of rainwater to be harvested.

Recommendations of the Committee (7th meeting held during 29-31st May 2019):

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

i. The project proponent shall submit permission for withdrawal of ground water from CGWA/CGWB/concerned Authority.

ii. Action plan to undertake rainwater harvesting and recharge, and the quantum of water so channelized shall be more than the water consumption in the project area.

iii. Monitoring of rainwater harvesting/recharging performance shall be done by the PP using standard methodology.

iv. Action plan to maintain the Stack emissions below 30 mg/Nm^3.

v. Project proponent shall confirm that no reheating furnace will be installed, and 100% hot charging process shall be adopted.

13.2.2 Reply of the observations were submitted to MoEF& CC on 17.10.2019. Now, the case is being reconsidered for appraisal in the 13th meeting of Re-constituted EAC (Industry – 1) on 27th Nov,2019 and point-wise reply of the observations are as follows:

S.No.	Query	Reply
1.	The project proponent shall submit permission for withdrawal of ground water from CGWA/ CGWB/ concerned Authority.	Proponent has obtained water permission from I&PH Department *vide* letter no. IPH-SE-P & I-II-EE-GWA/2019-20: 676-79 dated 21.09.2019. For this, PP has submitted an Affidavit complying the above said condition, after obtaining Environmental clearance (EC).
2.	Action plan to undertake rainwater harvesting and recharge, and the quantum of water so channelized shall be more than the water consumption in the project area.	Action Plan for Rain water recharging & harvesting has been submitted.
3.	Monitoring of rainwater harvesting/ recharging performance shall be done by the PP using standard methodology.	Agreed by the PP
4.	Action plan to maintain the Stack emissions below 30 mg/Nm^3.	An action plan to maintain Stack emissions below 30 mg/Nm^3 was submitted.
5.	Project proponent shall confirm that no reheating furnace will be installed, and 100% hot charging process shall be adopted.	An Affidavit to this effect has been submitted.

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

Consultant: Shivalik Solid Waste Management Limited, [S.No.140; List of Accredited Consultant Organizations (Alphabetically) Rev. 81, Nov., 2019].

Observations of the Committee:

i. Reply to the ADS for ground water permission is not acceptable.

ii. The rain water harvesting plan needs to be improved.

iii. Space provided for the green belt development is less than 33% of the plant area.

iv. Cost earmarked towards CER related activity is not as per the O.M. of MoEFCC dated 1.5.2018.

The committee felt that quality of the EIA report presented by Shivalik Solid Waste Management Limited is very poor. Earlier also, EAC has raised concern on similar issue with the same consultant. Therefore, EAC advised MoEF&CC to refer the matter to QCI/NABET to issue warning to consultant and ask him to improve the quality of reports in future.

Recommendations of the Committee:

13.2.3 After detailed deliberations, the Committee deferred the consideration of the proposal and sought ADS on the aforesaid points. Further, the Committee observed that the quality of EIA report was poor and this kind of reports lead to wastage of time for the Committee as well as the project proponent. Therefore, the Committee also recommended that the MoEF&CC may write to QCI/NABET to issue warning to consultant and ask him to improve the quality of reports in future.

13.3 Proposed expansion of paper production from 300 TPD to 600 TPD along with CPP of 14 MW **by M/s. Satia Industries Limited** located at Village Rupana, **District Muktsar, Punjab** [Online Proposal No. IA/PB/IND/61921/2015, File No. J11011/196/2014-IA.II(I)] **– Re-consideration for Environment Clearance based on ADS reply - regarding.**

13.3.1 The aforesaid proposal was earlier considered in the meetings of the Expert Appraisal Committee held during 21-23rd October 2019 and 24-25th September, 2019 and the relevant portion of the minutes of the meeting is given as below:

M/s. Satia Industries Ltd has made online application vide proposal no. IA/PB/IND/61921/2015dated 9thSeptember 2019 in prescribed Form-2 along with copies of EIA/EMP report and other documents seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 5(i) Pulp and Paper Industry under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

Proceedings of the EAC meeting held on 24-25th September, 2019

The Proposal of M/s Satia Industries Limited located in Village: Rupana, District: Sri Muktsar Sahib, State: Punjab was initially received in the Ministry on 28th December 2018 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 4th meeting held on 20th February 2019 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental

clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project vide Lr. No. IA-J-11011/196/2014-IA.II(I) dated 16th April 2019.

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

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

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

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

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

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

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

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

The targeted production capacity of the writing & printing paper is 600 TPD and Power generation through CPP is 44 MW. The Raw material for the plant would

be procured from local area. The raw material transportation will be done through Road.

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

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

S. No.	Fuel	Quantity, TPD			Source
		Existing	Proposed	Total	
1.	Rice Husk	500	400	900	Local Suppliers
2.	Black Liquor	400	300	700	In-House

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

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

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

Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.04 to 7.94; Total Hardness: 112 to 1200 mg/l; Chlorides: 40 to 875 mg/l; Fluoride: 0.4 to 0.7 mg/l. Heavy metals are within the limits. Surface

water samples were analyzed from 3 locations. pH: 7.23 to 7.75 ; DO: 4.9 to 5.1 mg/l ; BOD: <4 to 6 mg/l; COD from 10 to 16 mg/l.

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

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

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

It has been envisaged that an area of 6.0826 ha will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

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

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

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

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

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

Observations of the Committee (EAC meeting held during 24-25th September 2019)

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

activities shall be implemented in three years.

Recommendations of the Committee (EAC meeting held during 24-25th September 2019)

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

The Project Proponent uploaded the Closure of non-compliances report on 17.10.2019 in response to the additional information sought by the Ministry. The proposal was referred to EAC for consideration with the approval of competent authority.

The project proponent was solely represented by Sr General Manager (Marketing and Sales) who, being a non-technical person, was not able to furnish replies to technical queries. The consultant, who joined later, was also not fully prepared. Therefore, the project proponent requested the committee to allow them to present their case in the next meeting of EAC. The committee agreed to this request.

Recommendations of the Committee (EAC meeting held during 21-23rd October 2019)

In view of request from project proponent the proposal was deferred for consideration by EAC.

Observations of the committee:

13.3.2 The committee found closure of non-compliance to the conditions of earlier Environmental Clearance is satisfactory.

Recommendations of the Committee:

13.3.3 In view of the forgoing and after detailed deliberations, the committee recommended the project for grant of Environmental Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 for pulp and paper industries.

i. The process water requirement per tonne of paper production shall not exceed 50 m^3.

ii. Project Proponent shall recycle with appropriate treatment at least 25 m^3 of wastewater per ton of paper production back in the process.

iii. All CER targets shall be fully achieved in 3 years.

13.4 Proposed Steel Plant [(800TPD Pellet Plant; 600 TPD DRI; 1000 TPD Induction Furnace; Rolling Mill 975 TPD; 12 MW (7 MW (WHRB) and 5 MW (FBC)] **by M/s. Genext Steels Private Limited** located at Survey No. 661,662,664,665,1822 & 1823 Village Bagodara, Tehsil Bavla, **District Ahmedabad, Gujarat.** [Online Proposal No. IA/GJ/IND/70023/2017, MoEF&CC File No. J-11011/501/2017-IAII(I)] - **Re-consideration for Environment Clearance based on ADS reply - regarding.**

13.4.1 The project was considered in the Re-constituted EAC (Industry – 1) meetings held on 30th May'2019 and 22nd October 2019. There were certain observations made by the EAC on the proposed Project. The relevant minutes are given below:

M/s. Genext Steels Pvt Limited (Steel Division) has made an online application vide proposal no. IA/GJ/IND/70023/2017dated 17thApril, 2019 along with copies of EIA/EMP report and Form – 2 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 and Non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

Integrated Steel Plant [800 TPD Pellet Plant; 600 TPD DRI; 1000 TPD Induction Furnace; Rolling Mill 1000 TPD (975 TPD TMT bars + 25 TPD Mill scale); 12 MW [7 MW (WHRB) and 5 MW (FBC)] of M/s Genext Steels Pvt. Ltd. located Survey Nos. 661, 662, 664, 665, 1822 & 1823, Village: Bagodara, Tehsil: Bavla, District: Ahmedabad (Gujarat) was initially received in the Ministry on 30/09/2017for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 24thmeeting held on 14/11/2017 and further project proponent has made presentation on the additional details sought on 13.03.2018 in its 29thMeeting and on 12/06/2018 of 32ndmeeting of the Expert Appraisal Committee on Industry – 1 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 on19/06/2018 vide Letter No. IA-J-11011/501/2017-IA.II(I).

Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 01/04/2019 vide Online Application No. IA/GJ/IND/70023/2017.

The proposed capacity for different products of integrated steel plant is given below:

Sr. No.	Name of Unit	Product	Plant Configuration	Production Capacity
1	Pellet Plant	Pellets	4 x 200 TPD	800 TPD
2	DRI Kilns	Sponge Iron	4 x 150 TPD	600 TPD
3	Steel Melting Shop	MS Billets	Induction furnace: 4 x 25 MT/heat CCM: Eight-strand billet caster	975 TPD
4	Rolling Mill	Structural steel, TMT bars & Rolled products	2 x 500 TPD	1000 TPD
5	Power Plant			
A	WHRB	Electricity	1 x 7 MW	7 MW
B	FBC	Electricity	1 x 5 MW	5 MW

The total land required for the proposed plant is 15.3061 ha and the entire land is non-agricultural land. 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.

The topography of the area is flat with little undulating at few places and lies from22°37'42.86"N to 22°37'33.45"N, 22°37'24.77"N to 22°37'23.77"NLatitude and 72°10'5.95"E to 72°9'37.75"E, 72°9'48.08"E to 72°9'52.39"E Longitude in Survey of India topo sheet No. F43G2 & F43G6, at an elevation of 44-55 m AMSL. The ground water table reported to ranges between 20-25m below the land surface during the post-monsoon season and 25-30m 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 15 m. Further, the stage of groundwater development is reported to be 36.74% and 60.28% in core and buffer zone respectively and thereby these are designated as safe/critically exploited areas.

The National Park/WL etc. are not located at a distance of 10 KM from the site/No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The authenticated list of flora and fauna provided through the District management plan of DFO, Ahmadabad reporting presence of no /schedule-I fauna in the study area.

The list of raw material for the proposed project is given below:

Sr. No.	Name of raw materials	Quantity (TPD)	Source	Mode of Transport
Pellet Plant				
1.	Iron Ore fines/ Iron Oxide (Mill Scale)	832	Rajasthan, Chhattisgarh, Karnataka, Orissa and Mill scale from rolling mill working in vicinity	By Truck (through covered trucks)
2.	Bentonite	48	Kutch (Gujarat)	By Truck (through covered trucks)
3.	Imported Coal	128	South Africa from Kandla Port(Gujarat)	By Truck (through covered trucks)
DRI Kiln				
1.	Pellets	800	Internal	Through covered conveyors
2.	Imported Coal	570	South Africa from Kandla Port(Gujarat)	By Truck (through covered trucks)
3.	Dolomite	48	Local/Gujarat	By Truck (through covered trucks)
Induction Furnace with Concast				
1.	Sponge Iron	582	Internal	Through covered conveyors
2.	M S Scrap	562	Bhavnagar/Alang	By Truck

Sr. No.	Name of raw materials	Quantity (TPD)	Source	Mode of Transport
			Imported	(through covered trucks)
3.	Ferro Alloys	12.5	Local/Gujarat	By Truck (through covered trucks)
Rolling Mill				
1.	Billets	1000	Internal	Through covered conveyors
For Power Plant [FBC boiler - Power generation 5 MW]				
1.	Dolochar	100	Internal	Through covered conveyors
2.	Imported Coal	30	South Africa from Kandla Port	By Truck (through covered trucks)

The targeted production capacity of the Pellet plant is 800 TPD/0.292 MTPA. The Ore for the plant would be procured from Rajasthan, Chhattisgarh, Karnataka, and Orissa. The ore transportation will be done through Road.

The water requirement of the project is estimated as 1018m^3/day, out of which 905 m^3/day of fresh water requirement will be obtained from the Ground water and the remaining requirement of 113 m^3/day will be met from the Recycle water from treated industrial effluent/domestic water wastewater. The permission for drawl of groundwater is under process.

The power requirement of the project is estimated as 57 MW, out of which 12 MW will be obtained from the Captive Power Plant(7 MW (WHRB) + 5 MW (FBC) = 12 MW) and Remaining 45 MW will be procured from the State Grid, i.e. Gujarat State Electricity Corporation Limited (GSECL).
Baseline Environmental Studies were conducted during winter season i.e., from January 2018 to March 2018, Ambient air quality monitoring has been carried out at 8 locations during January 2018 to March 2018 and the data submitted indicated: PM_{10} (50.6 µg/m^3 to 77.2µg/m^3), PM2.5 (26 to 45.5 µg/m^3), SO2 (9.6 to 18.2µg/m^3) and NOx (12.1 to 24.4 µg/m^3). The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 11.741 µg/m3 with respect to the PM_{10},8.423 µg/m^3 with respect to the SO2,7.842 µg/m^3 with respect to the NOx.

Ground water quality has been monitored in eight locations in the study area and analyzed. pH: 7.5 to 7.9, Total Hardness: 362 to 447 mg/l, Chlorides: 958 to 1486 mg/l, Fluoride: 0.63 to 0.72 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from **six** locations. pH: 7.46 to 8.02; DO: 4.9 to 6.6 mg/l and BOD: < 10 mg/l, COD from 15 to 25 mg/l.

Noise levels are in the range of 40.6 to 45.9 dB(A) for daytime and 50.0 to 56.6 dB(A) for nighttime.

It has been reported that there are 18409 people in the core zone of the project. No/ R&R is involved.

It has been reported that a total of 31500 tons/annum of waste (Slag-Non-hazardous) will be generated due to the project, which will be used in road making and land filling in low lying area and no waste will be dumped in the earmarked dump yard. It has been envisaged that an area of 5.050 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. Summary of Solid and Hazardous waste is given below:

Sr. No.	Type of Waste	Category of Waste	Quantity	Disposal facility
Hazardous waste				
1.	ETP Sludge & MEE salt	35.3	5.0 MT/month 13 MT/month	Collection, Storage, Transportation & disposed at TSDF site.
2.	Used Lubricating oil	5.1	5.0 Kl/year	Collection, Storage, Transportation and sale to Registered re-processors.
3.	Discarded Drums &containers	33.1	500 Nos./month	Collection, Storage, Transportation, decontamination and sale to registered recyclers.
Solid waste				
Pellet Plant:				
1.	Ash	--	32 TPD	Collection, Storage andsold to brick manufacturing units.
Sponge Iron Plant				
1.	Ash	--	36 TPD	Collection, Storage and sold to Cement Plants & Brick manufacturers.
2.	Dolochar	--	100 TPD	Collection, Storage andused in FBC power plant/brick manufacturing units.
Induction Furnace				
1.	Slag	--	90 TPD	Slag from SMS will be crushed and iron will be recovered & then remaining non–magnetic material will be sold to brick manufacturers/for road construction.
Rolling Mill				
1.	Mill Scale	--	25 TPD	Will be reused in the Pellet Plant

Sr. No.	Type of Waste	Category of Waste	Quantity	Disposal facility
Power Plant				
1.	Ash from power plant	--	1.5 TPD	Ash will be sold to Cement Plants/ Bricks manufacturers

It has been reported that the project has obtained Consent to Establish(CTE) from the Gujarat Pollution Control Board vide CTE No. 99044 dated 29/01/2019 and is valid up to 28/12/2025.

The Public hearing of the project was held on 03/11/2018 at Project site, Survey Nos. 661, 662, 664, 665, 1822 & 1823, Village: Bagodara, Tehsil: Bavla, District: Ahmadabad (Gujarat) under the chairmanship of Additional Collector &Additional District Magistrate as a representative District Collector & District Magistrate, Ahmadabad. The main issues raised during public hearing are employment generation and given priority to local people. An amount of 50.0 Lakhs has been earmarked for Enterprise Social Commitment based on public hearing issues. The issues raised during the public hearing and response given is furnished as below:

Sl. No.	Main issues raised	Action plan proposed	Budgetary allocation	Timeline for implementation
1	Employment shall be given to local people and care must be taken for no creation of pollution	Management as given the commitment to take care for no creation of pollution. APCM like ESP and bag filters will be installed and efficiently operated and GPCB & CPCB norms will be maintained and assured that in the event of non-functioning of EMS, the plant will be taken under shut down.	EMS budget of Rs. 4000 Lakhs as Capital Cost and Rs. 800 Lakhs/annum as operating Cost	Capital cost along with project implementation and operating Cost at the time operational phase.
2	Local employment	Management as given the commitment to give priority of local people for employments.	--	--

The capital cost of the project is Rs. 261.0 Crores and the capital cost for environmental protection measures is proposed as Rs. 40.0 Crores. The annual

recurring cost towards the environmental protection measures is proposed as Rs. 8.0 Crores. The total employment generation from steel plant will be 500-700 persons.

The capital expenditure on CER will commensurate with the investment and shall be Rs. 5.22 crores in 5 years on the basis of MOEF&CCs office memorandum dated 01.05.2018, for greenfield projects. The CER action plan is given as below:

Sr. No.	Activities	Years (Rs. in Crore)					Total Budget (Rs. in Crore)
		1st	2nd	3rd	4th	5th	
A	**Based on need based & SIA study**						
1	Educational facilities & trade training to educated unemployed	0.1	0.1	0.1	0.1	0.1	0.5
2	Health and Family Welfare facilities	0.3	0.3	0.3	0.3	0.3	1.5
3	Drinking water and sanitation facilities	0.26	0.26	0.26	0.26	0.26	1.3
4	Women Empowerment activities	0.18	0.18	0.18	0.18	0.18	0.9
5	Preservation of Environment and Sustainable Development- Maintaining village ponds, encouraging rainwater harvesting in village	0.12	0.1	0.1	0.1	0.1	0.52
	Total	0.96	0.94	0.94	0.94	0.94	**4.72**
B	**Based on Public Consultation / Hearing**						
1	Educational facilities & trade training to educated unemployed	0.1	0.1	0.1	0.1	0.1	0.5
	Total (A+B)	**1.06**	**1.04**	**1.04**	**1.04**	**1.04**	**5.22**

Greenbelt will be developed in 5.05 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 5000 saplings will be planted and nurtured in 5.0500 hectares in 5 years.

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

Name of the consultant: Shivalik Solid Waste Management Limited, Punjab [Sr. No. 140, List of Accredited Consultant Organizations (Alphabetically) Rev. 81, October, 2019].

Observations of the committee (7th meeting held during 29-31st May 2019):

The Ministry sought Essential Details regarding permission for groundwater abstraction, feasibility of drawl of surface water and feasibility for transportation of material through railway siding.

Recommendations of EAC (7th meeting held during 29-31st May 2019):

After detailed deliberations, the Committee recommended to defer the consideration of the project proposal on the request of the PP, who wanted more time to compile the information relating to the EDS.

EAC meeting held during 21-23rd October 2019:

13.4.2 The project proponent has submitted the aforesaid additional information to the Ministry on 07/10/2019.

The project proponent made a presentation before the Committee on the ADS points. Point wise submission made by the PP against the additional information is furnished as below:

Sr. No.	Information sought by EAC	Response submitted by PP
1	**Permission for groundwater abstraction**	PP obtained CGWA permission.
2	**Feasibility of drawl of surface water**	Surface water is not available for industrial usage in the vicinity of the project site. Letter from GWSSB (Gujarat Water Supply & Sewerage Board), a Govt. of Gujarat Undertaking for providing surface water was submitted.
3	**Feasibility for transportation of material through railway siding**	**Option 1:** Senior Divisional Commercial Manager, Ahmadabad Division inform that nearest railway station capable of handling steel traffic is Kankaria Goods Shed, which is **65 km away** from the project site. If Kankaria Goods Shed is used, then material is required to cross major part of Ahmedabad city. Hence it is not feasible. Copy of the letter issued by Senior Divisional Commercial Manager, Western Railway is submitted. **Option 2:** Other nearest railway siding could be at village Arnej on Ahmadabad to Botad line with accessible distance of about **15 km.** However, this line was meter gauge and is currently being removed by IRL and broad gauge line may get started in upcoming years. So currently no nearby feasible rail transport is available. **Option 3:** In future, if above discussed village Arnej railway siding is accessible, even then connecting this railway siding to the plant with private siding will not be techno-commercially feasible, for a mini steel plant of our size as

		the volumes will not be economical. ➢ Total inward and outward trucks and tankers for the proposed project will not add any major transportation load on the existing transport system. ➢ Additionally, Construction work of six lane roads of NH-8A (Ahmadabad to Rajkot) is in progress and around 80% of work is already completed, which will lead to improved Level of Service. **Considering all above options, railway siding is presently not feasible. In future, we will take necessary actions in the favour of environment.**

Observations of the Committee (EAC meeting held during 21-23rd October 2019):

The committee observed that the ADS reply of the Project Proponent has pointed to a new possibility of procuring raw material from different sources located at such places that transportation from these places would avoid the busy road passing through the Bawala industrial estate. The reply from the PP indicates the possibility of local procurement of iron oxide/mill scale. But the proposal was only indicative and the available quantities and local sources were not furnished. Therefore, the details of transport and vehicular traffic could not be assessed and quantified.

Recommendations of the Committee (EAC meeting held during 21-23rd October 2019):

The Committee deferred the proposal for want of detailed information and clarification on the local sources of raw material and corresponding vehicular traffic assessment.

13.4.3 The project proponent has submitted the aforesaid Additional Information to the Ministry on 12/11/2019. The project proponent made a presentation before the Committee on the points. Point wise submission made by the PP against the additional information is furnished as below:

1. Detailed information regarding local sources of raw material.

Mill scales will be available via Kandla Port and from the surrounding Rolling Mills, which at present is being exported and also used by other steel plant. Letters from exporter for procurement of 100% equivalent of iron ore quantity required for the project. Project Proponent committed to avoid the procurement of the iron ore from Rajasthan and far way places like Chhattisgarh. A consent Letter from the local exporters are also furnished.

2. Corresponding vehicular traffic assessment.

Project proponent committed to avoid the heavy traffic route "Bavla", which has been considered in the earlier proposal and to follow less traffic routes like Kandla/Mundra to Bagodara, Bhavnagar to Bagodara and Bagodara to Tarapur. This will have insignificant impact on level of service. As regards finished

products, these will be sold to Maharashtra and South Gujarat routed through Bagodara Tarapur Road. And also it is proposed to bypass the route of Bavla-Ahmedabad even for some quantity of finished product around 20% to 25% which will be sold to Ahmedabad and part of North Gujarat and to choose other route like Bagodra-Sanand for delivery of Finish product to Ahmedabad city and North Gujarat. Coal will be obtained from Kandla/Mundra port as usual which will continue to be transported as already discussed during the presentation. Environmental impact on Traffic density and LoS (Level of Service) with respect to all approachable routes are furnished. Additional load with the coming up of GENEXT Steels during operational phase after avoiding use of Iron Ore are proposed to procure from Rajasthan and Chhattisgarh is summarized and furnished with the Additional Information.

Observations of the committee:

13.4.4 The committee found route map for transportation and local procurement of mill scale grade from areas which fall on the opposite side of Bavla may reduce the heavy traffic on the road connected to Bavla. The Project Proponent has submitted letters related to availability of mill scale with substantial evidence from such local exporters /other rolling mills.

Recommendations of the Committee:

13.4.5 In view of the forgoing and after detailed deliberations, the committee recommended the project for grant of Environmental Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 for Integrated Steel Plant with facilities Pellet Plant, Sponge Iron, Induction Furnace And Power Plant.

i. Rain water harvesting would be done to the tune of 100 % of consumption.

ii. Waste Heat Recovery shall not be less than 12MW.

iii. PM level should be less than 30 mg /Nm^3.

iv. 100 % waste utilization would be ensured.

v. Covered dumpers shall be used.

vi. Considering the location of the unit, the traffic management plan for avoiding traffic congestion on the Bavla road would be strictly implemented and compliance report should be submitted annually to MoEFCC Regional Office. The commitment by the project proponent to procure raw material from such sources or the transportation of raw material from such routes as to avoid causing any traffic congestion on the Bavla road would be strictly followed by the Project Proponent and monitored by The RO of MoEFCC. Similarly, all final products will be transported by such routes as to avoid causing any traffic congestion on the Bavla road and this would be strictly followed by the Project Proponent and would be monitored by The RO of MoEFCC. The traffic congestion situation would be reviewed annually and preventive action as required would be taken by the PP to avoid traffic

congestions caused by the project on all the adjoining roads. Action taken in this regard would be submitted to the RO of MoEFCC annually.

13.5 Expansion of cement grinding unit from 50 TPD to 300 TPD **by M/s Jai Shree Krishna Cements** located at Plot No. G-27, G-26 (B) RIICO Industrial area, Sotanala, Tehsil Behror, **District Alwar, Rajasthan** - [Online Proposal No. IA/RJ/IND/122267/2019, File No. J-11011/99/2012-IAII(I)] **– Prescribing of Terms of Reference – regarding.**

13.5.1 M/s. Jai Shree Krishana Cements proposes to install an expansion of existing manufacturing unit for Cement production (clinker grinding). It is proposed to set up the plant for 300 TPD (existing 50 TPD + proposed: 250 TPD) based on clinker grinding technology. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 19.10.2019, vide Online Application No. IA/RJ/IND/122267/2019.

13.5.2 The existing project was accorded environmental clearance vide lr.no. J-11011/99/2012-IAII(I) dated13.04.2016. Consent to Operate was accorded by Rajasthan State Pollution Control Board vide letter no. F(CPM)/Alwar (Behror)/2690(1)/2017-2018/194-196 validity of CTO is up to 30.06.2022.

13.5.3 The proposed expansion of the unit will be coming up at Plot No.-G-27, G 26 (B), RIICO Industrial Area, Sotanala , Taluka: Behror, District: Alwar , State Rajasthan.

13.5.4 The land area acquired for the proposed plant is 0.32 Ha {3210 sq. m. (existing: 1500 sq. m +proposed: 1710 sq. m.} out of which 0 ha is an agricultural land, 0 ha is grazing land and 0 ha is others Government Land). No forestland involved. The entire land has been acquired for the project. Of the total area 0.10 ha (33%) (1059 sq. m.) land will be used for green belt development.

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

13.5.6 Total project cost for the (proposed expansion) is approx.Rs.1.91 Cr. Proposed employment generation from proposed project will be 10 direct employments and 5 indirect employments.

13.5.7 The targeted production capacity of the cement is 90,000TPA (existing: 15000 TPA + proposed 75,000 TPA). The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Cement production (PPC/OPC/PSC)	1	-	Existing : 50 TPD Proposed : 250 TPD After expansion: 300 TPD

13.5.8 The electricity load of 0.5 MW will be procured from JVVNL, Jaipur. Company has also proposed to install 1 DG Set (1500 kVA).

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

S. No.	Cement type	Raw material combinations
1.	**OPC**	Clinker 97% + Gypsum 3%
2.	**PPC**	Clinker 65% + Gypsum 5% + Fly ash 30%
3.	**PSC**	Clinker 40% + Fly ash 25% + slag 35%

13.5.10 The requirement would be fulfilled by various places such as Shree Cement, Beawar&Laxmi Cement, Sirohi(clinker), and other raw materials (fly ash, gypsum, slag etc.) will will be procured from outside agencies and cement mills through trucks (by road). Fuel consumption will be mainly of HSD for DG set (240 l/hr).

13.5.11 Water Consumption for the proposed project will be 3 KLD and waste water generation will be 0.85 KLD (domestic sewage). Domestic waste water will be handled through septic tank, soak pit and there will be no industrial waste water as clinker grinding is a dry process.

13.5.12 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

13.5.13 The committee after detailed deliberations, deferred the proposal for want of the following information.

i. Detailed Engineering drawing layout
ii. Information on green belt in the existing plant

13.6 Expansion in existing Steel manufacturing unit having existing capacity 25,200 TPA(70TPD) of steel Ingots to 1,72,800TPA (480 TPD) of steel Ingots Billets & 1,50,000 TPA of Round, MS Bars, Flats wire rod & TMT Bars by replacing existing Induction Furnace **of M/s. Sharu Special Alloys (P) Ltd.** located at Village Gobindgarh, Adjoining, Phase-VII, Focal Point, Ludhiana District**, Punjab** - [Online Proposal No. **IA/PB/IND/125221/2019**, File No. **J-11011/346/2019-IA.II(I)**] **– Prescribing of Terms of Reference –** regarding**.**

13.6.1 M/s Sharu Special Alloys Pvt. Ltd. proposes for the expansion of existing manufacturing unit for steel manufacturing for Steel Billets/ Ingots based on I.F. technology. The project proponent submitted an application in the prescribed format along with Form-I and other documents to the Ministry online on 14.11.2019 vide online application no.- IA/PB/IND/125221/2019, F. No.- J-11011/346/2019-IA.II(I).

13.6.2 The existing project did not require EC. CTO for water was accorded by Punjab Pollution Control Board vide lr. No. RI5LDH4CTOW3448580 and validity of CTO is up to 30/06/2020. Consent to Operate of Air was accorded by Punjab pollution Control Board vide lr. No. RI5LDH4CTOA3448621 and validity of CTO is up to 30/06/2020.

13.6.3 The proposed unit will be located at Village: Gobindgarh, Adjoining Phase- VII, Focal Point, District: Ludhiana, State: Punjab.

13.6.4 The land area already available is 1.84 Ha (4.5 Acre) and the same is industrial land. The entire land is in the name of project proponent. Out of total area of 1.84ha, 0.63ha (35%) of total area will be used for green belt development.

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

13.6.6 Total project cost is approx Rs. 27.55 Crores and cost of expansion is Rs. 23.80 Cr. Employment generation from proposed project will be 450.

13.6.7 The targeted production capacity of the unit after expansion will be 1, 72,800 TPA steel Billets/Ingots, 3300TPA forged roll & 1, 50,000 TPA structural steel. The proposed capacity for different products after expansion is given below:-

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Induction Furnace	2	20 TPH each	1,72,800 TPA
Rolling Mills	1	--	1,50,000 TPA

13.6.8 The electricity load of 18505 KW for expansion will be procured from Punjab State Power Corporation Limited, Punjab. A D.G. set of 180 KVA is already available in the existing unit as backup power back up power source for lighting purpose and operation of STP.

13.6.9 Proposed raw material and fuel requirement for project are MS Scrap & electricity. The requirement of scrap will be fulfilled by local as well as international market. Electricity will be mainly required for induction furnace, concast and rolling mill.

13.6.10 No water is required in the manufacturing process. Cooling water will be recirculated and only make up equivalent to evaporation loss & blow down will be required. Domestic waste water will be treated in STP and treated water used as make up water for cooling tower. Green belt development and dust suppression. No industrial waste water will be generated.

13.6.11 There is no court case against the project or the related activity. Also, there has not been any violation of consent conditions.

13.6.12 Name of Consultant- Chandigarh Pollution Testing Lab.-EIA Division Sl. No.- 26 in Accredited Consultant List QCI List as October, 2019

Recommendations of the Committee

13.6.13 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in **addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:**

i. All the activities shall be performed in the covered sheds.

ii. The particulate matter emissions shall be less than 30 mg/Nm^3

iii. The Proponent shall develop additional greenbelt in 10% of the total project area.

iv. The Plant shall be designed for ZLD.

v. Action plan for 100 % utilization solid waste would be made part of the Environment Management Plan.

vi. The plant shall be designed in such a way that the re-heating furnace shall be operated with Furnace Oil

vii. Ground water extraction permission shall be obtained from the competent authority.

13.7 Expansion in existing Steel Manufacturing unit having existing capacity 29,500 TPA of Steel Billets to 1, 00,800 TPA of Steel Billets/ Ingots by replacing existing Induction Furnaces, LRF &Concast by **M/s. Sharu Industries Pvt. Ltd.** located at Village- Nichi Mangali, Adjoining Phase- VII, Focal Point, Ludhiana District, **Punjab** [Online Proposal No. **IA/PB/IND/125274/2019**, File No. **J-11011/345/2019-IAII(I)**] **– Prescribing of Terms of Reference -** regarding**.**

13.7.1 The Industry is a Steel manufacturing Unit already manufacturing 29,500 TPA of Steel Ingots/ Billets at Village- Nichi Mangali, Near Phase-VII, Focal Point, Ludhiana, Punjab. Now, it is proposed to enhance the capacity of their unit by replacing the existing 2 Induction furnaces of capacity 3.5 TPH each with two number of Induction furnaces of 12 TPH capacities each, LRF & Concast. The capacity of the unit after expansion will be 1, 00,800 TPA of Steel Billets/Ingots. There is no increase in rolling mill production. Total proposed project cost is estimated to be around Rs. 29.18 Crores**.**

13.7.2 The raw materials used are MS Scrap and Ferro alloys. The total area of the plot is about 5.3 Acres. The water requirement after expansion for domestic purpose will be 15.0 KLD and for cooling purpose will be 22 KLD. There is no use of water in the process. So the total water requirement after expansion will be 37 KLD. The total power demand for the unit after expansion shall be about 26505 KW. This demand will be met by sourcing power from Punjab State Power Corporation Limited from the nearby Sub-station. There will be about 315 persons working in the unit.

13.7.3 Now they are proposed to replace existing 2 nos. of induction furnaces of capacity 3.5 TPH each with two nos. of Induction Furnace having capacity 12 TPH each, LRF & Concast. There is no increase in rolling mill production.

13.7.4 After expansion the production details will be as under:

Product Name	Existing (TPA)	Additional (TPA)	Total (TPA)
Steel Ingot/Billets	29,500	71,300	1,00,800
Round/Flat/Patra	78,000	Nil	78,000

13.7.5 Total water requirement after expansion will be 37 KLD, which includes 15 KLD for domestic use, 22 KLD for cooling. This will be met from the existing tube-well within the premises. Domestic waste water shall be treated through septic tank and the same will be used within the premises for plantation and into public sewer. After

Expansion, STP will be provided.

13.7.6 About 8000 KW of power is already available. Additional 18505 KW power will be required for expansion. The total power demand for the unit after expansion shall be about 26505 KW. This demand will be met by sourcing power from Punjab State Power Corporation Limited from the nearby Sub-station.

13.7.7 There will be about 315 persons directly/indirectly will be working in the unit after expansion. Provision for occupational health of the workers has also been made.

13.7.8 The unit is situated in the critically Polluted area of Ludhiana. There are no Wild Life Sanctuaries, Reserved /Protected Forests or Defense Installations, Rivers and Hill Ranges within 10 km of the project.

13.7.9 Total quantity of slag after expansion will be 18.0 TPD and will be supplied to manufacturers of cement concrete blocks, pavers & tiles under proper agreement. Hazardous waste generated (0.01kl/annum) from DG sets in the form of used oil is being re-used as lubricants within the industry. About 0.6 TPD APCD dust will be covered under hazardous waste & sent to M/S Madhav Alloys (P) Limited for metal recovery or TSDF site.

13.7.10 For Air Pollution Control, Bag filters have been provided on Induction. A chimney of adequate height has been provided for DG sets as per CPCB norms. There is no process waste water.

13.7.11 The industry produces ingots from melting MS Scrap. All operations are carried out in batch process. The brief description is as follows:

13.7.12 MS Scrap is put into the induction furnaces pot through magnetic conveying system, where it is heated to 1800^{o}C. Scrap is melted and is heated for about 100 minutes. In the molten steel some Ferro Alloys are added according to the carbon contents in the scrap. The molten metal is then fed to Concast Machine/Billet Castor form where the material is taken to rolling mill. The process flow chart of manufacturing process is given Figure 1.0 & the material balance is given in Figure 2.0.

Recommendations of EAC:

13.7.13 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in **addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:**

i. The propjet is located is located in CEPI area, the terms for EIA study shall be as per the Ministry's OM vide F.No.22-23/2018-IAIII(Pt) dated 31.10.2019.

ii. Project shall be designed with side extension hood to control secondary emissions and there will be re-heating furnace.

13.8 Expansion in existing Steel Manufacturing unit having existing capacity 25,200 TPA of Steel Ingots/ Billets to 84,000 TPA of Steel Billets/ Ingots by modernization of existing furnace of 3.5 TPH with 1 no of Induction furnaces of capacity 10 TPH & replacement of Induction Furnace of capacity 3.5 TPH with 1 no. of Induction Furnace of capacity 10 TPH, LRF, Comcast & a Rolling Mill of **M/s Sharu Steels Pvt. Ltd.** (Induction Furnace

at B-48, Phase-VII, Focal Point Ludhiana District**, Punjab** [Online Proposal No. **IA/PB/IND/125295/2019**, File No. **J-11011/344/2019-IAII(I)**]– **Prescribing of Terms of Reference –** regarding**.**

13.8.1 M/s Sharu Steels Pvt. Ltd. (Furnace Division) proposes for the expansion of existing manufacturing unit for steel manufacturing for Steel Billets/ Ingots based on I.F. technology. The project proponent submitted an application in the prescribed format along with Form-I and other documents to the Ministry online on 14.11.2019 vide online application no.- IA/PB/IND/125295/2019, F. No.- J-11011/344/2019-IA.II(I).

13.8.2 The existing project did not require EC. CTO for water was accorded by Punjab Pollution Control Board vide lr. No. RI5LDH4CTOW2206199 and validity of CTO is up to 30/06/2019 and the same has already been applied for renewal. Consent to Operate of Air was accorded by Punjab pollution Control Board vide lr. No. RI5LDH4CTOA2201811 and validity of CTO is up to 30/06/2019 and the same has already been applied for renewal.

13.8.3 The proposed unit will be located at B-48, Focal Point, Phase-VII, District: Ludhiana, State: Punjab.

13.8.4 The land area already available is 1.12 Ha (2.77 Acre) and the same is industrial land. The entire land is in the name of project proponent. Out of total area of 1.12ha, 0.39ha (35%) of total area will be used for green belt development.

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

13.8.6 Total project cost is approx Rs. 16.59 Crores and cost of expansion is Rs. 10 Cr. Employment generation from proposed project will be 250.

13.8.7 The targeted production capacity of the unit after expansion will be 84,000 TPA steel Billets/Ingots & 75,000 TPA MS bars, Round, Flats, TMT Bars and wire rod. The proposed capacity for different products after expansion is given below: -

Product Name	No. of Units	Capacity of each unit	Production Capacity (TPA)
Induction Furnace	2	10 TPH	84000
Rolling Mill	1	--	75000

13.8.8 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-1 read with additional ToRs at Annexure-2:**

i. The project is located is located in CEPI area, the terms for EIA study shall be as per the Ministry's OM vide F.No.22-23/2018-IAIII(Pt) dated 31.10.2019.

ii. Project shall be designed with side extension hood to control secondary emissions and there will be re-heating furnace.

13.9 Installation of Cement Grinding Unit of 0.60 MTPA Capacity (1st Phase:1000 TPD & 2nd Phase:1000 TPD) at village: Kurari, Durgawati, Kaimur (Bihar) by **M/s. Mittal tech Steel & Cement Pvt. Limited** located at Village-Kurari, Kaimur district, **Bihar** - [Online Proposal No. **IA/BR/IND/125350/2019**, File No. **J-11011/343/2019-IAII(I)**] **– Prescribing of Terms of Reference –** regarding**.**

13.9.1 M/s. MITTALTECH Steel & Cement Pvt. Ltd. proposes to install a Greenfield Manufacturing Unit of Capacity 0.60 MTPA (Product Mix of OPC, PPC, PSC & PCC) for production of cement in two phases (1st Phase: 1000 TPD & 2nd Phase: 1000 TPD). It is proposed to set up the plant for production of Cement based on Ball Mill technology. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 14.11.2019 vide Online Application No. **IA/BR/IND/125350/2019.**

13.9.2 The proposed unit will be located at Village: Kurari, Tehsil: Durgawati, District: Kaimur, State: Bihar.

13.9.3 The land area acquired for the proposed plant is 1.651ha. No/forestland is involved. The entire land has been acquired for the project. Of the total land area 0.55 ha (33%) land will be used for green belt development.

13.9.4 No National Park/Wild-life Sanctuary/etc are located within 10 Km radius. 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.

13.9.5 Total Cost of the proposed project is envisaged at Rs. 4556.73 Lakhs. Phase-wise Break-up will be as under:

Phase: 1 = Rs. 2838.52 Lakhs
Phase: 2 = Rs. 1718.21 Lakhs.

13.9.6 Total number of Employees will be 45 in Nos. (25 Employees will be appointed for smooth operation of Phase: 1)

13.9.7 The targeted production capacity of the Project will be implemented in 2 phases of 0.30 MTPA (1000 TPD) each. The raw materials for the plant would be procured from Madhya Pradesh, Bhutan, Rajasthan& Uttar Pradesh etc. Transportation of raw materials will be done by road. The proposed capacity is 0.60 MTPA (Product Mix of OPC, PPC, PSC & PCC) for production of cement in two phases (1st Phase: 1000 TPD & 2nd Phase: 1000 TPD).

13.9.8 The electricity load of 4000 KVA (2000 KVA for each phase) to be supplied by South Bihar Power Distribution Company Limited. Silent DG sets shall also be installed at the unit for power supply requirement during load shading.

13.9.9 Raw Materials required for the proposed project are:

For OPC:

Raw Material	Percentage (%)	Phase: 1	Phase: 2
		Quantity (MT)	
Clinker	95%	285000	285000

Gypsum	5%	15000	15000
Total	**100%**	**300000**	**300000**

For PPC:

Raw Material	Percentage (%)	Phase: 1	Phase: 2
		Quantity (MT)	
Clinker	64%	192000	192000
Fly Ash	31%	93000	93000
Gypsum	5%	15000	15000
Total	**100%**	**300000**	**300000**

For PSC:

Raw Material	Percentage (%)	Phase: 1	Phase: 2
		Quantity (MT)	
Clinker	40%	120000	120000
Slag	55%	165000	165000
Gypsum	5%	15000	15000
Total	**100%**	**300000**	**300000**

For PCC:

Raw Material	Percentage (%)	Phase: 1	Phase: 2
		Quantity (MT)	
Clinker	35%	105000	105000
Slag	40%	120000	120000
Fly Ash	20%	60000	60000
Gypsum	5%	15000	15000
Total	**100%**	**300000**	**300000**

13.9.10 Transportation of Raw Materials and Finished Product-Mix (Cement) would be done by Road.

13.9.11 Water Consumption for the proposed project will be 6.5 KLD for both the phases and it will be sourced through ground water & treated waste water.

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

13.9.13 Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar is engaged as the EIA consultant accredited by NABET, QCI with accreditation no. NABET/EIA/1720/RA0090-rev1, dtd- 28.05.2018. And Sl. no. in the QCI list is 161 as on October,2019

Observations and Recommendations of the Committee:

13.9.14 The committee made observation that the layout is not proper, not to the scale and illegible. Therefore, after detailed deliberations the committee returned the proposal in the present form.

13.10 Enhancement of Cement Production from 1.2 MTPA to 2.7 MTPA and 2.0 MTPA Clinker **by M/s Birla Corporation Limited** located at Village Chanderia, Sector-3, Tehsil Chittaurgarh, District Chittorgarh, **Rajasthan** [Online Proposal No. **IA/RJ/IND/117142/2019**, MoEF&CC File No. **J-11011/506/2010-IAII(I)**] **– Validity extension of Environment Clearance-**regarding.

13.10.1 **M/s Birla Corporation Limited** has made online application vide proposal no. IA/RJ/IND/117142/2019 dated 9th September, 2019 in the prescribed Form-6 along with other documents seeking extension of validity of Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

Details Submitted by the Project Proponent:

13.10.2 Environment Clearance for Enhancement of Cement Production from 1.2 MTPA to 2.7 MTPA and 2.0 MTPA Clinker **by M/s Birla Corporation Limited** located at Village Chanderia, Sector-3, Tehsil Chittaurgarh, District Chittorgarh, Rajasthan was issued vide letter no: J-11011 / 506 / 2010- IA-II (I) dated 11.09.2012.

13.10.3 To enhance production as proposed above, BCL to upgrade the previously installed facilities for 1.2 MTPA Cement to an ultimate capacity of 2.7 MTPA Cement & 2.0 MTPA Clinker by installing a parallel pre-calciner stream and also by installing higher capacity critical units as per the requirement of the design intent.

13.10.4 The following modifications in the design of the envisaged system:

- A side stream/parallel five stage precalciner will be installed to facilitate additional production throughput.
- Raw mill bag house and fan will be upgraded.
- Additional/expanded grate area will be considered in the cooler and accordingly the cooler ESP will be modified to accommodate the additional dust and volume loads.
- Necessary modifications will be made in the Cement grinding unit.

13.10.5 Presently, more than 85% of the jobs envisaged for enhancement of the production has been completed and remaining job is expected to complete within a year. The progress of the project was not at the pace and it was delayed due to various reasons like business constraints, fluctuating market demands, corporate strategic polices. However, this all have overcome by deploying adequate resources and now project is running on full swing. BCL is quite hopeful that, we shall get the enhanced production in the last quarter in the next calendar year.

Recommendations of the Committee:

13.10.6 After detailed deliberations, the committee recommended for extension of validity of Environmental Clearance for period of three years, i.e., up to 10.09.2022. All other terms and conditions stipulated in the environmental clearance accorded vide letter no. J- J-11011/506/2010-IAII(I) dated 11.09.2012 shall remain unchanged.

13.11 Expansion of Cement Plant from 5000 to 7000 TPD clinker i.e. 1.80 MTPA t0 3.60 MTPA Cement Plant along with 18 MW Captive Power Plant(CPP) of **M/s. Ambuja Cement Limited** located at Village Rabriyawas, Tehsil Jaitaran, District Pali, **Rajasthan.** [Online Proposal No. **IA/RJ/IND/124083/2019**, MoEF&CC File No. **J-11011/189/2006-IAII(I)**] **– Amendment in Environment Clearance-** regarding**.**

13.11.1 **M/s. Ambuja Cement Limited** has made online application vide proposal no. IA/RJ/IND/124083/2019 dated 5th November, 2019 in the prescribed Form-4 along with other documents seeking amendment to Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

Details Submitted by the Project Proponent:

13.11.2 M/s. Ambuja Cements Ltd. is operating an existing Integrated Cement Plant with installed capacity - Clinker (2.4 MTPA), Cement (3.6 MTPA) and CPP (18 & 15 MW) at Village: Rabriyawas, Tehsil: Jaitaran, District: Pali (Rajasthan).

13.11.3 Environmental Clearance for the Existing Cement Plant has been obtained from MoEFCC New Delhi vide their letter no. J- 11011/189/2006- I A- II (I) dated 31st Aug, 2006 in the name of M/s. Gujarat Ambuja Cement Ltd.

13.11.4 Application for Name Change in EC letter no. J- 11011/189/2006- I A- II (I) dated 31st Aug., 2006 from M/s Gujarat Ambuja Cement Ltd. to M/s Ambuja Cements Ltd. is under process vide proposal no. IA/RJ/IND/115140/2019 at MoEFCC, New Delhi.

13.11.5 Environmental Clearance for Expansion of Integrated Cement Project (Clinker from 2.4 MTPA to 2.9 MTPA), Captive Power Plant (from 33 MW to 53 MW) and new Limestone Mine RAS – I (ML Area: 183.53 ha & 0.279 MTPA) at Rabriyawas, Tehsil Jaitaran, District Pali in Rajasthan has been obtained from MoEFCC New Delhi vide their letter no. J-11011/54/2010- IA-II (I) dated 29th March 2012, in the name of M/s. Ambuja ements Ltd. But due to unavoidable reason the expansion project was not commissioned, hence the plant is currently running with production capacities as mentioned in earlier paragraphs. As on date, the EC obtained for Cement project on 29th March, 2012 has been expired but the same EC is valid for Limestone Mine Ras- I.

13.11.6 M/s. Ambuja Cements Ltd. is proposing an amendment in Existing EC "Expansion of Cement Plant from 5000 to 7000 TPD clinker i.e. 1.80 MTPA t0 3.60 MTPA Cement Plant along with 18 MW Captive Power Plant (CPP) at Village: Rabriyawas, Tehsil: Jaitaran, District: Pali, Rajasthan" in compliance of General condition no. (ii) of Environment Clearance vide letter no. J-11011/189/2006- I A- II (I) dated 31st Aug., 2006 for upgradation / modification in existing Cement Plant. Management plan w.r.t. amendment in existing EC is as follow - (1) Company is proposing installation of Steel silo; which will be will be equipped with dust extraction arrangement. (2) The packers have been / will be equipped with dust extraction arrangement. (3) Wagon tipper for railway siding will be equipped with Pulse Jet Bag filters and transportation by road will be

reduced. (4) Change in Product mix w.r.t. addition of PSC, Composite Cement and Microfine Ordinary Portland Cement with existing Product mix i.e OPC and PPC without changing the production capacity, therefore no impact is envisaged, however; slag will be added to produced to PSC and Composite Cement but overall transportation by road will be reduced.

13.11.7 M/s. Ambuja Cements Ltd. is proposing an amendment in Existing EC "Expansion of Cement Plant from 5000 to 7000 TPD clinker i.e. 1.80 MTPA t0 3.60 MTPA Cement Plant along with 18 MW Captive Power Plant (CPP) at Village: Rabriyawas, Tehsil: Jaitaran, District: Pali, Rajasthan" in compliance of General condition no. (ii) of Environment Clearance vide letter no. J-11011/189/2006- I A- II (I) dated 31st Aug., 2006 for upgradation / modification in existing Cement Plant by:

i. Addition of Steel Silo (2500 MT)
ii. Installation of Electronic Packer (18 spouts),
iii. Proposed Wagon Tippler for Railway siding (4.00 Rakes/day) and
iv. Change in Product mix w.r.t addition of PSC, Composite Cement and Microfine Ordinary Portland Cement with existing Product mix i.e OPC and PPC without changing the production capacity.

Recommendations of the committee:

13.11.8 After detailed deliberations, the committee made following recommendations to amend the existing Environmental Clearance. The change of product mix was exempted from obtaining Environmental Clearance as per MoEF&CC Notification S.O.3518 dated 23rd November 2016. However, following additional conditions were recommended by the Committee to be imposed on the project proponent.

i. Wagon tippler and additional silo are recommended with dust extraction system at all the drop points

ii. Greenbelt shall be developed in additional 10 acres area.

iii. All other terms and conditions shall remain unchanged.

28th November, 2019

13.12 Establishment of 1x 350 TPD DRI Kiln to manufacture 1,05,000 TPA of Sponge Iron, 4X 15 T Induction Furnaces to manufacture 1,80,000 TPA of MS Billets, 10x500 TPD of Rolling Mill to manufacture 1,75,000 TPA of Structural Steel / Rolled product, 10 MW of WHRB based Power Plant, 10 MW FBC based Power Plant & 1 x9 MVA Submerged Electric ARC Furnace to Manufacture SiMn-14,400 TPA OR FeMn - 14,400 TPA or FeSi7,000 TPA by Forward Integration in the existing 10 MW Biomass based power plant in the existing plant premises by **M/s. Animesh Ispat Private Limited** located at Village Khajuri, Tehsil & District Baloda Bazaar, **Chhattisgarh** [Online Proposal No. **IA/CG/IND/107824/2017**, File No. **J-11011/420/2017-IA.II(I)**] – **Environment Clearance -** regarding**.**

13.12.1 M/s. Animesh Ispat Private Limited has made an online application vide proposal no. IA/CG/IND/107824/2017 dated 22/07/2019 along with copy of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of the EIA

Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

13.12.2 The aforesaid proposal was considered in the 9th meeting of the Reconstituted Expert Appraisal Committee meeting held during 30-31st July, 2019 and the relevant portion of the minutes of the meeting is given as below:

Proceedings of the 5th REAC meeting held during 30-31st July, 2019

Details submitted by the project proponent

The proposed expansion of Steel Plant of M/s. Animesh Ispat Private Limited located at Village: Khajuri, Tehsil: Baloda Bazaar, District: Baloda Bazaar, Chhattisgarh was initially received in the Ministry on 21/08/2017 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised in 22nd EAC (Industry – 1) meeting held during 11-13th September 2017 for prescribing ToRto the expansion 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 vide Lr. No. J-11011/420/2017-IA II (I) dated 19/09/2017.

The project of M/s. Animesh Ispat Pvt. Limited is an existing 10.0 MW Biomass based power plant located at Village: Khajuri, Tehsil: Baloda Bazaar, District: Baloda Bazaar, Chhattisgarh. It has been proposed to establish 1 x 350 TPD DRI Kiln to manufacture 1,05,000 TPA of Sponge Iron, 4 x 15 T Induction Furnaces to manufacture 1,80,000 TPA of MS Billets, 1 x 500 TPD of Rolling Mill to manufacture 1,75,000 TPA of Structural Steel / Rolled product, 10 MW of WHRB based Power Plant, 10 MW FBC based Power Plant & 1 x 9 MVA Submerged Electric Arc Furnace to manufacture Si-Mn – 14,400 TPA OR Fe-Mn – 14,400 TPA OR Fe-Si – 7,000 TPA by forward Integration in the existing 10 MW Biomass based power plant in the existing plant premises. Existing plant is located in 9.949 Ha. (24.6 acres) of land and proposed expansion will be taken up in the existing plant premises only.

It has been reported that the existing plant does not have EC, as the plant was established in June 2006 (as per EIA Notification 1994 EC required for capital investment more than Rs 100 Crores, for Greenfield projects). Accordingly obtained Consent to Establishment vide letter no. 2956/TS/CECB/2006 dated 16/06/2006 from Chhattisgarh Environment Conservation Board (CECB). Hence, Certified Compliance report of Consent to Operate issued for existing plant from the Regional Office, CECB, Raipur, Chhattisgarh has been submitted. There are no non-compliances reported by Regional officer, CECB, Raipur.

The following are the existing and proposed plant configuration and production capacity of various units:

S.No	Unit	Existing Capacity	Proposed Expansion	After Expansion
1.	DRI Kilns	---	1 x 350 TPD (1,05,000 TPA)	1 x 350 TPD (1,05,000 TPA)
2.	Induction Furnaces	---	4 x 15 T (1,80,000 TPA)	4 x 15 T (1,80,000 TPA)
3.	Rolling Mill	---	1 x 500 TPD	1 x 500 TPD

S.No	Unit	Existing Capacity	Proposed Expansion	After Expansion
			(1,75,000 TPA)	(1,75,000 TPA)
4.	Power Plant WHRB	---	10 MW	10 MW
5.	Power Plant FBC	---	10 MW	10 MW
6.	Ferro Alloys Plant (1 x 9 MVA)	---	Silicon Manganese (SiMn) – 14,400 TPA OR Ferro Manganese (FeMn) – 14,400 TPA OR Ferro Silicon (FeSi) – 7,000 TPA	Silicon Manganese (SiMn) – 14,400 TPA OR Ferro Manganese (FeMn) – 14,400 TPA OR Ferro Silicon (FeSi) – 7,000 TPA
7.	Biomass based Power Plant	10 MW	---	10 MW

Existing plant is located in 9.949 Ha. (24.6 acres) of land, comprising of 574, 575, 577, 578, 579, 580, 581, 582, 583 & 588/2 and same is in possession of management. Proposed expansion will be taken up in the existing plant premises only. No River / stream passes through the plant area. It has been reported that no natural water body / stream exists in the plant area and any modification / diversion in the existing natural drainage pattern at any stage has not been proposed.

The topography of the area is flat with undulations and reported that the site lies between 21°44'49.34"N to 21°45'2.50"N Latitude and 82°10'35.71"E to 82°10'41.75"E longitude in Survey of India Topo sheet no. 64 K/1 at an elevation of 261m AMSL. The ground water table reported to ranges between 2.0 to 9.1 m bgl below the land surface during the post-monsoon season and 18.5 to 4.0 m bgl below the land surface during the pre-monsoon season.

There are no National Park/ Wild life sanctuary / Biosphere reserve / Tiger Reserve/ Elephant Corridors / migratory routes for Birds with in 10 Km. radius of the plant. Sonbarsa Reserve Forest is present at 3.1 Kms. from the plant site.There are no Schedule- I fauna exists in the study area. The list of flora and fauna during study period in the study area is furnished the EIA report.

The list of raw material for the proposed expansion project is given below:

S.No.	Raw Material	Quantity (in TPA)	Sources	DISTANCE (w.r.t Plant)	Mode of Transport
1.	**For DRI Kilns (Sponge Iron)- 1,05,000 TPA**				
a)	Pellets/	1,52,250	Pellet manufacturers Barbil, Orissa	~ 80 Kms.	By Road
	Iron Ore	1,68,000	NMDC, Chhattisgarh	~ 500 Kms.	By rail & road

S.No.	Raw Material		Quantity (in TPA)	Sources	DISTANCE (w.r.t Plant)	Mode of Transport
						(through covered trucks)
b)	Coal	Indian	1,36,500	SECL, Chhattisgarh /MCL Odisha	~ 500 Kms.	By rail & road (through covered trucks)
		Imported	94,500	Indonesia / South Africa / Australia	600 Kms. (from Vizag Port)	Through sea route, rail route & by road
c)	Dolomite		5,250	Raipur	~ 80 Kms.	By road (through covered trucks)
2.	**For Induction Furnace (MS Billets) - 1,80,000 TPA**					
a)	Sponge Iron		1,50,000	Own generation & Purchased from Raipur	--- ~ 80 Kms.	----- By Road (through covered trucks)
b)	Scrap		64,000	Raipur	~ 80 Kms.	By road (through covered trucks)
c)	Ferro Alloys		2700	Raipur	~ 80 Kms.	By road (through covered trucks)
3.	**For Rolling Mill (TMT bars & Structural Steel) – 1,75,000 TPA**					
a)	Steel billets		1,90,000	Own generation & Purchased from Raipur	--- ~ 80 Kms.	---- By road (through covered trucks)
b)	Furnace oil		8,750	Nearby HPCL / IOCL depots	~ 80 Kms.	Tankers
c)	Coal for Gasifier (Producer Gas – 10500 Nm^3/hr)	Indian	35,000	SECL, Chhattisgarh /MCL Odisha	~ 500 Kms.	By rail & road (through covered trucks)
		Imported	22,400	Indonesia / South Africa / Australia	600 Kms. (from Vizag Port)	Through sea route, rail route & by road
4.	**For FBC Boiler [Power Generation 10 MW]**					

S.No.	Raw Material		Quantity (in TPA)	Sources	DISTANCE (w.r.t Plant)	Mode of Transport
a)	Indian Coal (100 %)		54,000	SECL, Chhattisgarh /MCL Odisha	~ 500 Km.	By rail & road (through covered trucks)
	OR					
b)	Imported Coal (100%)		34560	Indonesia / South Africa / Australia	600 Km (from Vizag Port)	Through sea route / rail route / by road
	OR					
c)	Dolochar + Indian Coal	Dolochar	31,500	In plant generation	---	through covered conveyors
		Indian Coal	38,250	SECL, Chhattisgarh /MCL Odisha	~ 500 Km	By rail & road (through covered trucks)
	OR					
d)	Dolochar + Imported Coal	Dolochar	31,500	In plant generation	---	through covered conveyors
		Imported	18,810	Indonesia / South Africa / Australia	600 Km. (from Vizg Port)	Through sea route / rail route / by road
5.	**For Ferro Alloys (1 x 9 MVA)**					
5 (i)	*For Ferro Silicon – 7000 TPA*					
a)	Quartz		8,450	Chhattisgarh	~ 100 Km	By Road (Covered trucks)
b)	LAM coke		2,800	Chhattisgarh / Jharkhand	100 – 500 Km	By Rail & Road (covered trucks)
c)	MS Scrap		175	Raipur	~ 80 Km	By Road (covered trucks)
d)	Electrode paste		420	Maharashtra / West Bengal	600 – 900 Km	By Road (covered trucks)
5 (ii)	*For Ferro Manganese – 14400 TPA*					
a)	Manganese Ore		26,650	MOIL / OMC	500 – 600 Km	By Rail & Road (covered trucks)
b)	LAM coke		15,350	Chhattisgarh / Jharkhand	100 – 500 Km	By Rail & Road (covered trucks)

S.No.	Raw Material	Quantity (in TPA)	Sources	DISTANCE (w.r.t Plant)	Mode of Transport
c)	MS Scrap	1030	Raipur	~ 80 Km	By Road (covered trucks)
d)	Electrode Paste	3000	Maharashtra / West Bengal	600 – 900 Km	By Road (covered trucks)
5 (iii)	*For Silico Manganese – 14400 TPA*				
a)	Manganese Ore	15,850	MOIL / OMC	500 – 600 Km	By Rail & Road (covered trucks)
b)	Mn. Slag	9,000	In house generation	---	----
c)	Quartz	3,900	Chhattisgarh	~ 100 Km	By Rail & Road (covered trucks)
d)	LAM coke	1,600	Chhattisgarh / Jharkhand	100 – 500 Km	By Rail & Road (covered trucks)

The targeted production capacity of the plant after expansion project is Structural Steel / Rolled product – 0.175 million TPA. Iron ore & Iron ore pellet will be supplied by M/s. Basna Steels Pvt. Ltd. Imported Coal would be supplied by M/s. Mukund Coal Fields Pvt. Ltd. Major raw materials will be transported through railway rakes up to the nearest railway station (Nipaniya RS – 19.5 Kms.) and then to the site through road by covered trucks.

Impact on Vehicular Traffic Load due to proposed expansion

Traffic load during the operation of the existing plant (Baseline) :5550 PCU/day

Additional Traffic load during operation of the expansion project:1146 PCU/day

Total Traffic load during operation of existing and proposed expansion load

:6696 PCU/day

Traffic Capacity as per the IRC 73: 1980 for Highways :10000 PCU/day

Water requirement for the present proposal will be 640 KLD. Total water requirement after the proposed expansion will be 1840 KLD, which will be sourced from KeslaAnicut. Water Resource Department, Kasdol vide letter no. 2372/Revenue/2018/Kasdol dated 27/06/2018 has confirmed the availability of water in Keslaanicut.

Total power required for the existing unit & for the proposed expansion units will be 30 MW which will be partly met from the existing 10 MW biomass based power, 10 MW WHRB power and 10 MW FBC power plant.

Baseline Environmental Studies were conducted during summer season i.e. from 1stOctober 2017 to 31stDecember 2017. Ambient air quality monitoring has been carried out at 8 locations and the data submitted indicated: $PM_{2.5}$ (19.2 to 35.2 $\mu g/m^3$), PM_{10} (33.6 to 58.2 $\mu g/m^3$), SO_2 (7.6 to 12.3 $\mu g/m^3$), NOx (7.4 to 13.8

$\mu g/m^3$) & CO (350 to 650 $\mu g/m^3$). The results of the modeling study indicates that the maximum increase of GLC due to the proposed units & Vehicular emissions will be 4.2 $\mu g/m^3$ with respect to the PM_{10}, 13.2 $\mu g/m^3$ with respect to the SO_2, 16.2 $\mu g/m^3$ with respect to the NOx & 3.8 $\mu g/m^3$ with respect to the CO.

Ground water quality has been monitored in eight (8) locations in the study area are analyzed and the data submitted indicated pH: 7.1 to 7.6, Total Hardness: 145 to 255 mg/l, Chlorides: 132 to 225 mg/l, Fluoride: 0.31 to 0.49 mg/l. Heavy metals are within the limits.

Surface water samples were analyzed from 3 locations in the study area and the data submitted indicated pH: 7.2 to 7.7, DO: 4.1 to 6.2 mg/l, BOD: 2.9 mg/l & COD: 3.5 to 6.2 mg/l.

Noise levels are in the range of 40.9 dBA to 67.6 dBA during the study period. It has been reported that there is no R & R involved, as it is an expansion project.

It has been reported that the following Solid wastes will be generated due to the proposed expansion project which will be stored in storage yard above the ground level.

S.No.	**Waste/ By-product**	**Quantity (TPD)**		**Method of disposal**
		Existing	**Proposed**	
1	Ash from DRI	---	63.0	Will be given to Cement plants (M/s. Century Cement - Baikunth) & Brick manufacturers.
2	Dolochar	---	105.0	Will be reused in FBC boiler-based power plant
3	Kiln Accretion Slag	---	4.0	Will be given to M/s. Agarwal Infrabuild Private Limited for road construction in their ongoing projects.
4	Wet Scraper Sludge	---	16.0	Will be given to M/s. Agarwal Infrabuild Private Limited for road construction in their ongoing projects.
5	SMS Slag	---	60.0	Will be crushed and iron will be recovered & remaining non -magnetic material being inert by nature will be given to M/s. Agarwal Infrabuild Private Limited for road construction in their ongoing projects
6	Mill scales from Rolling Mill	---	30.0	Mill scales from Rolling Mill will be reused in the SMS
7	Slag from SiMn	---	37.5	Will be utilized in road construction
8	Slag from FeMn	---	30.0	Will be used in manufacture of Silico manganese as it contains high MnO_2
9	Slag from FeSi	---	0.8	Will be given to cast iron foundries

S.No.	Waste/ By-product	Quantity (TPD)		Method of disposal
10	Ash from Power Plant (with Indian Coal)	70.0	84.0	In the existing plant, ash is being given to nearby Brick manufacturers and during operation of the present proposal ash will be given to Cement plant (M/s. Century Cement - Baikunth) & will be given to the brick manufacturers.
11	Tar (from Producer gas plant)	---	2.1	Will be given to coal tar recyclers / agencies engaged in construction activities / given to nearby Pellet plant units /
12	Cinder (from Producer gas plant)	---	45	Will be given to Cement plant

It has been reported that an area of 8.2 Acres (3.319 ha.) has been earmarked for Greenbelt to attenuate the noise levels and trap the dust generated due to the project development activities.

It has been reported that the Consent to Operate for existing plant was accorded by Chhattisgarh Environment Conservation Board (CECB) vide letter no. 6805 and 6807/TS/CECB/2018 Naya Raipur dated 01/03/2018 and same is valid till 31/12/2019.

The Public hearing for the proposed project was held on 4thJanuary 2019, at 11:00 A.M at Ground of High School, Village Khajuri, Tehsil Balodabazar, District Balodabazar-Bhatapara, Chhattisgarh under the chairmanship of Additional Collector (ADM cadre). The issues raised during public hearing are Pollution, Socio economic activities & employment etc., which have been addressed in the EIA report.

An amount of Rs.1.45 Crores out of project cost of Rs 160 Crores (as per Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018) has been earmarked for Corporate Environment Responsibility (CER) based on need based assessment and public hearing issues. The details of CER proposed are as follows:

S.No	Major Activity Heads	Years (Rs. In Crores)			Total Expenditure
		1st	2nd	3rd	(Rs. In Crores)
A	**Based on Need Based & SIA Study**				
1	Community & Infrastructure Development Programmes (construction of 6 nos. of toilets in nearby local schools in Khajuri, Boirdih, Dhabadih village under Swachh Bharat (6nos@ Rs 3 lakhs / toilet), renovation of school buildings (Rs 10 lakhs) , Providing	0.09	0.09	0.22	0.40

S.No	Major Activity Heads	Years (Rs. In Crores)			Total Expenditure
		1st	2nd	3rd	(Rs. In Crores)
	LED Street lighting with solar panels in suitable places in surrounding 3 nos. of villages, (Rs 12 lakhs)				
2	Establishment of Skill Development Centre "DISHA Centre" along with necessary infrastructure for various vocational training program for employment generation in association with *National Skill Development Mission* (Automobile Repair, Welding, Electrical, Computer Hardware, Soft skills like computer programs, Industrial Sewing Operator & Coaching classes for under privilege students for various competitive exams, Defence Services etc.)	0.15	0.10	0.10	0.35
3	Education and Scholarship Programmes • Providing furniture, computers, library, sports equipment etc. for 3 nos. of schools in Khajuri, Boirdih, Dhabadih village • Sponsorship for School Sport events • Providing Model AnganwadiCentres in consultations with State Women and Child Development Department	0.10	0.05	0.05	0.20
4	Medical & health related activities (like Ambulance facilities to villagers etc.)	0.10	---	---	0.10
5	RWH pits in the surrounding villages	0.05	0.05	0.05	0.15
6	Supply of NPK based fertiliser to farmers	0.05	0.05	---	0.10
	SUBTOTAL (A)	**0.54**	**0.34**	**0.42**	**1.30**
B	**Based on Public Consultation / Hearing**				
1	Water Sprinkling on roads outside the plant premises	0.05	0.05	0.05	0.15
	SUBTOTAL (B)	**0.05**	**0.05**	**0.05**	**0.15**
	TOTAL (A + B)	**0.59**	**0.39**	**0.47**	**1.45**

The capital cost of the project is Rs.160 Crores and the capital cost for environmental protection measures is proposed as Rs. 14.0 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 1.9 Crores/annum. The employment generation is 200 people during operation of the proposed expansion and 500 people during construction of the proposed units.

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

S.No	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Crores)
1.	**Air Emission Management**		
	Electro Static Precipitators (ESP)	3.5	1.00
	Fume Extraction system with bag filters	2.0	
	Stacks	2.0	
	Water Sprinklers	0.2	
2.	**Wastewater Management**		
	for ETP & STP	0.3	0.20
	for Garland drains	0.2	
3.	**Solid waste Management**		
	Fly Ash Handling system	1.2	0.30
	Slag Handling	0.3	
	Hazardous waste storage & disposal	0.2	
	Municipal solid waste storage & disposal	0.1	
4.	Greenbelt development, Land scaping, Noise Management, RWH etc.	0.1	0.10
5.	Fire Safety Systems	1.0	0.05
6.	**Environmental Monitoring**		
	AAQMS	1.6	0.10
	CEMS	0.5	
7.	**Occupational Health & Safety**		
	Primary Health Centre (PHC)	0.5	0.15
	Personal Protective Equipment's (PPEs)	0.2	
	Ambulance	0.1	
TOTAL		**14.0**	**1.90**

8.2 acres (3.319 ha.) of land is earmarked for greenbelt development in the plant premises (including existing). 10 to 20 m wide greenbelt will be developed all around the plant.

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

Name of the Consultant: M/s. Pioneer Laboratories & Consultants Pvt. Ltd., Hyderabad (Sl. No. 113 in the List of Accredited EIA Consultants dated 10th July 2019).

Observations of the Committee held during 30-31st July, 2019

The Committee noted that as per the proceedings of the public hearing only four people have attended the hearing and only one person namely Shri. Vishay Kumar Dhruv, Husband of the Sarpanch, Khajuri village has expressed concerns against the proposed expansion project. Further, the Committee has also seen the videography of the public hearing wherein it is noted that majority of the people were raising slogans against the expansion project outside the venue fixed for the hearing and they have not come forward to participate in the hearing.

Recommendations of the Committee held during 30-31st July, 2019

In view of the above and after detailed deliberations, the committee requested the Ministry to obtain the comments/views from the District Magistrate on the proceedings of the Public Hearing for further consideration and taking appropriate view on the proposal cited above.

13.12.3 Based on the EAC recommendations, Ministry vide letter dated 1/10/2019 sought the comments/views of District Magistrate on the proceedings of the Public Hearing. In response to this, the Addl. District Magistrate, Balodabazar-Bhatapara vide letter dated 24/10/2019 informed Ministry that Public Hearing for the project was held at 11.00 Hrs on 4/01/2019 at High School Ground, Village Khajuri, Tehsil Balodabazar, District Balodabazar-Bhatapara, Chhattisgarh under the chairmanship of Additional Collector. The public hearing was held as per the provisions laid down in the EIA Notification, 2006. During the hearing, the Managing Director of M/s. Animesh Ispat Private Limited has explained the salient features of the project to the participants and the issues raised during the public hearing are pollution and employment. It was also stated in the letter that the industrial development in their district is very low and therefore most of the families are dependent on income from agricultural activities which is mostly seasonal. Moreover, lack of industrial development is also affecting the educated population due to non-availability of sufficient employment opportunities in the district. The expansion proposal can curb the employment and skill development problems in the district. The problems of environmental harms from the project can be curbed by ensuring strict compliance of the pollution control norms.

13.12.4 Subsequently, Ministry vide letter dated 18/11/2019 requested the District Magistrate, Balodabazar-Bhatapara, Chhattisgarh and Member Secretary, Chhattisgarh Environment Conservation Board (CECB) to participate in the EAC meeting held during 28/11/2019 in order to take appropriate view in the matter.

13.12.5 The letter dated 24/10/2019 of Addl. District Magistrate, Balodabazar-Bhatapara was placed before the Committee. Shri. S.K. Upadhyay, Regional Officer, CECB attended the meeting on behalf of CECB. He apprised the Committee that public hearing was held as per the procedure laid down in the EIA Notification, 2006. Further, it was informed that project proponent should put in place the state-of-art pollution control system to combat pollution arising from the proposed project. Also, the proponent should ensure adequate measures to develop and promote the standard of living of the village must be taken to ensure that the project benefits all its stakeholders.

Observations of the Committee:

13.12.6 The Committee has taken cognizance of the response of Addl. District Magistrate, Balodabazar-Bhatapara and the views expressed by the representative of the Chhattisgarh Environment Conservation Board on the proceedings of the Public Hearing held for the instant proposal. Besides, the Committee also noted that Sarpanch, Gram Panchayat, Khajoori, Janpad Panchayat, Balodabazar had filed a case [Original Application No. 250 of 2019] before the Hon'ble National Green Tribunal alleging that proposed sponge iron plant of M/s. Animesh Ispat Private Limited will have potential to cause pollution which was disposed of by the Tribunal on 6/8/2019 based on the CECB report.

Recommendations of the Committee

13.12.7 In view of the forgoing and after detailed deliberations, the committee recommended the project for grant of Environmental Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 for sponge iron plants, induction furnace and rolling mills.

i. As proposed, the project proponent shall use good quality of coal with Sulphur content less than 0.5% and calorific value at least 4500 Kcal /Kg.

ii. Project proponent shall not produce ferrochrome in the Ferro Alloys plant.

iii. Air cooled condenser shall be provided in the power plant.

iv. Fourth hole extraction shall be provided in the furnaces to control secondary emissions.

v. Project proponent shall install closed loop gasifier to take care of tar generation, phenolic and cyanide laden effluent.

vi. No ground water abstraction is permitted.

vii. Greenbelt shall be developed in an area of eighteen (18) acres outside the plant premises in addition to 33% greenbelt development in the plant area.

viii. Performance monitoring of pollution control device shall be carried out on six monthly basis and report shall be furnished to the Regional Office of the MoEF&CC.

ix. Particulate emissions from the stacks shall be maintained less than 30 mg/Nm^3.

x. CER shall be implemented in three (3) years which includes procurement of ambulance and establishment of skill development training center.

13.13 Greenfield Steel Plant (Pellet Plant- 600000 TPA, DRI plant 420000 TPA, Billet Making using Induction Furnaces-400000 TPA, Automotive Components Manufacturing Facility120000 TPA using Billets, Ferroalloy Plant-52000 TPA, and Captive Power Plant- 34 MW using WHRB and AFBC) by **M/s. Pushp Steels & Mining Private Limited** located at Borai Industrial Growth Centre, **Rasmara, District Durg, Chhattisgarh** [Online proposal No. **IA/CG/IND/85734/2018**; MoEF&CC File No. **J-11011/393/2018-IA-II(I)**] – **Environment Clearance - regarding.**

13.13.1 **M/s. Pushp Steels & Mining Private Limited** has made an online application vide proposal no. IA/CG/IND/85734/2018dated 18/11/2019 along with copy of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Observations of the Committee

13.13.2 The Committee noted that the proposal is for setting up of following units at Borai Industrial Growth Centre, Rasmara, District Durg, Chhattisgarh.

Name of Unit	No of Unit	Capacity of Each Unit	Total Production Capacity
Iron ore Beneficiation cum Pellet Plant (Product-iron ore pellets)	1	600000 TPA	600,000 TPA
DRI Plant (Product-sponge iron)	2 1 1	100 TPD 350 TPD 500 TPD	350,000 TPA
Induction Furnace (Product- Billets)	4 3	15 tons 12 tons	320,000 TPA
Ferroalloy Plant (Product-FeMn, FeSi, SiMn)	3	9 MVA	52,000 TPA
Press Machines (Product-various automotive components using billets)	1 1 1 2	125 tons 60 tons 40 tons 25 tons	120,000 TPA
Captive Power Plant (Product- electricity)		25 MW (WHRB) 10 MW (AFBC)	35 MW

13.13.3 After detailed deliberations, the committee observed the EIA report is lacking in several aspects inter-alia include the following:

i. EIA report is not in line with the generic structure of Appendix-III of EIA Notification, 2006.

ii. Details of the gasifier in respect of technology and pollution control devices to be adopted were not provided.

iii. Plant layout was illegible and it does not have proper legends and scale.

iv. Interpretation of baseline environment data (Ambient Air/Water/Soil Quality) was not furnished in chapter 3 of the EIA report.

v. Methodology followed for reporting of low values of BOD (0.4 mg/l) in the water quality need to be provided.

vi. Source of Ammonia presence in the Ambient Air shall be provided.

vii. Tailings/slime management plan has not been furnished.

viii. Corporate Environment Policy has not been furnished.

ix. Time bound action plan to comply with the issues raised during the public hearing ad verbatim and findings of the social impact assessment along with the budgetary requirement shall be prepared and submitted in line with the provisions contained in the Ministry's O.M. No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

x. Action plan for rain water harvesting has not been furnished.

xi. Action plan for green belt development covering 33% of the total project area in two years shall be submitted.

Recommendations of the Committee

13.13.4 In view of the foregoing and after detailed deliberations, the committee recommended to return the proposal in present form.

13.14 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 Jhargram (Formerly Paschim Medinipur) **West Bengal** [Proposal No. **IA/WB/IND/5852/2008**; F.No. **J-11011/604/2008-IA-II(I)**] **– Environment Clearance - regarding.**

13.14.1 **M/s. Rashmi Cement Limited** has made an online application vide proposal no. IA/WB/IND/5852/2008dated 19/11/2019 along with copy of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details submitted by the project proponent

13.14.2 The expansion of Sponge Iron plant from 6,00,000 TPA to 14,90,000 TPA, Ferro Alloys Plant from 72,000 to 96,000 TPA with Chrome briquette & Zigging plant and addition of new Steel Melting Shop of 5,70,000 TPA with slag crushing unit, Hot rolling mill of 2,50,000 TPA, Cold rolling mill of 3,00,000 TPA capacity, CPP from 45 MW to 113 MW (25 MW coal and Dolochar Mix Based and 88 MW WHRB based) of M/s Rashmi Cement Limited located at Mouza Jitusole (J.L. No. 702 & 703), Junglekhas (JL No. 731) & Baghmundi (J.L. No. 928), Village- Jitusole, P.S. Jhargram, District – Jhargram, (Formerly Paschim Medinipur) West Bengal was initially received in the Ministry on 27/09/2017 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC (I)] during its 28thmeeting held on 5-7th February, 2018 and the ToR was accorded by the Ministry on 27/02/2018. Thereafter, the ToR was amended by the Ministry on 4/04/2019 for inclusion of revised product slate and DRI unit configuration. Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry on 19/11/2019 vide proposal no. IA/WB/IND/5852/2008.

13.14.3 The project of M/s Rashmi Cement Limited located at Mouza Jitusole (J.L. No. 702 & 703), Junglekhas (JL No. 731) &Baghmundi (J.L. No. 928), Village- Jitusole, P.S. Jhargram, District – Jhargram, West Bengal is for expansion of Sponge Iron plant from 6,00,000 TPA to 14,90,000 TPA, Ferro Alloys Plant from 72,000 to 96,000 TPA with Chrome briquette & Zigging plant and addition of new Steel Melting Shop of 5,70,000 TPA with slag crushing unit, Hot rolling mill of 2,50,000 TPA, Cold rolling mill of 3,00,000 TPA capacity, CPP from 45 MW to 113 MW (25 MW coal and Dolochar Mix Based and 88 MW WHRB based).The existing project was accorded environmental clearance vide F. No: J-11011/604/2008-IA. II (I) dated 13/02/2009 and amendment and validity extension of environmental clearance was obtained on 7/07/2017.

13.14.4 The certified compliance report for the existing unit was issued by the Regional Office of MoEF&CC at Bhubaneshwar vide letter no.102-214/EPE dated 26/07/2018 wherein non-compliances have been reported with respect to no increase in pollution load certificate from West Bengal State Pollution Control Board (WBPCB)installation of online AAQ station, green belt development, provision of mobile STP, construction of garland drain, PPE to workers and approval obtained for slurry disposal. Subsequently, PP has submitted that action taken report to the Regional Office on 29/10/2018 &14/01/2019 which was examined and the report was furnished by Regional Office on 6/03/2019 wherein it was stated that corrective action has been taken by the PP to comply with the non-compliances.

13.14.5 It has been reported that the Consent to Operate renewal for the existing unit was obtained from WBPCB vide CO No-113753 (memo no-036-hl-co-s-10-0399 dated 20-06-2019) and is valid up to 31-12-2021.

13.14.6 The existing and proposed unit details along with the configuration and their production capacities are given as below:

Sl. No	Name of the Unit	No of Units (Existing)		No of Units (Proposed)		Total Production	
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity
1	Enhancement of Existing DRI production by process optimization **Product:-** Sponge Iron	10 x 100 + 1 x 350 TPD + 1 x 600 TPD	6,00,000 TPA	3 x 600 TPD	6,90,000 TPA	10 x 100 + 1 x 350 + 4 x 600 TPD	14,90,000 TPA
			--	--	2,00,000 TPA		
2	SAF (Ferro Alloy Plant) **Product:-** (FeMn, FeSi , SiMn&FeCr)	4 x 9 MVA	48,000	4 x 9 MVA	48,000	8 x 9 MVA	96,000 TPA
3	Zigging plant	--	--	6 x 15 TPD	6 x15 TPD	6 x 15 TPD	6 x 15 TPD
4	Chrome Briquette Plant	1 x 40 TPH	1 x 40 TPH	1 x 40 TPH	1 x 40 TPH	2 x 40 TPH	2 x 40 TPH

Sl. No	Name of the Unit	No of Units (Existing)		No of Units (Proposed)		Total Production	
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity
5	SMS with matching LRF & AOD, CCM **Product-:** Billets/ Slab	--	--	8 x 20 T	5,70,000 TPA	8 x 20 T	5,70,000 TPA
6	Slag Crusher	--	--	2 x 20 TPH	2 x 20 TPH	2 x 20 TPH	2 x 20 TPH
7	Hot Rolling Mill **Product-:** H.R. Plates, Galvanized sheets	--	--	--	2,50,000 TPA	--	2,50,000 TPA
8	Cold Rolling Mill/ Wire Drawing with Pickling Line & Continuous Galvanising Line **Product-:** TMT Bars, Wire rod & Wire	--	--	--	3,00,000 TPA	--	3,00,000 TPA
9	Captive Power Plant Product: Power	43 WHRB	43 MW	45 MW WHRB based + 1 x 25 MW CFBC (Coal Dolochar based)	70 MW	88 MW WHRB based + 1 x 25 MW CFBC (Coal Dolochar based)	113 MW

13.14.7 The total land of M/s Rashmi Cement Limited is 48.56 ha. (120 acres). Total land required for the installation of proposed expansion unit will be 12.14 ha. (30 acres). The proposed expansion project is to be installed within the existing plant premises. No additional land is required for the above mention expansion project. The land is industrial in nature. No forest land involved. The entire land has been acquired for the project. The Kangsabati Canal passes at a distance of 3.5 km from the project site. It has been reported that rain water harvesting reservoir over an area of 0.33 ha. (0.809 acres) exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

13.14.8 The topography of the area is flat and reported to lies between 22°21'51" N to 22°21'33" N & 22°21'32" N to 22°21'41" N Latitude and 87°01'04"E to 87°01'58"E & 87°01'07"E to 87°01'21"E Longitude in Survey of India topo sheet No. F45J3. The ground water table reported to ranges between 4.5 to 11.6 mbgl below the land surface during the post-monsoon season and 6.6 to 17 mbgl below the land surface during the pre-monsoon season.

13.14.9 No national park/wildlife sanctuary / biosphere reserve / tiger reserve/elephant reserve

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

13.14.10 The raw material requirement along with its source and mode of transportation is furnished as below. The mode of transportation of finished products is also given below.

Raw materials

Sl. No.	Name of the Raw Materials	Quantity (TPA)	Source	Distance of source from		Up to First Unloading point (RAIL/ PORT)	Plant site	
				First Unloading Point (Km)	Project site		Distance from first unloading point	(Mode of Transportation)
1	Iron ore lump	4,47,000	Applied for captive iron ore mines Alternate source: Purchased from Barbil-Joda, Orissa	270-300	---	Train up to Jhargram Public Siding	10 KM	By Road SH-5
						Train up to PFT RML Siding	30 KM	By Road NH-6
2	Iron ore Pellet	17,88,000	From other unit of group company	---	30-200	----	---	By Road NH-6
3	Non-coking coal	12,77,200	CCL, MCL & Imported Coal. Applied for captive Coal mines (Jagnnathpur-B, West Bengal) and is successful bidder.	300-500	---	By vessel up to nearest port (Haldia / Paradeep / Vizag) and followed by train up to Jhargram Public Siding	10 KM	By Road SH-5
						By vessel up to nearest port (Haldia / Paradeep / Vizag) and followed by Train up to PFT RML Siding	30 KM	By Road NH-6

4	Coke	62,400	Imported, E-Auction	300	---	By vessel up to nearest port (Haldia / Paradeep / Vizag) and followed by train up to Jhargram Public Siding	10 KM	By Road SH-5
						By vessel up to nearest port (Haldia / Paradeep / Vizag) and followed by Train up to PFT RML Siding	30 KM	By Road NH-6
5	Dolomite	93,240	From Birmitrapur, Orissa / Bilaspur, CG	270-350	---	Train up to Jhargram Public Siding	10 KM	By Road SH-5
6	Limestone	40,279	From Birmitrapur, Orissa / Bilaspur, Raipur CG / Katni MP	270-350	---	Train up to Jhargram Public Siding	10 KM	By Road SH-5
7	Manganese ore	2,49,600	From Balaghat, MP & Orissa	1000	---	Train up to Jhargram Public Siding	10 KM	By Road SH-5
8	Chromium Ore	2,11,200	Orissa, Jharkhand etc.	300	---	Train up to Jhargram Public Siding	10 KM	By Road SH-5
9	Quartzite	24,000	From Belpahar Orissa / Bilaspur, Raipur CG	500		Train up to PFT RML Siding	30 KM	By Road NH-6
Total		**41,92,919**						

13.14.11 The transportation of raw material will be mainly through rail and road. The nearest railway station is Jhargram at a distance of 10 Km and RML PFT siding is at 30 Km

from the project site. From railway siding it will be transported to project site by road.

Total Inventory of Inward & Outward movement of material

Sl. No.	Entity	Quantity (TPA)	Remark
1	Iron Ore Lump	4,47,000	INWARD
	Iron Ore Pellet	17,88,000	
	Non –Coking Coal	12,77,200	
	Coke	62,400	
	Dolomite	93,240	
	Limestone	40,279	
	Manganese Ore	2,49,600	
	Chromium Ore	2,11,200	
	Quartzite	24,000	
SUB-TOTAL		41,92,919	A
2	Finished Product	14,40,350	OUTWARD
	Solid waste	6,86,813	
SUB-TOTAL		21,27,163	B
Total (A+B)		**63,20,082**	

13.14.12 The total quantity of raw material, finished product and solid waste consider for impact on Transportation is given in Table below:

Quantity of Material for Transport through road

Detail	Raw Material	Finished Product	Solid waste
Quantity (MTPA)	4.2	1.4	0.7
Average operating Days	350	350	350
Quantity (t/ Day)	11,979	4,115	1,962
Capacity of truck (tons)	35	35	35
Total Numbers of Trucks per days	342	117	56
Operating Hours	16	16	16
Number of Trucks/hr	21	7	4

13.14.13 It can be seen from the table that, maximum trucks which would add to the existing traffic will be 21 trucks/ hour inward and 11 trucks/ hour outward for duration of 16 hours after the expansion of the plant.

13.14.14 The total water requirement of the project is estimated as 4536 KLD. The raw water will be sourced mainly from the supply system of Jhargram Municipality & ground water (bore well). The detail of sources of water is given as:

Sl.no.	Permission Granted by	Permission Obtained for drawl of water (KLD)	Total Daily Make up Water requirement for the proposed project
1	Jhargram Municipality (Letter dated 12-08-2018)	2500	

Sl.no.	Permission Granted by	Permission Obtained for drawl of water (KLD)	Total Daily Make up Water requirement for the proposed project
2	State Water Investigation Directorate (SWID), West Bengal from bore well (Permit no-P141773100763 dated 13.03-2014 etc.)	2060	**4536 KLD**
TOTAL		**4560**	

13.14.15 The power requirement of the project is estimated as 196.6.MW, out of which 113 MW will be obtained from the proposed Captive power plant and balance 83 MW from WBSEDCL.

13.14.16 Baseline Environmental Studies were conducted during summer season i.e. from 1/03/2019 to 31/05/2019. Ambient air quality monitoring has been carried out at 9 locations and the data submitted indicated: PM_{10} (42.6 μg/m^3 to 91.3 μg/m^3), $PM_{2.5}$ (26.3 μg/m^3 to 51.3 μg/m^3), SO_2 (4.1 μg/m^3 to 15.3 μg/m^3) and NO_x (12.33 μg/m^3 to 29.4 μg/m^3). The results of the modelling study indicate that the maximum increase of GLC for the proposed project is 4.8 μg/m^3 (N direction) with respect to the PM_{10}, 23.8 μg/m^3 (N direction) with respect to the SO_2& 5 μg/m^3 (N direction) with respect to the NO_x.

13.14.17 Ground water quality has been monitored in eight locations in the study area and analysed. pH: 6.5 to 7.1, Total Hardness: 44 to 185 mg/l, Chlorides: 5.4 to 41.2 mg/l, Fluoride: 0.09 to 0.22 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 8 locations. pH: 6.6 to 7.2; DO: 6.2 to 6.9 mg/l and BOD: 2.1 to 2.9.mg/l. COD:8 to 20 mg/l.

13.14.18 Noise levels are in the range of 42 to 73 dBA for daytime and 30 to 62 dBA for night time.

13.14.19 No/ R&R is involved. The proposed expansion will be carried out within the existing plant premises without any further land acquisition.

13.14.20 The solid waste generation due to the existing and proposed expansion along with the mode of reuse/disposal is furnished as below:

EXISTING (After Surrendering Un Implemented Unit)				**Because of Proposed Expansion**	**TOTAL**	
Sr. No	**Solid Waste**	**(TPA)**	**Solid Waste Management Practice**	**(TPA)**	**(TPA)**	**Solid Waste Management Practice**
1	From APC Devices of DRI & Ferro Plant	1,16,800	Cement Making, Brick Manufacturing, Road Construction, Low land Filling	97,000	2,13,800	Cement Making, Brick Manufacturing, Road Construction, Low land Filling
2	Dolochar from DRI Plant	1,11,250	Sent to M/s Orissa Metaliks Private Limited, Kharagpur (Group	1,69,750	2,81,000	To be used in proposed CFBC Boilers. and Sent to M/s Orissa

EXISTING (After Surrendering Un Implemented Unit)				Because of Proposed Expansion	TOTAL	
Sr. No	**Solid Waste**	**(TPA)**	**Solid Waste Management Practice**	**(TPA)**	**(TPA)**	**Solid Waste Management Practice**
			Company) for using in FBC Boiler			Metaliks Private Limited, Kharagpur (Group Company) for using in FBC Boiler
3	Ferro Alloy Slag	25,000	Cement Making, Road Construction	25,000	50,000	• Slag generated during Ferro Manganese production will be used as a raw material for Silico Manganese production. • Slag generated during Silico Manganese production will be used for road construction /land filling. • After maximum recovery of Chrome, Ferro chrome slag after undergoing TCPL Test will be used for green concreting.
4	Kiln Accretion	6,854	Road Construction	5,016	11,870	Road Construction
5	From APC Devices of SMS, CPP	*****	*****,	*****	95,992	Cement Making, Brick Manufacturing, Road Construction,
6	Fly Ash	*****	*****	*****	92,106	Used for Cement Making & Brick Making
7	SMS Slag	*****	*****	****	83000	Used for low land filling, Block Making, Road Making
8	Miss Roll/ End Cuts	*****	*****	20000	20000	Used in Proposed S.M.S Plant

EXISTING (After Surrendering Un Implemented Unit)				Because of Proposed Expansion	TOTAL	
Sr. No	**Solid Waste**	**(TPA)**	**Solid Waste Management Practice**	**(TPA)**	**(TPA)**	**Solid Waste Management Practice**
9	Steel Scrap	*****	*****	Variable	Variable	Used in Proposed SMS Plant
10	Sludge from ETP	*****	*****	07	07	Sent to (CHWTSDF)
11	Sludge from Galvanising & Pickling Line	*****	*****	1578	1578	Sent to (CHWTSDF)
12	Zinc Ash/ Dross	****	*****	845	845	Sell to WBPCB Authorized Vendors
13	Iron oxide Powder from ARP	****	*****	1500	1500	To be used in Group Sinter plant, Sell to Tape & Paint manufacture

13.14.21 It has been envisaged that an area of 15.05 ha. (37.2 acres) out of 16.03 ha (39.6 acres) @ 1800 tress per hectare already being developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities. Density of tree species will be increased from 1800 to 2500 saplings per hectare and develop three tier plantations over an area of 16.18 ha. (40 acres) in a time frame of two years.

13.14.22 The Public hearing of the project was held on 22/08/2019 at Sidho Kanho Meeting Hall located at the office compound of the District Magistrate, Dist.-Jhargram, West Bengal under the chairmanship of Sri P. Goswami (Additional District Magistrate). The issues raised during public hearing are pollution, employment, development of road, drinking water facility, medical facilities etc. An amount of 407.5 Lakhs (0.80 % of Project cost) has been earmarked for CER based on public hearing issues and need based assessment study. The break up is given as below:

Sl. No.	**PROPOSED CER ACTIVITIES**	**INVESTMENT (IN LACS)**		
		Year 1	**Year 2**	**Year 3**
PUBLIC HEARING RELATED ACTIVITIES				
1	Drinking Water Infrastructure (Tube well in nearby villages – 25 nos. @ Rs. 0.70 Lakhs); ATM Water Machine 15 nos. @ Rs 0.50 Lakhs)	15	10	0
2	Development & repairing of road in nearby villages	25	20	15
3	Ambulance to nearby panchayats-02 Nos.	22	0	0
4	Providing equipment to the local hospitals, Developing/ up gradation of primary health center.	10	15	11
5	Financial Support to the Local School for extension of building / class room/ toilets/ development of school infrastructure & library facilities	10	10	12

Sl. No.	PROPOSED CER ACTIVITIES	INVESTMENT (IN LACS)		
		Year 1	**Year 2**	**Year 3**
6	Supporting schools/ club for establishment of mini outdoor sports complex or playgrounds in providing the facilities like badminton court, tennis court and levelling of ground.	13	12	9
7	Skill development to unemployed local youth through National Skill Development Corporation, Govt. of India Scheme.	14	13	11
8	Workshop centre with latest tailoring machines for training women (like tailoring, stitching, Pickle & Sauces making, Soft Toys & Gem Jeweller, and Beautician Courses and for making affordable price of Sanitary Pads.)	10	13	10
9	Vocational Training Center for Educated youth of villages	8	9	9
10	Development of parks, plantation of trees in the nearby areas.	15	11	10
NEED BASED ACTIVITIES				
1	Open Defecation free village by introducing community & Individual Toilets	5	5	5
2	Transportation facility for school students	5	5	0
3	Street Lighting (Solar/Led) provision at suitable public places – 100 nos.	5	5	0
4	Creation of irrigation infrastructure in the peripheral villages(Up gradation of Pond, Supply of Crop harvesting maching, Pest Control Machine) and Drainage Development - side drains & Construction of Culvert on drainage	5	5	5
5	Infrastructure facilities development for Welfare of the local villager	5.5	0	0
6	Provide Dustbin in Village (under Swach Bhart Scheme)	5	5	0
TOTAL			**407.5 Lacs**	

13.14.23 The capital cost of the project is Rs 510 Crores and the capital cost for environmental protection measures is proposed as Rs 3060 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 306 Lakhs. The total employment generation (existing & proposed) from the expansion project is 4750.

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

13.14.25 Name of the consultant: Kalyani Laboratories Private Limited [Sr. No. 95, List of Accredited Consultant Organizations (Alphabetically) Rev. 81, Nov., 2019].

Recommendations of the Committee

13.14.26 In view of the forgoing and after detailed deliberations, the committee recommended the project for grant of Environmental Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 for sponge iron plants, induction furnace and rolling mills.

i. Local employment shall be to the extent of Government norms (State or GoI norms).

ii. CER activities shall be completed within a time frame of three years.

iii. Excess dolochar will be consumed in the company own units located at Kharagpur.

iv. Pickling is permitted for flat products only.

v. Fourth hole extraction shall be provided in the furnaces to control secondary emissions.

vi. Particulate emission from the stacks shall be less than 30 mg/Nm3.

vii. No dumping and 100% reuse of solid wastes shall be adopted.

viii. Green belt shall be developed in an area of 33% of the total area in and around the plant in a time frame of two years.

13.15 Installation of 0.8 MTPA slag grinding unit and new facilities related to value addition and technological upgradation within the existing 1.3 MTPA Integrated Steel Plant premises by **M/s JSW Steel Limited** located at Mecheri, Taluk Mettur, District Salem, **Tamil Nadu** [Proposal No. **IA/TN/IND/104947/2019**; MoEF& CC File No**. J-11011/281/2006- IA.II(I)**] **– Environmental Clearance under para 7(ii) of the EIA Notification, 2006 -** regarding**.**

13.15.1 M/s JSW Steel Limited has made an online application vide proposal no. IA/TN/IND/104947/2019dated 19/11/2019 along with copy of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of para 7(ii) of EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details submitted by the project proponent

13.15.2 The project of M/s. JSW Steel Works located in M. Kallipatti and Pottaneri Village, Mettur Tehsil, Salem District, Tamil Nadu was granted environment clearance for the expansion of crude steel capacity from 1.0 to 1.3 MTPA. and additional captive power plant of 1 x 30 MW vide letter No. J-11011/281/2006-IA. II (I) dated 07.07.2017. The Expansion project activities are scheduled in phased manner. At present Phase-I activities of the project are completed and CTO obtained on 25.06.19 for 1.15 MTPA steel production and 97 MW Captive power generation. Balance expansion activities are scheduled in phase II.

13.15.3 The implementation status of 1.3 MTPA existing EC are given in the table below:

S. No	Manufacturing Units	Capacity at 1.0 MTPA	Proposed Expansion 1.0 to 1.3 MTPA	Total Capacity after Expansion	Implementation Status
1	Coke Oven Plant -1(Non–Recovery Type)	0.50	-	0.5	In operation
2	Sinter Plant – 1 (20 Square Meter)	0.175	-	0	In operation
3	Sinter Plant – 2 (90 Square Meter)	1.06	-	1.06	In operation

4	Sinter Plant – 3 (90 Square Meter)	-	1.06	1.06	Yet to be installed
5	Blast Furnace – 1 (402 to 650 Cubic Meter)	0.367	0.316	0.683	Yet to be installed
6	Blast Furnace – 2 (550 to 650 Cubic Meter)	0.578	0.105	0.683	In operation
7	Energy Optimizing Furnace – 1	0.41	0.23	0.64	In operation
8	Energy Optimizing Furnace – 2	0.62	-	0.62	In operation
9	Ladle Furnace-1 with Common VD	45 T/heat	20 T/heat	65 T/heat	In operation
10	Ladle Furnace -2	65 T/heat	-	65 T/heat	In operation
11	Ladle Furnace- 3 common VD	65 T/heat	-	65 T/heat	In operation
12	Ladle Furnace- 4	65 T/heat	-	65 T/heat	In operation
13	Continuous Casting Machine-1	0.35	-	0.35	In operation
14	Continuous Casting Machine	0.50	-	0.50	In operation
15	Continuous Casting Machine	-	0.45	0.45	In operation
16	Bar & Rod Mill Augmentation	0.4	0.08	0.48	In operation
17	Blooming Mill Augmentation	0.36	0.12	0.48	In operation
18	Pickling and Annealing Steel unit	-	0.06	0.06	Annealing unit is in operation. Pickling plant construction is under progress
19	Peeled and ground	-	0.04	0.04	0.01 MTPA in operation. 0.03 MTPA installation under progress
20	Air Separation Plant 1	150 T/day	-	150 T/day	In operation
21	Air Separation Plant 2	390 T/day	-	390 T/day	In operation

22	Air Separation Plant 3	-	250 T/day	250 T/day	Yet to be installed
23	Captive Power Plant 1	7 MW	-	7 MW	In operation
24	Captive Power Plant - 2	2 x 30 MW	-	2 x 30 MW	In operation
25	Captive Power Plant - 3	0	1 x 30 MW	1 x 30 MW	In operation

13.15.4 An amendment in the existing environmental clearance (EC) of 1.3 MTPA was requested for installation of 0.8 MTPA slag grinding unit and other few technological upgradation of existing facilities. The proposal was appraised in the 36thmeeting of the reconstituted EAC (Industry-I) held on 9/10/2018 and ToR was prescribed on 09.11.2018. Thereafter, amendment to the ToR was requested to include few balancing and modification facilities in the existing ToR. The proposal was considered in the 6th meeting of the reconstituted EAC (Industry-I) held during on 30/04/2019 and MoEF&CC issued amendment to the existing ToR to include the proposed facilities vide letter dated 27/06/2019. Further, the Committee also recommended that the decision to consider the instant proposal under para 7(ii) (a) will be based on findings of the EIA report to be submitted to the Ministry by the project proponent. Thereafter, EAC will consider the proposal in its meeting exercising due diligence, inter-alia, and also ascertain the need for conduct of a fresh public consultation by the project proponent.

13.15.5 Based on the ToRs prescribed for the project, JSWSL has submitted an application for grant of environmental clearance under clause 7 (ii) of the EIA notification 2006 to the Ministry vide online application no. IA/TN/IND/104947/2019 dated 11.11.2019.

13.15.6 The proposed project is for value addition, modification in the existing facilities for emission reduction and balancing facilities without increasing the production capacity of 1.3 MTPA steel.

13.15.7 The modification envisaged in the existing EC dated 7/7/2017 and the details of the value added facilities envisaged are given as below:

Modifications envisaged in the existing EC dated 7/7/2017

Manufacturing Facilities	Existing Capacity	Proposed Expansion for which EC has been issued	Total Capacity after Expansion	Modification
Coke Oven Plant -1 (Non – Recovery Type)	0.50	-	0.5	The existing weakened 80m RCC chimney of Battery 1, is being replaced with two nos. of MS refractory lined chimney of 75m height.
Sinter Plant – 2	1.06	-	1.06	**Waste heat**

Manufacturing Facilities	Existing Capacity	Proposed Expansion for which EC has been issued	Total Capacity after Expansion	Modification
(90 Square Meter)				**utilization:**
Sinter Plant – 3 (90 SquareMeter)	-	1.06	1.06	About 6,00,000 m^3/hr of hot air (275°C) planned to be diverted from sinter cooler of SP 2 & 3 to GGBS grinding unit to recover the sensible heat which is presently vented into atmosphere. **Emission reduction:** At present, Sinter machine-2 waste gas stack is operating at an average of 110 mg/Nm^3 of SPM as against the norm of 150 mg/Nm^3, which is planned to be revamped to meet 50 mg/Nm^3 as an voluntary APC measures.
Blast Furnace – 1 (402 to 650 Cubic Meter)	0.367	0.316	0.683	It is proposed to install 0.8 MTPA slag grinding unit to produce Ground Granulated Blast furnace Slag (GGBS) as a value added facility.
Blast Furnace – 2 (550 to 650 Cubic Meter)	0.578	0.105	0.683	
Ladle Furnace - 1 with Common VD (45 T to 65 T)	45 T/heat	20 T/heat	65 T/heat	The existing primary de-dusting system of LRF 1 (38000 m^3/hr) has been taken to common secondary de-dusting system of LRF's which is having designed capacity of 5,50,000 m^3/hr but working at 4,00,000 m^3/hr.

Manufacturing Facilities	Existing Capacity	Proposed Expansion for which EC has been issued	Total Capacity after Expansion	Modification
				The existing LRF-1 primary de-dusting stack of 30m height became redundant and planned to be used for CCM-3 billet grinding (surface preparation) fume extraction.
Ladle Furnace – 5 (65 T with VD)	-	-	65 T/heat (New)	Additional facility planned now. Since JSW Salem is producing special steels, the per heat process time increased from 30 min to 105 min due to vacuum degassing. Hence, additional LRF-5 is envisaged.
Continuous Casting Machine – 1	0.35	-	0.35	**Additional stacks** Since, CCM-2 is provided with auto cutter fume extraction system with stack, it is planned to provide the same facility to CCM-1 & 3 APC measures. The height of the chimney will be 20m. In addition, grinding fume extraction facility will be provided with bag filters for CCM 1 to 3 with stack height of 30m.
Continuous Casting Machine – 2	0.5	-	0.5	
Continuous Casting Machine – 3	-	0.45	0.45	
Pickling and Annealing Steel unit	-	0.06	0.06	A wet scrubber is envisaged to scrub the acid fumes generated from the acid bath as APC measures. Three hot water generators are envisaged to meet the

Manufacturing Facilities	Existing Capacity	Proposed Expansion for which EC has been issued	Total Capacity after Expansion	Modification
				following process requirement to minimize fresh acid consumption and to ensure ZLD in the proposed ETP. To maintain the acid temperature of 55^0 in the pickling bath. To maintain the treated spent acid temp. of 55^0 for reuse. To supply hot water to thermal fluidic system of evaporator for ETP to ensure ZLD
Captive Power Plant 2 (2 x 30 MW)	2X30 MW	-	2X30 MW	One coal-based boiler installed in the year 2006 with a capacity of 127 TPH is operating at emission concentration of SPM, SO2 & NOx with 70, 1000 and 600 mg/Nm^3 respectively. This unit has been planned to be upgraded, to meet the revised emission standard as per CPCB letter dated 16.04.2018 of 50, 600 and 300 mg/Nm^3 respectively.
Captive Power Plant 3 (1 x 30)	-	30 MW	30 MW	The total capacity of 30MW remains unaltered. Since, COP capacity remains same there is no additional waste gas is expected. The additional BF gas as expected due to expansion is planned to be diverted to SMS

Manufacturing Facilities	Existing Capacity	Proposed Expansion for which EC has been issued	Total Capacity after Expansion	Modification
				(VD Boilers) and various shops, a coal based boiler of 105 TPH is envisaged to meet the planned power generation of 30 MW.
DG sets	3x625 KVA	1x1250 KVA	3x625 KVA and 1x1250 KVA	2x1250 KVA 1x1750 KVA 3x275 KVA 1x650 KVA 1x400 KVA The above DG sets are envisaged to meet the emergency conditions of plant black out requirements.

Installation of value added facilities

S.No.	Name of the unit	Production capacity envisaged	Purpose
i.	Paver block making facility	25000 Nos. of paver block/day	The utilization of the steel slag has been a major challenge in all integrated steel plants. Our R&D has successfully developed a technology for using steel slag in the manufacture of paver blocks. The study has established successful production paver blocks at 30% lower costs than with natural aggregates with lower use of cement and use of steel slag. It is proposed to install a paver block making facility for 25000 Nos. of paver block/day for

S.No.	Name of the unit	Production capacity envisaged	Purpose
			demonstration purposes. It is intended with its installation, entrepreneurs will utilize this to supply good quality pavers for use in construction purposes.
ii.	Etching Lab	Nil	PP is receiving requests from their customers of special steels for the results of macro structure of steel products to assess its internal soundness. In order to carry out this test, the test samples of 25 mm thick will be collected from 160 to 310 mm round, 130 to 340/400 square and rectangle of bar products. The samples are to be immersed in hydrochloric acid in a tank of 100-liter volume for preparing the sample for further testing. It is proposed to install an acid fume extraction system to improve the work area for the laboratory personnel.
iii.	SMS slag crushing plant	Crushing unit of 50 TPH capacity	It is proposed to install a crushing unit of 50 TPH Capacity with suitable air pollution control facilities for crushing and separation of iron bearing material from slag.
iv.	Batching plant	Batching plant of 30 m^3/hr capacity	The construction activity for the expansion units in the 1.3 MTPA steel plant

S.No.	Name of the unit	Production capacity envisaged	Purpose
			expansion is under progress. For this purpose, it is proposed to install a batching plant within the steel works with suitable air pollution control facilities for catering to the ready mix concrete for construction
v.	Coke oven plant	Installation of bag filter with associated equipment to capture the coke dust emission	Existing Coke oven, fugitive emissions are observed while transporting coke in the conveyors (width: 1200mm) whenever it is in operation. In order to control this visible emission, it is proposed to install a bag filter with associated equipment to capture the coke dust emission
vi.	Coke Oven Plant	Coke Oven Stack 2A (COP)	Coke Oven battery # 2 existing 80m RCC chimney is found weakened, will be replaced with two nos. of MS refractory lined chimney of 75m height.
vii.	Coke Oven Plant	Coke Oven Stack 2B (COP)	
viii.	Coke Oven Plant	Coke oven # III chimney	To maintain and control draft at ovens the existing stack height of 38m will be increased to 65m.
ix.	Coke Oven Plant	Waste Heat Recovery Boiler# III	It is envisaged that additional sensible heat source from COP battery # 3 and to meet the requirement the existing stack dia and height will be modified to 1.8m and 35m respectively.

S.No.	Name of the unit	Production capacity envisaged	Purpose
x.	SMS – CCM# 3	Steam Exhaust System stack #2	To maintain draft in the casting area an additional steam exhaust stack will be provided with the height of 26m
xi.	Pickling plant ETP	Hot water generator to ATFD	It is anticipated that Agitated Thin Film Drier (ATFD) will be installed after evaporator of ETP. To supply heat source to ATFD a Hot water generator (HSD based) will be installed
xii.	Pickling plant ETP	ETP plant ATFD vent	It is anticipated that there is a vent stack to release water vapor from ATFD.
xiii.	CPP II	ETP plant ATFD vent	It is proposed to install a ETP (ZLD) plant in CPP II and steam will be used for heating application. It is anticipated that there is a vent stack to release water vapor from ATFD.

13.15.8 The certified compliance report for the existing environmental clearance was obtained from Regional office, Chennai vide letter No. EP/12.1/2016-17/20/TN/1687 dated 18.10.2019 wherein the conditions related to installation of solar panel, implementation of ESC related activities are yet to be complied. In this regard, project proponent has submitted action taken report for the conditions which are partially completed vide letter JSWSL/ENVT/MoEF&CC/ROC/2019-20/112 dated 01.11.2019.

13.15.9 The total land available including township is 268.08 ha. The plant site is 237.28 ha and township area is 30.80 ha. The land has been classified as Industrial Land use. The land required for the proposed changes/facilities is about 5.36 ha and the same exists within the plant premises. Hence, no additional land is required for the proposed changes. The greenery is about 33.5% of the total land area. Geographically, the proposed plant is located at 11°49'30.00" N & 77°54'22.34" E to 11°48'44.80" N to 77°55'37.51" E. The entire area falls in Survey of India topo sheet nos. C43F13, C43F14 & C44A1, C44A2.

13.15.10 There is No National parks, Wildlife sanctuaries, Biosphere reserves, Tigers/Elephant reserves, Wildlife corridors etc. within 10 km from the project site. There is no water body passing through project site.

13.15.11 The raw materials used in the plant are Iron ore lumps and fines, Coking/Non-coking and thermal coals, Dolomite Quartzite, Dunite, Anthracite and lime stone. The requirement of raw materials remains the same as noted in the existing EC of 1.3 MTPA except the addition of 0.04 MTPA of lime stone for SO_2 control in coal based boiler.

13.15.12 An agreement already exists between PWD and JSW to utilize 5 MGD (22730 KLD) of raw water from downstream of Mettur dam. The total estimated water requirement after the modification and installation of value added facilities will be about 17727 KLD (3.9 MGD) against the existing consumption of 17007 KLD (3.74 MGD). The additional water requirement 0.16 MGD is mainly for the proposed LRF# 5. As per existing EC dated 7/7/2017, the estimated fresh water consumption is 4.45 MGD (20245 KLD). Due to the RO plant installation and Air Cooled Condenser installation in CPP II (Unit # 3), about 2500 KLD of fresh water consumption was reduced per day.

13.15.13 The power requirement of the proposed project is estimated as 11.5 MW, The existing Captive power plant of the industry have power generation capacity of 97 MW and power purchase agreement with TNEB is about 34 MW. After the proposed changes the total power requirement would be 101.5 MW which will be cater through CPP and TNEB grid.

13.15.14 Baseline Environmental Studies were conducted during winter season from December 1st 2018 to 28th February 2019. Ambient Air Quality Monitoring (AAQM) was carried out at eight (8) locations during December 2018 to February 2019 and the baseline data indicates the ranges of concentrations as PM_{10} – 54.71 to 70.98 $\mu g/m^3$; SO_2 – 9.55 to 14.68 $\mu g/m^3$; NO_2 – 19.63 to 27.53 $\mu g/m^3$. AAQ modelling study emissions indicates that the maximum incremental GLCs after the proposed amendment is 4.17 $\mu g/m^3$ with respect to PM_{10}, 0.62 $\mu g/m^3$ with respect to SO_2, 0.38 $\mu g/m^3$ with respect to NO_2.The proposed technological upgradation and other facilities will lead to reduction in pollution load – SPM by 11.8%, SO_2 by 4.33% & NO_x by 8.14 %.

13.15.15 Ground water quality has been monitored at eight locations in the study area and analyzed. pH: 7.14 - 7.69, Total Hardness: 116.7 – 357.2 mg/l, Chlorides: 38.7 to 560.8 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 8 locations. Surface water samples were analyzed from 5 locations: pH: 6.52 – 7.56, Total Hardness: 126.0 – 216.2 mg/l, Chlorides: 32.4 to 85.3 mg/l. Heavy metals are within the limits.

13.15.16 Noise levels are in the range of 49.6 to 55.2 dB(A) for day time and 38.7 to 51.4 dB(A) for night time.

13.15.17 With the installation of the proposed facilities, there will be an additional waste generation from pollution control facilities viz dust about 3 TPD and will be reused in sinter plant. From pickling plant Phosphate Sludge about 100 TPD will be generated and the same will be used as fertilizer and also disposed to TSDF. Chemical Sludge/salt from the waste water treatment will be generated about 750 TPD and the same will be disposed to TSDF.

13.15.18 The Public hearing for the existing EC was held on 12.08.2016 as per the provisions laid down in the EIA Notification, 2006.

13.15.19 Total cost of the proposed modification and value addition facility is INR 234.2 crores. An allocation of Rs.13 Crores has been earmarked towards the implementation of CER related activities. The additional employment generation from the proposed project is about 50 nos.

13.15.20 Green belt is established in an area of 79.52 ha (33.50%)and further the green belt around the project will be developed (10000 saplings for the FY 2019-2020). Local and native tree species such as Mango, Neem, Eucalyptus, Ficus, Mahogany, Vagai, Teak, Puvarasu, Banyan, etc. are planted.

13.15.21 The resource requirement, pollution load comparison for the proposed modification vis-à-vis with existing EC dated 7/7/2017 is given as below.

S.No.	Description	UoM	At 1.3 MTPA as per Earlier EC	Installation of facilities proposed / modification	After EC modification and value added facilities	Remarks
1	Land Requirement					
a.	Total land	Ha	268.08	0	268.08	No change
2	Raw materials Requirement					
a.	Iron ore fines	MTPA	1.47	0	1.47	No change
b.	Iron Ore Pellets	MTPA	0.5	0	0.5	
c.	Lump ore	MTPA	0.705	0	0.705	
d.	Coking/Non-coking coal	MTPA	0.947	0	0.947	
e.	Power plant coal	MTPA	0.172	0	0.172	
f.	Coke breeze for SP	MTPA	0.023	0	0.023	
g.	Dolomite	MTPA	0.147	0	0.147	
h.	Quartzite	MTPA	0.039	0	0.039	
i.	Dunite	MTPA	0.039	0	0.039	
j.	Lime powder	MTPA	0.0945	0	0.0945	
k.	Mill scale	MTPA	0.158	0	0.158	
l.	Purchase coke	MTPA	0.156	0	0.156	
m.	Anthracite	MTPA	0.095	0	0.095	
n.	Limestone	MTPA	0.135	0.04	0.175	To control SO_2 in CPP II coal based boiler
	Total	MTPA	4.6805	0.04	4.7205	
3	Power Requirement					
a.	Power	MW	90	11.5	101.5	LRF #5, Slag

S.No.	Description	UoM	At 1.3 MTPA as per Earlier EC	Installation of facilities proposed / modification	After EC modification and value added facilities	Remarks
	Requirement					grinding unit
b.	Captive Power generation	MW	97	0	97	
c.	From grid	MW	34	0	34	
	Total power availability	MW	131	0	131	
4	Fuel Requirement					
a.	High Speed Diesel	KLD	1.7	1.6	3.3	Pickling plant and DG sets - emergency operations
b.	Liquid Petroleum Gas	TPD	1.0	0.015	1.015	
5	Water Requirement					
a.	Approved water allocation	MGD (m^3/day)	5.0 (22730)	0	5.0 (22730)	No Change
b.	Make up water consumption	MGD (m^3/day)	4.45 (20245)	0.16 (720)	3.90 (17727)	LRF #5 with VD, Slag grinding unit. Water reduction due to installation of RO plant and Air Cooled Condenser in CPPII - unit III
6	Man power Requirement					
a.	Man power Requirement	Numbers	5341	50	5391	For slag grinding unit
5	Waste water generation	m^3/day	3040	235	3275	Additional effluent from RO 200 KLD,LRF#5 - 15 KLD and CPP II –unit III - 20 KLD. Zero waste water

S.No.	Description	UoM	At 1.3 MTPA as per Earlier EC	Installation of facilities proposed / modification	After EC modification and value added facilities	Remarks
						discharge by reuse in steel plant
6	Pollution load					
	PM_{10}	kg/hr	341.31	-40.34	300.97	Reduction in pollution due to Technological Modification.
	SO_2	kg/hr	280.53	-12.16	268.37	
	NO_x	kg/hr	207.01	-16.86	190.15	
7	Waste generation					
	Non Hazardous					
	BF Slag	TPD	1350	0	1350	No change
	SMS slag	TPD	720	0	720	No change
	Dust, Sludge	TPD	197	2.66	199.66	Additional dust generation from dedusting systems which is proposed for modification. The same will be reused in sinter plant
	Hazardous	TPD	0.41	2.33	2.74	Additional generation from pickling unit- Phosphate sludge 0.27 TPD will be used as fertilizer and salt from ZLD ETP 2.06 TPD will be disposed to TSDF.

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

13.15.23 Name of the consultant: Vimta Labs Limited [Sr. No. 160, List of Accredited Consultant Organizations (Alphabetically) Rev. 81, Nov., 2019].

Observations of the Committee

13.15.24 The Committee noted that as per the findings of the EIA report, there is no change in land requirement and there is reduction in water requirement and pollution load due to the technological modification. Besides, the Committee also noted that the installation of value added facilities such as slag grinding unit and its allied facilities are environment friendly. Further, there will be no increase in the production capacity of 1.3 MTPA steel. Therefore, the Committee consider the instant proposal under para 7(ii) (a) of the EIA Notification, 2006 and dispense with the requirement of conducting fresh public consultation.

Recommendations of the Committee

13.15.25 In view of the forgoing and after detailed deliberations, the committee recommended the project for grant of Environmental Clearance under para 7(ii) of EIA Notification, 2006 subject to the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 for integrated steel plants.

i. Particulate emission from the rod mill of slag grinding unit shall be less than 10 mg/Nm^3.
ii. Green belt shall be developed in an area of 85 ha (210 acres) in and around the plant in a time frame of two years.

13.16 Proposed expansion of existing sponge iron plant (2x100 TPD) by installation of sponge iron plant of 350 TPD capacity for manufacturing DRI -1,05,000 TPA, Steel Melting Shop - 1,35,000 TPA, Rolling mill – 1,20,000 TPA and Captive Power Plant of 22 MW by **M/s. M B Ispat Corporation Limited** located at village Barjora, P.S Barjora, District Bankura, **West Bengal**-[Online Proposal No. **IA/WB/IND/120191/2019,** File No. **J-11011/347/2019-IAII(I)**] - **Prescribing of Terms of Reference –** regarding.

13.16.1 M/s. M B Ispat Corporation Limited has made application vide online proposal no. IA/WB/IND/120191/2019 dated 24/10/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

13.16.2 M/s. M B Ispat Corporation Limited is operating a 2x100 TPD sponge iron unit for manufacturing Direct Reduced Iron (DRI) – 60,000 TPA at village Barjora, P.S Barjora, District: Bankura, West Bengal based on the NOC obtained from West Bengal Pollution Control Board (WBPCB) obtained vide Memo no. 2516-2N-367/2002 dated 21.01.2003.As the capital investment for the project was INR 15.70 crores Environmental Clearance was not required as per the provisions of EIA

Notification, 1994. The unit has obtained NOC prior to 14/09/2006, hence EC was not required as per the provisions of the EIA Notification, 2006. Consent to Operate was obtained for the exiting unit and is valid up to 31/07/2022.

13.16.3 The existing land is 21.39 acres. The present proposal is for expansion of existing sponge iron plant (2x100 TPD) by installation of sponge iron plant of 350 TPD capacity for manufacturing DRI -1,05,000 TPA, Steel Melting Shop - 1,35,000 TPA, Rolling mill – 1,20,000 TPA and Captive Power Plant of 22 MW within the existing land of 21.39 acres located at village Barjora, P.S Barjora, District Bankura, West Bengal.

13.16.4 The existing and proposed capacity of different products is given as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Existing			
DRI	2	100 TPD	60,000 TPA
Proposed			
DRI	1	350 TPD	105000 TPA
SMS	3	15 TPH	1,35,000 TPA
Rolling Mill	-	-	1,20,000 TPA
Captive Power			22MW

13.16.5 The land area acquired for existing plant i.e., 21.39 acres (8.65 ha) will be used for the proposed expansion activity. No forestland is involved. Of the total area 2.63 ha (33%) land will be used for green belt development.

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

13.16.7 Proposed raw material and fuel requirement for project are Iron Ore, Dolomite, Coal. The requirement would be fulfilled by Rail as well as Road Fuel consumption will be mainly in DRI & Captive Power Unit.

13.16.8 The electricity load of 18.5 MW will be procured from WBSEDCL Company has also proposed to install 1250 KVA DG Set.

13.16.9 Water Consumption for the proposed project will be 1292 KLD which will be met from rain water harvesting and ground water. There will be no trade effluent generation. Domestic waste water will be treated and reused for Greenbelt.

13.16.10 Total project cost is INR 268.90 Crore rupees. Proposed employment generation from proposed project will be 340 Nos.

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

13.16.12 Name of the consultant: Kalyani Laboratories Private Limited [Sr. No. 95, List of Accredited Consultant Organizations (Alphabetically) Rev. 81, Nov., 2019].

Recommendations of the Committee

13.16.13 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in **addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:**

i. No ground water drawl is permitted.

ii. Particulate emissions from the stacks shall be less than 30 mg/Nm3 with bag house as APCD.

iii. No reheating furnace shall be used.

iv. 100 % solid waste utilization shall be adopted.

v. Alternate energy sources shall be implemented.

vi. All areas after the installation of plant shall be developed as a green belt.

vii. Emission from ESP shall be less than 50 mg/Nm3.

viii. Rainwater harvesting plan shall be prepared and furnished by the project proponent.

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

x. The issues raised during the public hearing and commitment of the project proponent to address the same shall be compiled and submitted in a time bound action plan. The action plan shall, inter alia, contain the year-wise activities with corresponding financial allocations.

13.17 Expansion of enhancement in Production Of Pig Iron From 15,000 TPA To 30, 000 TPA, MS Billet From 15,000 TPA To 3,00,000 TPA By Installation Of Eight Nos Of Induction Furnace And Production Of TMT Bar 1,80,000 TPA By Installation of Rolling Mill And Installation Of 60,000 TPA Slag Grinding Unit Of **M/s. Radha Casting & Metaliks (P) Limited** Located at Village Paiki, P.O: Marar, District: Ramgarh, **Jharkhand**-[Online Proposal No. **IA/JH/IND/123137/2019**, File No. **J-11011/507/2009-IAII(I)**] **– Prescribing of Terms of Reference – regarding.**

13.17.1 **M/s. Radha Casting & Metaliks (P) Limited** has made application vide online proposal no. IA/JH/IND/123137/2019dated 11/11/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

13.17.2 M/s. Radha Casting and Metaliks Private Limited proposes for expansion of existing manufacturing unit for Production of Pig Iron 15,000 TPA to 30, 000 TPA, MS Billet from 15,000 TPA to 3,00,000 TPA by installation of eight nos of induction furnace and production of TMT bar 1,80,000 TPA by installation of rolling mill and installation of 60,000 TPA slag grinding unit within the existing premises.

13.17.3 The existing project was accorded environmental clearance vide letter no.J-11011/507/2009- IA II (I) dated 23.12.2009. Following is the implementation status of the existing EC.

Sl. No.	Unit	Existing Capacity (TPA)	Present status
1.	Mini Blast Furnace (23 m^3)	15,000	Implemented
2.	Induction Furnace (6 x 2T)	15,000	Implemented
3.	Re-rolling mill	18,000	Implemented.
4.	Submerged Arc Furnace	9,000	Not established and dropped
5.	Cement Grinding Unit	18,000	

13.17.4 Consent to Operate for the existing unit was accorded by Jharkhand State Pollution Control Board (JSPCB) memo No. N-93 dated 30.11.2010 validity of CTO is up to 31.12.2019.

13.17.5 The proposed expansion will be carried out within the existing premises of 8.09 ha located at VillagePaiki, Po: Marar, Dist: Ramgarh, Jharkhand.No/forestland is involved. The entire land has been acquired for the project. Of the total area 2.93 ha (36%) land will be used for green belt development.

13.17.6 The details of the existing and proposed unit details are furnished as below:

Sl. No.	Unit	Existing Capacity (TPA)	Proposed Capacity (TPA)	Total (TPA)
1.	Mini Blast Furnace	(23 Cum)15,000	(23 Cum) 15,000	30,000
2.	Induction Furnace	15,000 (6 x 2 T)	2,85,000 (6 x 8T+2x20T)	3,00,000
3.	Rolling mill	18,000	1,62,000	1,80,000
4.	Slag crushing unit	--	60,000	60,000

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

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

Raw Material Requirement for Induction Furnace

Raw Material	Existing Quantity (TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)
Sponge Iron	15,000 TPA	2,85,000 TPA	3,00,000 TPA
Pig Iron/M S Scrap	3,000 TPA	57000 TPA	60,000 TPA
Total	18,000 TPA	3,42,000 TPA	3,60,000 TPA

Raw Material Requirement for Rolling Mill

Raw Material	Existing Quantity (TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)
Hot metal	--	1,89,000TPA	3,00,000 TPA
Total	--	1,89,000 TPA	3,00,000 TPA

Raw Material Balance for Mini Blast Furnace

Raw Material	Existing Quantity (TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)
Iron ore	21315	21315	42630

Coke	9150	9150	18300
Coal Fines	750	750	1500
Dolomite	2100	2100	4200
Quartz	780	780	1560
Total	34095	34095	68190

13.17.9 The requirement would be fulfilled by nearby Iron and Manganese mines of Odisha and Jharkhand and CCL, Jharkhand. Fuel consumption will be mainly coal and electricity.

13.17.10 Water Consumption for the proposed project will be 750 KLD and existing consumption is 30KLD which will be sourced from Damodar river. Domestic waste water will be treated through soak pit via septic tank and industrial waste water generated will be treated by settling and reused in the process.

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

13.17.12 Total project cost is approx 378 Crore rupees. Proposed employment generation due to existing and expansion project will be approx 308 nos, direct employment and 1000 indirect employment.

13.17.13 The electricity load of 22 MVA will be procured from Damodar Valley Corporation. Also proposed to install 500 KVA DG set.

13.17.14 Name of the consultant: Kalyani Laboratories Private Limited [Sr. No. 95, List of Accredited Consultant Organizations (Alphabetically) Rev. 81, Nov., 2019].

Recommendations of the Committee

13.17.15 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in **addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:**

i. No reheating furnace shall be used.

ii. 100 % hot charging shall be adopted.

iii. ZLD shall be adopted.

iv. De-dusting shall be provided in the slag granulation plant.

v. Rainwater harvesting plan shall be prepared and furnished by the project proponent.

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

vii. The issues raised during the public hearing and commitment of the project proponent to address the same shall be compiled and submitted in a time bound action plan. The action plan shall, inter alia, contain the year-wise activities with corresponding financial allocations.

13.18 Modernization of existing SAIL-Rourkela Steel Plant (RSP) by installing a new stamp charge Coke Oven Battery (COB#7) of 0.77 MTPA Capacity along with by-product recovery plant within the premises of **M/s. SAIL Rourkela Steel Plant** located at Rourkela, **Odisha**- [Online Proposal No. **IA/OR/IND/124456/2019**, File No. **J-11011/66/2014-IAII(I)**] **– Prescribing of Terms of Reference – regarding.**

13.18.1 M/s. SAIL Rourkela Steel Plant has made application vide online proposal no. IA/OR/IND/124456/2019 dated 7/11/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

13.18.2 M/s. Rourkela Steel Plant (RSP) of Steel Authority of India Limited (SAIL) proposes to modernize the existing steel plant at Rourkela by installing a new stamp charge coke oven battery (COB#7) along with by-product recovery plant. It is proposed to set up the plant for producing 0.77 MTPA coke along with By-product recovery and 5 MW of power based on recovery stamp charge technology within the existing premises of integrated steel plant.

13.18.3 The existing project was accorded environmental clearance for expansion cum modernization of their Integrated Steel Plant from 1.9 MTPA to 4.2 MTPA vide letter no. J-11011/757/2007- IA II(I) dated 29/01/2008. As a part of further modernization of steel Plant (4.2 MTPA) by addition of 3 MTPA Hot Strip Mill, 3.3MTPA Beneficiation and 2 MT Pellet Plant and Special Plate Plant (3,000 TPA to 15,000 TPA) within the premises of Rourkela Steel Plant was accorded EC vide MoEF&CC's letter no. J-11011/66/2014-IA II(I) dated 15/12/2016. As part of further modernization MoEF&CC accorded EC for installation of 1 MTPA Caster#4 in SMS#2 vide letter no. J-11011/66/2014-IA II(I) dated 06/11/2019. Consent to Operate was accorded by Odisha State Pollution Control Board vide letter ref. no. 3303 dated 29/03/2019 and 8904, dated 29/08/2019 which is valid up to 31/03/2020.

13.18.4 The proposed unit will be located at Village: Rourkela, Taluka: Lathikata, District: Sundargarh, State: Odisha.

13.18.5 Total Land area in possession of RSP which was acquired way back in 1950's is 11374.65 ha (28107.36 acre). Out of this total area, the present steel plant area covers 2135.53 ha (5277 acre). Present Township covers 2301.04 ha (5686.0 acre) & reservoir created at Mandira dam covers 4856.23 ha (12000.0 acre). Out of the balance 2081.85 ha (5144.37 acre), part of the land was given to some Private institutions/organizations and the remaining vacant land would be utilized in future for expansion of existing steel plant.

13.18.6 No forestland is involved in this project. 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.

13.18.7 The targeted production capacity of the coke is 0.77 million TPA. The coal for the plant would be procured from indigenous and imported sources. The ore transportation will be done through rail.

13.18.8 The existing and proposed capacity of units along with their production capacities are given as below:

Sl. No.	Unit	Existing capacity, MTPA	Proposed capacity, MTPA	Final capacity, MTPA
1	Ore bedding and blending plant	12 MTPA	-	12 MTPA
2	Coke Ovens along with By-product recovery plant	6 COBs = 437 Ovens = 2.17 MTPA 6.4 MW Power from CDCP's BPTG By Product Plant Tar @ 97000 TPA Sulphur @ 1220 TPA	1 COB = 92 Ovens = 0.77 MTPA 5 MW Power from CDCP's BPTG By Product Plant Tar @ 37000 TPA Sulphur#1220 TPA	7 COBs = 529 Ovens = 2.94 MTPA 11.4 MW Power from CDCP's BPTG By Product Plant Tar @ 134000 TPA Sulphur#2440 TPA
3	Sinter Plant	#1(1.5 MTPA) + #2(1.57 MTPA) + #3 (3.706 MTPA) = 6.776 MTPA	-	#1(1.5 MTPA) + #2(1.57 MTPA) + #3 (3.706 MTPA) = 6.776 MTPA
4	Beneficiation Plant	3.3 MTPA	-	3.3 MTPA
5	Pellet Plant	2.0 MTPA		2.0 MTPA
6	Blast Furnace	BF#1, #4 #5 = 4.5 MTPA	-	BF#1, #4 #5 = 4.5 MTPA
7	BOF Converters	2X60/66 T + 3X150 T = 4.2 MTPA	-	2X60/66 T + 3X150 T = 4.2 MTPA
8	Ladle Furnace	1X60/66 T + 4X150 T	-	1X60/66 T + 4X150 T
9	RH-OB	150 T	-	150 T
10	Hot Metal Desulphurization	2 nos.	-	2 nos.
11	Continuous Slab Casters	4 X Single strand + 1x Single Strand = 4.2 MTPA	-	4 X Single strand + 1x Single Strand = 4.2 MTPA
12	Hot Strip Mill	3.0 MTPA	-	3.0 MTPA
13	Plate Mill	2.135 MTPA	-	2.135 MTPA
14	Cold Rolling Mill	0.641 MTPA	-	0.641 MTPA
15	ERW Pipe Plant	0.075 MTPA	-	0.075 MTPA
16	Spiral Welded Pipe Plant	0.055 MTPA	-	0.055 MTPA
17	Silicon Steel Complex	0.255 MTPA	-	0.255 MTPA
18	Special Plate	0.015 MTPA	-	0.015 MTPA

Sl. No.	Unit	Existing capacity, MTPA	Proposed capacity, MTPA	Final capacity, MTPA
	Plant			
19	Lime & Dolo Plant	6 VSKs : Lime = 0.4149 MTPA & Dolo = 0.130 MTPA	-	6 VSKs : Lime = 0.4149 MTPA & Dolo = 0.130 MTPA
20	Oxygen Plant	2 x 180 T + 1 x 700 T	-	2 x 180 T + 1 x 700 T
21	Sulphuric Acid Plant	125 TPD	-	125 TPD

13.18.9 Proposed raw material for project are Coal (1.02 MTPA). The requirement would be fulfilled by existing indigenous & imported sources. Fuel consumption will be mainly BF gas & CO gas.

13.18.10 Water Consumption for the proposed project will be 560 m^3/hr and waste water generation will be 60 m^3/hr. The project is designed based on Zero Liquid Discharge. Industrial waste water generated will be treated in BOD & RO plant and recycled back to process. Domestic waste water will be treated in existing STP.

13.18.11 The power requirement is 12 MW which will be procured from existing grid/captive production.

13.18.12 Green belt has already been developed inside the existing Steel Plant, over an area of 448.23ha. (1107.60 Acres). The vacant land of RSP, available adjacent to the steel plant boundary will be utilized to enhance Green belt further to 33%.

13.18.13 Total project cost is approx. Rs 2317.64 crore. Proposed employment generation from proposed project will be 529 direct employments and 200 indirect employments.

13.18.14 The details of court case under EIA Notification related to Project or activity are given below:

Case No.2(c) cc 110/2019, District Magistrate & Collector, Sundargarh, at SJDM Court, Panposh, Rourkela for Credible action against RSP for establishment of 125 TPD sulfuric acid plant without obtaining Environmental Clearance.

13.18.15 Name of the consultant: M/s. M. N. Dastur and Company (Pvt.) Ltd. [S.No. 99, List of Accredited Consultant Organizations (Alphabetically) Rev. 81, Nov., 2019].

Observations of the Committee

13.18.16 The Committee noted that a report on cumulative environmental impact assessment of all the existing units is required in order to take holistic view on the instant proposal under consideration.

Recommendations of the Committee

13.18.17 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-1 read with additional ToRs at Annexure-2:

i. BOD plant shall be installed for the treatment of effluent from Coke oven plant.

ii. Consolidated compliance report of all the existing ECs from the Regional Office shall be furnished.

iii. Consolidated list of all the existing units shall be furnished in the EIA report and cumulative impact assessment shall be done with considering site specific parameters including PAH modeling.

iv. 100% waste utilization shall be adopted.

v. Vision document for future expansion shall be prepared and submitted along with the EIA report.

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

vii. The issues raised during the public hearing and commitment of the project proponent to address the same shall be compiled and submitted in a time bound action plan. The action plan shall, inter alia, contain the year-wise activities with corresponding financial allocations.

13.19 Expansion of Karakhendra Steel Plant from 0.127 MTPA to 0.681 MTPA crude steel capacity with installation of 90 MW CPP by **M/s Rungta Mines Ltd.** located at village Karakhendra and Karakolha, District Keonjhar, **Odisha.**-[Online Proposal No. **IA/OR/IND/125115/2019**, File No. **J-11011/230/2016-IAII(I)] – Prescribing of Terms of Reference** – regarding**.**

13.19.1 M/s Rungta Mines Limited has made application vide online proposal no. IA/OR/IND/125115/2019 dated 14/11/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

13.19.2 M/s Rungta Mines Limited proposes expansion of Karakhendra Steel Plant from 0.127 MTPA to 0.681 MTPA crude steel capacity with installation of 90 MW CPP based on DRI//MBF/EAF technology.

13.19.3 The existing project was accorded Environment Clearance vide Letter No. J-11011/230/2016-IA.II(I) dated 15.01.2018 and its enhancement to 0.127 MTPA dated 07.08.2019. The Consent to Establish has been obtained from OSPCB vide letter no.8262/IND-II-CTE-6338 dated 14.08.2019. Presently, the construction activities are under progress.

13.19.4 The Expansion project will be located at villages Karakhendra and Karakolha, District Keonjhar, Odisha.

13.19.5 The project will be established in two parcels of land, (Part I) South part, an area of 105.955 acres for plant and its facilities and (Part II), North part, which is an area of 31.546 acres for Solid waste management and Green Belt Plantation.

13.19.6 The total land for project shall be 137.501 acres. Out of which 13.2 acres private land is in possession and already under industrial purpose and 6.26 acres land has been purchased. Additional 118.041 acres has been approved by IDCO for allotment. Out

of the total area 45.366 acres (33%) land will be used for green belt development and plantation.

13.19.7 The coordinates of the plant site and solid waste disposal facility are given below:

		Latitude, N	Longitude, E
Plant & Facilities (Part 1- South part)	A. North most	22°08'28.71"	85°24'49.74"
	B. East most	22°08' 19.01"	85°25'07.99"
	C. South most	22°07'57.13"	85°24'49.56"
	D. West most	22°08'13.86"	85°24'42.44"
Waste disposal management area (Part 2- North part	A. North most	22°08'52.38"	85°24'57.65"
	B. East most	22°08'48.01"	85°25'11.12"
	C. South most	22°08'26.37"	85°24'56.33"
	D. West most	22°08'47.98"	85°24'53.08"

13.19.8 The nearest national park is Simlipal at a distance of 77 Km in ESE direction and Simlipal Sanctuary is at a distance of 109 km in ESE direction from the site. No National park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are located in the core and buffer zone of the project.

13.19.9 The existing and proposed manufacturing facilities and production are given as below:

Sl. No.	**Plant Facilities**	**Annual production, TPA except where mentioned**		
		Present sanctioned capacity as per EC dated 07.08.2019	**Expansion/ Additional facility**	**Total**
(a)	**(b)**	**(c)**	**(d)**	**(c)+(d)**
1.	Sponge Iron Plant (1x600 TPD DRI)	-	273,000	273,000
2.	Pelletisation Plant	-	1,474,000	1,474,000
3.	Sinter plant (1x50 sq.mtr)		554,400	554,400
4.	Coke oven plant (4x70,000 TPA)		280,000	280,000
5.	Mini Blast furnace (1x380 cum)		372,400	372,400
6.	Steel Melting Shop	126,720	554,400	681,120
6.1	Steel Melting Via IF-Route			
	(i) Induction Furnace (2 nos. X15T)	126,720		
	(ii) Laddle Furnace (1 no. X 20T)	126,720		
6.2	Steel melting shop via EAF/ EOF with LRF/ VD/ AOD (1x70T)		554,400	
7.	Oxygen plant		150 TPD	150 TPD
8.	Continuous Casting Machine - Billets/ Bloom/ Slab	124,186 (1 no. x 2 strands)	543,312 (1 no. x 4 strands)	667,498
9.	Rolling Mill	121,702 (Unit-1)	532,140 (Unit-2)	653,842

Sl. No.	Plant Facilities	Annual production, TPA except where mentioned		
		Present sanctioned capacity as per EC dated 07.08.2019	Expansion/ Additional facility	Total
(a)	(b)	(c)	(d)	(c)+(d)
10.	Captive Power Plant (CPP)	-	90 MW	90 MW
10.1	WHRB Based CPP	-	12 MW	12 MW
10.2	WHRB based CPP from Coke oven plant		18 MW	18 MW
10.3	WHRB based CPP from BF		10 MW	10 MW
10.4	AFBC/ CFBC based CPP	-	50 MW	50 MW
10.5	TG	-	2 x 45 MW	2 x 45 MW

13.19.10 Proposed raw material and fuel requirement for project are Iron Ore (20,60,498 TPA from own mines/OMC/other private mines), Coking Coal (378,000 TPA from South Africa) and Coal (562,396 TPA from South Africa). The requirement would be fulfilled by company's own mines/OMC/Other private mines. The ore transportation will be done through rail and road. Fuel consumption will be mainly Coking and non - coking coal.

13.19.11 Water Consumption shall be 609.8 KLD after expansion and waste water generation will be 262 KLD. Domestic waste water will be treated Sewage Treatment Plant and industrial waste water generated will be treated in Effluent Treatment Plant and reused completely.

13.19.12 The power requirement of the plant will be met through own power generation & from Company's nearby plant. The total requirement of power for the various units will be approximately 108 MW which will be met from captive generation (90 MW) and from Company's nearby CPP (19 MW available). Company has also proposed to install 2x1500 KVA DG Set.

13.19.13 Total project cost for expansion is Approx.Rs.1848.69 Cr. Proposed direct employment generation from expansion project will be 1000 persons.

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

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

Observations of the Committee

13.19.16 The Committee noted that a road is passing through the project site. Further, a report on cumulative impact assessment of all the units envisaged in the existing ECs are required in order to take holistic view on the instant proposal under consideration.

Recommendations of the Committee

13.19.17 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-1 read with additional ToRs at Annexure-2:

i. Explore the possibility of railway siding for transportation of raw materials/ finished products and the outcomes shall be submitted as part of the EIA report.

ii. No ground water drawl is permitted.

iii. 100% waste utilization shall be adopted.

iv. Plan for diversion of road passing through the plant premises shall be furnished.

v. Fourth hole extraction shall be provided in the furnaces to control secondary emissions.

vi. Consolidated list of all the units envisaged in the existing EC shall be furnished in the EIA report and cumulative impact assessment shall be done.

vii. 100% waste utilization shall be adopted.

viii. Rainwater harvesting plan shall be prepared and furnished by the project proponent.

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

x. The issues raised during the public hearing and commitment of the project proponent to address the same shall be compiled and submitted in a time bound action plan. The action plan shall, inter alia, contain the year-wise activities with corresponding financial allocations.

13.20 Proposed expansion of existing sponge iron plant (2x100 TPD) by installation of sponge iron plant of 350 TPD capacity for manufacturing DRI -1,05,000 TPA, Steel Melting Shop - 1,35,000 TPA, Rolling mill – 1,20,000 TPA and Captive Power Plant of 22 MW by **M/s. M B Sponge & Power Limited** located at village Hijalgora, P.S. Jamuria, District Paschim Bardhaman**, West Bengal** -[Online Proposal No. **IA/WB/IND/119750/2019**, File No. **J-11011/310/2019-IAII(I)**] **– Prescribing of Terms of Reference –** regarding**.**

13.20.1 M/s. M B Sponge and Power Limited has made application vide online proposal no. IA/WB/IND/119750/2019 dated 1/10/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

13.20.2 M/s. M B Sponge and Power Limited has established a 2x100 TPD sponge iron unit for manufacturing Direct Reduced Iron (DRI) – 60,000 TPA at village Hijalgora, P.S. Jamuria, District Paschim Bardhaman, West Bengal based on the NOC obtained from West Bengal Pollution Control Board (WBPCB) obtained vide Memo no. 1087-252-WPB/SEE(KO) dated 6/1/2006.As the capital investment for the project was INR

20.87 crores Environmental Clearance was not required as per the provisions of EIA Notification, 1994. The unit has obtained NOC prior to 14/09/2006, hence EC was not required as per the provisions of the EIA Notification, 2006. Consent to Operate was obtained for the exiting unit and is valid up to 31/03/2022.

13.20.3 The existing land is 8.31 acres. The present proposal is for expansion of existing sponge iron plant (2x100 TPD) by installation of sponge iron plant of 350 TPD capacity for manufacturing DRI -1,05,000 TPA, Steel Melting Shop - 1,35,000 TPA, Rolling mill – 1,20,000 TPA and Captive Power Plant of 22 MW within the existing land of 21.39 acres located at village Hijalgora, P.S. Jamuria, District Paschim Bardhaman, West Bengal.

13.20.4 The existing and proposed capacity of different products is given as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Existing			
DRI	2	100 TPD	60,000 TPA
Proposed			
DRI	1	350 TPD	105000 TPA
SMS	3	15 TPH	1,35,000 TPA
Rolling Mill	-	400 TPD	1,20,000 TPA
Captive Power			22MW

13.20.5 The land area acquired for existing plant i.e., 8.31 acres (3.36 ha) will be used for the proposed expansion activity. No forestland is involved. Of the total area 1.10 ha (33%) land will be used for green belt development.

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

13.20.7 Proposed raw material and fuel requirement for project are Iron Ore, Dolomite, Coal. The requirement would be fulfilled by Rail as well as Road Fuel consumption will be mainly in DRI & Captive Power Unit.

13.20.8 The electricity load of 18.5 MW will be procured from WBSEDCL Company has also proposed to install 1250 KVA DG Set.

13.20.9 Water Consumption for the proposed project will be 1257 KLD which will be met from rain water harvesting and ground water. There will be no trade effluent generation. Domestic waste water will be treated and reused for Greenbelt.

13.20.10 Total project cost is INR 274.82 Crore rupees. Proposed employment generation from proposed project will be 336 Nos.

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

13.20.12 Name of the consultant: Kalyani Laboratories Private Limited [Sr. No. 95, List of Accredited Consultant Organizations (Alphabetically) Rev. 81, Nov., 2019].

Recommendations of the Committee

13.20.13 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in

addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:

i. No ground water drawl is permitted.

ii. Particulate emissions from the stacks shall be less than 30 mg/Nm^3 with bag house as APCD.

iii. No reheating furnace shall be used.

iv. 100 % solid waste utilization shall be adopted.

v. Alternate energy sources shall be implemented.

vi. Emission from ESP shall be less than 50 mg/Nm3.

vii. Rainwater harvesting plan shall be prepared and furnished by the project proponent.

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

ix. The issues raised during the public hearing and commitment of the project proponent to address the same shall be compiled and submitted in a time bound action plan. The action plan shall, *inter alia*, contain the year-wise activities with corresponding financial allocations.

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

13.21.1 M/s. MSP Sponge Iron Limited has made online application vide proposal no. IA/CG/IND/115232/2019 dated 21/08/2019 along with Form no.6and sought for validity extension of the environmental clearance accorded by the Ministry vide letter no. F.No. J-11011/178/2010- IA-II(I) dated 23/08/2012.

Details submitted by the project proponent

13.21.2 M/s. MSP Sponge Iron Limited has established a Ferro-Alloy unit having 2 x 7.5 MVA and 1 x 9 MVA Submerged Electric Arc Furnace (SEAF) in its factory situated at Manuapalli Village, in Raigarh District, Chhattisgarh in phased manner to produce Silico Manganese (29,034 TPA) and Ferro Manganese 29,978 TPA).

13.21.3 Following are the chronology of permissions / clearances obtained from Chhattisgarh Environment Conservation Board (CECB), Raipur and MoEF&CC pertaining to the project:

i. Consent to Establish (CTE) obtained from Chhattisgarh Environment Conservation Board (CECB) for establishment of 2x7.5 MVA Submerged Electric Arc Furnaces and Coal and Char based captive power plant of 12 MW vide order No. 1492/TS/ CECB/ 2005 dated 01/04/2005.

ii. 1st Consent to Operate (CTO) obtained from Chhattisgarh Environment Conservation Board (CECB) for 2x7.5 MVA Submerged Electric Arc Furnaces vide order No. 1859/TS/CECB/2007, dated 13.04.2007.

iii. Consent to Operate (CTO) obtained from Chhattisgarh Environment Conservation Board (CECB) for 12 MW Coal and Char based captive power plant vide order No. 5609/TS/CECB/2007, dated 09.10.2007.

iv. Environmental Clearance from MoEF&CC vide letter No. J-11011/178/2010-IA II (I) for expansion of Ferro Alloys unit with 5 x 9 MVA Submerged Electric Arc Furnaces (Si-Mn- 84,474 TPA, Fe-Mn – 1,03,958 TPA) and Captive Power Plant of 62 MW (including existing 12 MW power plant) dated 23/08/2012.

v. Environmental Clearance from MoEF&CC to M/s. MSP Sponge Limited for change of product mix under para 7(ii) of EIA Notification, 2006 dated 7/08/2019.

13.21.4 Following is the implementation status of the EC dated 23/08/2012.

S.No.	Unit/Products	EC approved capacity by MoEF&CC dt. 23/08/2012	Units in operation (CTO obtained from CECB)	Proposed Change in Product mix	Unimplemented portion of EC	Ultimate Production Capacity
		[1]	[2]	[3]	[4]	[5]
1	Submerged Electric Arc Furnaces (7 no.s)	2 x 7.5 MVA & 5 x 9 MVA	2 x 7.5 MVA & 1 x 9 MVA	2 x 7.5 MVA & 1 x 9 MVA	4 x 9 MVA	2 x 7.5 MVA & 5 x 9 MVA
	Silico Manganese (SiMn)	84,474 TPA	29,034 TPA	--	55,440 TPA	84,474 TPA
	Ferro Manganese (FeMn)	1,03,958 TPA	29,978 TPA	--	73,980 TPA	1,03,958 TPA
		OR				
	Ferro Chrome (FeCr)	**---**	**---**	**64,043 TPA**	**---**	**64,043 TPA** *
	Total Production Capacity	1,88,432 TPA	59,012 TPA	64,043 TPA	1,29,420 TPA	

** Fe-Cr will only be manufactured (from 3 nos. of Furnaces i.e. 2 x 7.5 MVA & 1 x 9 MVA only)*

13.21.5 It was informed that 4x9 MVA Submerged Electric Arc Furnaces could not be implemented within the validity period due to the impact of recession in the steel market and the bankers declined to extend financial assistance. Presently, there is an improvement in steel market.

13.21.6 It was submitted that the unimplemented portion of 4x9 MVA Submerged Electric Arc Furnaces will be implemented on or before 22/08/2022.

Observations of the Committee

13.21.7 The Committee noted that the application for EC validity extension was filed by the project proponent within the validity period. The proposal was listed for consideration during the EAC meetings held on September, 2019 and October, 2019. However, the project proponent did not attend the meeting. Further, the Committee also noted that the 4x9 MVA Submerged Electric Arc Furnaces could not be implemented by project proponent within the validity period due to the impact of recession in the steel market and the bankers declined to extend financial assistance.

Recommendations of the Committee

13.21.8 After detailed deliberations, the Committee recommended to extend the validity of the

Environmental Clearance for a period of three years beyond 22/08/2019, i.e., from 23/08/2019 to 22/08/2022 subject to environmental safeguards. All other terms and conditions stipulated in the environmental clearance accorded vide letter no. J-11011/178/2010- IA-II(I) dated 23/08/2012 and 7/08/2019 shall remain unchanged.

13.22 Amendment in Existing Environmental Clearance letter for Expansion of Integrated Cement Plant (from 2.5 MTPA to 8.25 MTPA Capacity) and WHRB (from 7 MW to 27 MW) and CPP (from 30 to 160 MW) of **M/s. Chettinad Cement Corporation Pvt. Ltd** located at Village Sangem & Kallur, Tehsil Chincholi, District Gulbarga, **Karnataka**. [Online Proposal No**. IA/KA/IND/123977/2019**, MoEF&CC File No. J-**11011/57/2011-IAII(I)**] – **Amendment in Environment Clearance**-reg.

13.22.1 M/s. Chettinad Cement Corporation Pvt. Ltd has made online application vide proposal no. IA/KA/IND/123977/2019 dated 4th November, 2019 in the prescribed Form-4 along with other documents seeking amendment to the Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

Details Submitted by the Project Proponent:

13.22.2 M/s. Chettinad Cement Corporation Pvt. Ltd. is operating an existing Integrated Cement Plant having 2.5 MTPA capacity, WHRB (7 MW), CPP (30 MW) at Villages: Sangam &Kallur, Taluka: Chincholi, District: Gulbarga (Karnataka). Environmental Clearance for the existing Cement Plant, Captive Power Plant along with Captive Limestone Mine was obtained from MoEFCC, New Delhi vide their letter no. J-11011/399/2008-IA-II (I) dated 18th June, 2010.

13.22.3 Thereafter, Company had obtained Environment Clearance for the Expansion of Existing Integrated Cement Plant (2.5 to 8.25 MTPA), WHRB (from 7 MW to 27 MW) and CPP (30 MW to 160 MW) from MoEFCC, New Delhi, vide letter no. J-11011/57/2011-IA-II (I) dated 20th Oct., 2015; and corrections made in EC letter by MoEFCC, New Delhi vide letter dated 31st Jan., 2017 in the name of M/s. Chettinad Cement Corporation Ltd.

13.22.4 Application for Name Change in EC letter no. J-11011/57/2011-IA-II (I) dated 20th Oct., 2015and corrections made in EC letter by MoEFCC, New Delhi vide letter dated 31st Jan., 2017 from M/s. Chettinad Cement Corporation Ltd. to M/s. Chettinad Cement Corporation Pvt. Ltd. is under process vide proposal no. IA/KA/IND/122067/2019 at MoEFCC, New Delhi.

13.22.5 As, the company is proposing amendment in the specific conditions (i) of existing EC letter obtained from MoEFCC, New Delhi vide letter no. J-11011/57/2011-IA-II (I) dated 20th Oct., 2015; and corrections made by MoEFCC, New Delhi vide letter dated 31st Jan., 2017, no impact is envisaged for the same and no management plant will be required.

13.22.6 The company is proposing amendment in the specific conditions (i) of existing EC letter obtained from MoEFCC, New Delhi vide letter no. J-11011/57/2011-IA-II (I) dated 20th Oct., 2015; and corrections made by MoEFCC, New Delhi vide letter dated 31st Jan., 2017.

13.22.7 As Eco-sensitive Zone of Chincholi Wildlife Sanctuary has been declared & published vide Notification dated 9th August, 2019 and the plant site does not fall

within Eco-sensitive zone of Chincholi Wildlife Sanctuary and also as per the procedure define in Ministry Office Memorandum No. 22-43/2018-IA.III dated 8th August, 2019 for the proposal involving developmental activity / project located outside the stipulated boundary limit of notified ESZ and located within 10km radius of National Park / Wildlife Sanctuary, Prior Clearance from Standing Committee of National Board of Wildlife is not required to be obtained.

Observations of the committee:

13.22.8 In view of the Ministry's OM F.No.22-43/2018-IAIII, the committee opined that appropriate conservation measures are required as the project is within a distance of 10 km from the boundary of Chincholi Wildlife Sanctuary.

Recommendations of EAC

13.22.9 After detailed deliberations, the committee recommended to amend the condition subject to the implementation of wildlife conservation plan as approved by the Chief wildlife warden.

13.23 Expansion of Sponge Iron Plant into Mini Integrated Steel Plant (82,500 TPA) Sponge Iron Plant(100 TPD) and Captive Power Plant(20 MW) by **M/s. Hothur Ispat Ltd** located at Hospete Road, Veeniveerapur Village, Bellary District, **Karnataka** [Online Proposal No. **IA/KA/IND/24746/1910**, File No. **J-11011/24/2009-IA. II(I)**] – **Extension of validity of Environmental Clearance** – regarding.

13.23.1 M/s. Hothur Ispat Pvt Ltd has made online application vide proposal no. IA/KA/IND/24746/1910 dated 11th November, 2019 in the prescribed Form -6 along with other documents seeking extension of validity of Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the proposal is appraised at Central level.

13.23.2 M/s. Hothur Ispat Pvt Ltd, located at Survey No. 283/A, 284/B, 285/A, 286/A, 287/B, 288, 289/1, 289/2, 290/1, 290/2, 290/3, 290/4, 281/2, 282/2, 282/1, 287/A, Veniveerapura Villate, Bellary Taluk & District, Karnataka, with a total Land Area of 144 Acres, which is fully ownd by M/s. Hothur Ispat Pvt Ltd, and had been operating Sponge Iron Plant – 60,000 TPA (2 X 100 TPD Kilns) and then had obtained EC for Expansion vide EC # J-11011/24/2009- IA II (I) dated 26/07/2012 for the following production capacity.

S. No	Description	Existing	Upon Expansion
1	Sponge Iron	60,000 TPA (2 x 100 TPD Kilns)	90,000 TPA (3 x 100 TPD Kilns)
2	MS Billets	--	82,500 TPA (2 x 15 TPH Electrical Induction Furnace) Billet Caster 1x2 Strand
3	Rolled Steel Products	--	82,500 TPA
4	Power Generation	--	10 MW (3 x 10 TPH Boiler Attached

	(WHRB)		to Single Turbine of 10 MW
5	Power Generation (AFBC)	--	10 MW (60 TPH Boiler)

13.23.3 The total land area is 144 Acres of which 61 Acres of area has been allotted for Greenbelt.

13.23.4 The water requirement projected was 2.73 MLD, of which 2.55 MLD sourced from Bellary City Treated Sewage, Remaining 0.18 MLD sourced from Ground Water.

13.23.5 The waste water to be generated 2.592 MLD, all treated effluent is recycled and reused for dust suppression and greenbelt development.

13.23.6 The Quantity of Solid waste generation are as follows

Sl. No	**Waste Generation Location**	**Nature of waste**	**Total Quantity (TPA)**
1.	Dust Settling chamber / Wet scrubber	Sludge	900
2.	De Dusting System	Dust	2160
3.	Product Separator System	Fines	30780
4.	Heater Exchanger and ESP	Dust with Fly Ash	9675
5	Dolochar	--	27270
6.	Fly Ash	From Power Plant	47164
7.	Bottom Ash	From Power Plant	20874
8.	Slag	From Induction Furnace	11880
9.	Scale & Muck		520

13.23.7 Slag and kiln dust will be given to Cement Manufacturers, Fly Ash / Bottom Ash will be given to Cement / Brick Manufacturers, Scraps will be used in process and Dolochar will be used in power plant.

13.23.8 M/s. Hothur Ispat Pvt Ltd, along with NABET Accredited Consultant M/s. Chennai Testing Laboratory Pvt. Ltd, made a presentation and said that the Project was delayed due to iron ore mining ban issues and hence seeking extension of validity of existing Environment Clearance.

Recommendations of EAC

13.23.9 After detailed deliberations, the committee recommended for extension of validity of Environmental Clearance for period of three years, i.e., up to 25.07.2022. All other terms and conditions stipulated in the environmental clearance accorded vide letter no. J-11011/24/2009-IA. II(I) dated 26.07.2012 shall remain unchanged

29thNovember, 2019

13.24 Production Enhancement of MS, Stainless Steel & Alloy Steel Billet/Ingot from 220 TPD to 750 TPD, MS, Stainless Steel & Alloy Steel Bar, Rods & Flat Bars from 125 TPD to 750 TPD &Proposed production of Bright Bars up to 75 TPD by **M/s. Jailaxmi Casting & Alloys Pvt. Ltd**., Location – Gut no. 74 &75, Pharola, & Gut no: 53 at Mharola Paithan, Aurangabad District, **Maharashtra** - [Online Proposal No. **IA/MH/IND/122469/2017**, File No. **J-11011/131/2017-IAII(I)**] – **Environment Clearance** - regarding.

13.24.1 M/s. Jailaxmi Casting & Alloys Pvt. Ltd.has made an online application vide proposal no. IA/MH/IND/122469/2017 dated 25/10/2019 along with copy of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details Submitted by the Project Proponent:

13.24.2 The expansion proposal of M/s Jailaxmi Casting & Alloys Pvt. Ltd was initially received in the Ministry vide online proposal No.IA/MH/IND/63071/2017dated 9th March 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 17thmeeting of Expert Appraisal Committee held during 6-7th April 2017 and prescribed TORs to the project for undertaking detailed EIA study. Accordingly, the Ministry of Environment, Forests and Climate Change had prescribed TORs to the project on 01.05.2017 vide letter no. J-11011/131/2017-IAII(I).

13.24.3 Based on the TORs prescribed to the project, the project proponent submitted an application for Environmental Clearance (EC)to the Ministry online on 25.10.2019vide online application no. IA/MH/IND/122469/2017.

13.24.4 Company was established in year 2004; hence EC was not required earlier. JCAPL have received Consents to Operate from MPCB for existing production vide no: BO/ROA/Aurangabad/137-04/E/CC/147 dated 29.10.2004 and the latest CTO granted by MPCB for production of 220 MTD Billets vide consent no: BO/JD (APC)/TB/UAN No: 0000047772/R/CC valid upto 30/04/2021;

13.24.5 The existing project of M/s. M/s Jailaxmi Casting & Alloys Pvt. Ltd is located at Gut no. 74 &75, Pharola, & Gut no: 53 at MharolaPaithan, Aurangabad District, Maharashtra. The plant is producing 220 TPD of MS, SS & alloys billet/ingots and 125 TPD of MS, SS & alloys bars & rods, flats bars.

13.24.6 The details of proposed expansion are given below:

S.No	Particulars	Capacity, TPD		
		Existing as per CTO	Proposed	Total
1	MS, SS & alloys billet/ingot	220	530	750
2	MS, SS & alloys bars & rods, flats bars	125	625	750
3	Proposed bright bars	--	75	75

13.24.7 The total available land with M/s Jailaxmi Casting & Alloys Pvt. Ltd is 4.5 ha at Gut No. 74&75 for expansion of facilities and 4.32 ha at Gut No.53 for development of green belt in Mahorala Paithan, Aurangabad, Maharashtra. No water body exists in the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

13.24.8 The topography of the area is flat lies between 19°44'2.02"N to 19°44'4.36"N latitude and 75°17'41.15"E to 75°17'40.87"E longitude. The project is located in Survey of India topo sheet no 47 M/6 while 10 km radius study area covers four topo sheets as 47 M/1, 47 M/2, 47 M/5 and 47 M/6. and Ground elevation at the site is 505 m above MSL.

13.24.9 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.

13.24.10 The details of raw material requirement and its source is given as below:

SNo	Name	Existing (TPD)	Proposed (TPD)	Total (TPD)	Source	Transportation
1	Sponge Iron	95	229	324	Local	Road
2	Scrap	143	343	486	Local	Road
Ferro Alloys as						
3	FeMn	0.95	6.55	7.5	Local	Road
4	SiMn	0.25	1.75	2.0	Local	Road
5	Moly	0.06	0.44	0.5	Imported	Road
6	Ni	0.12	0.88	1.0	Imported	Road

13.24.11 The Configuration of the existing and proposed facilities for expansion are given as below:

S.No	Particulars	Existing	Proposed	Total
1	Induction Furnace	25 TX1 Nos	--	25 TX1 Nos
2	Arc Furnace	--	25 TX1 Nos	25 TX1 Nos
3	Re-heating Furnace	20 TX1 Nos	--	20 TX1 Nos

13.24.12 These materials will get melted into Induction and Arc furnace with the help of graphite electrode and oxygen blowing. Lime and dolomite is added during the process of melting. After melting process is completed liquid steel is transferred to ladle refining furnace for removal of inclusion in the steel and final chemistry is achieved with the addition of ferro alloys accordingly. Then the liquid steel is transferred to vacuum degassing station were vacuum is achieved at 1 milibar to removal of inclusion of oxygen, hydrogen and nitrogen.

13.24.13 Baseline Environmental Studies were conducted during post monsoon season i.e. from October, 2017 to December, 2017. Ambient air quality monitoring has been carried out at eight locations and the data submitted indicated: PM_{10} (45.32 µg/m^3 to 87.12 µg/m^3), $PM_{2.5}$ (17.51 to 41.74 µg/m^3), SO_2 (14.27 to 29.55 µg/m^3) and NOx (18.34 to 41.74 µg/m^3).

13.24.14 Ground water quality has been monitored in eight locations in the study area and analyzed. pH: 6.98 to 7.29, Total Hardness: 117 to 167 mg/l, Chlorides: 53 to 86 mg/l,

Fluoride 0.12 to 0.44 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from six locations. pH: 7.16 to 7.6 ; and BOD <4 mg/l. COD from 10 to 32 mg/l.

13.24.15 Noise levels are in the range of 50.7 to 60.5 dBA for daytime and 41.8 to 52.9 dBA for nighttime.

13.24.16 AAQ modeling results are as given below:

Pollutants	**Maximum Incremental Levels, µg/m³**	**Distance, km**	**Direction**
PM_{10}	0.52	2.20	W
$PM_{2.5}$	Concentration is too low to create isopleth	--	--
SO_2	1.8	4.05	W
NOx	1.4	4.4	W
CO	0.03	5.04	WS

13.24.17 Power and fuel other requirements are as given below:

S.No	**Particulars**	**Existing**	**Proposed**	**Total**
Resource Requirement				
i.	Plot Area	Gut No. 74 & 75 (Project Activity) - 45,000 m^2	Gut No. 53 (For development of Greenbelt) - 43,200 m^2	Gut No. 74, 75 & 53 - 88,200 m^2
ii.	Manpower	160	400	560
iii.	Power (MW)	10	20	30
iv.	DG Set (kVA)	--	1x1000	1x1000
v.	Water (m^3/day)	35	131	166
Fuel Requirement				
i.	HSD (DG Set)	--	200 Liters/hr	200 Liters/hr
ii.	Coal/FO for Re-Heating furnace	Coal: 10 TPD or FO: 3.4 KLPD	Coal: 50 TPD or FO: 16.6 KLPD	Coal: 60 TPD or FO: 20 KLPD

13.24.18 Water requirement is basically for cooling application and will be met by artificial farm lake/tankers. The total water requirement after proposed expansion will be around 166 m^3 /day.

13.24.19 Out of 28 m^3 /day of total effluent, around 20 m^3 /day of effluent will be generated from domestic activity, 3 m^3 /day of effluent will generate from DM Plant and 5 m^3 /day from cooling system. Effluent from DM Plant and cooling system will be recycled back to the cooling system. i.e. 8 m^3 /day and sewage will be treated in STP of 25 m^3 /day capacity.

13.24.20 The EMP Budget provision for Capital Investment is approx 264 lakhs and Recurring Expenditure is approx 44.89 lakhs/year

13.24.21 Considering paucity of land for development of greenbelt, company has procured Gut No 53 in adjacent village viz, Mharola with plot area of 43,200 m^2.

13.24.22 Cost of Proposed Project is 73.72 Cr. Company proposes to allocate 1% of their total expansion cost for CER activities as suggested in MoEF&CC O.M. regarding Corporate Environment Responsibility vide. F.No. 22-65/2017-IA III.

13.24.23 The Public Hearing for the expansion project was conducted on 03.08.2019 within the premises of JCAPL. Public Hearing was chaired by Additional District Magistrate.

Observations of the Committee:

13.24.24 Proposed project will meet water requirement from the lake owned by the Project Proponent and other farm lakes in the local area with the approval of local authorities.

13.24.25 The Project proponent has acquired an additional area of 4.32 ha for green belt near the existing plant location

Recommendations of the Committee:

13.24.26 In view of the forgoing and after detailed deliberations, the committee recommended the project for grant of Environmental Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 for steel plant operating with induction furnace.

i. CER shall be completed in three years.

ii. Reheating is permitted only with HSD.

iii. Fourth hole extraction shall be provided in the furnaces to control secondary emissions.

iv. 100% waste utilization would be ensured.

v. No ground water abstraction is permitted.

vi. Water stored in the reservoir shall be used.

vii. Particulate emissions from the stacks shall be less than 30 mg/Nm^3 with bag house as APCD.

viii. Green belt development shall be completed in a time frame of three years.

13.25 Proposed 1200 MT/day (396000 MT/annum) Cement Plant by **M/s. Kashmir Cements** to be located at village Bhatayan, Khrew, Tehsil Pampore, District Pulwama, **Jammu and Kashmir** - [Online Proposal No. **IA/JK/IND/76457/2018**, File No. **IA-J-11011/269/2018-IA-II(I)**] – **Environment Clearance** - regarding.

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.

13.26 Setting up of 1.8 lakh tonnes per year non-recovery coke oven plant with10 MW cogen captive power plant and 2 lakh tonnes per year Ductile iron spun pipe(DISP) at Blast furnace unit, **M/s KIOCL Limited**, Panambur, Mangaluru, **Karnataka** [Online Proposal No. **IA/KA/IND/83835/2018**; MoEF& CC File No. **IA-J-11011/372/2018-IA-II(I)**] – **Environment Clearance** - regarding.

13.26.1 M/s KIOCL Limited has made an online application vide proposal no.

IA/KA/IND/83835/2018 dated 18/11/2019 along with copy of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details Submitted by the Project Proponent:

13.26.2 The proposal of setting up of 1.8 lakh tonnes per year capacity Non-Recovery Coke Oven Plant with 10 MW Cogen Captive Power Plant and 2 lakh tonnes per year capacity Ductile Iron Spun Pipe (DISP) at Blast Furnace Unit of M/s. KIOCL Limited, located in Baikampady Industrial area, Dakshina Kannada district, Karnataka was initially received in the Ministry on 29.10.2018 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during 1st meeting of re-constituted committee held on 28-11-2018 and prescribed TORs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forests and Climate Change had prescribed TORs to the project on 21.12.2018 vide letter no. IA-J-11011/372/2018-IA.II(I).

13.26.3 Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 18.11.2019 vide online application no. IA/KA/IND/83835/2018.

13.26.4 The project of M/s. KIOCL Limited located in Baikampady industrial area, Mangalore, Dakshina Kannada district, Karnataka is for setting up of new DISP plant of capacity 0.2 MTPA and non-recovery coke oven plant of capacity 0.18 MTPA. The existing Blast furnace unit was accorded environmental clearance vide letter no. F. No. J-11012/26/95-IA-II(I) dated 13.12.95.

13.26.5 The Status of compliance of earlier EC was obtained from Regional Office, Bangalore vide letter no. EP/12.1/2012-13/17/KAR dated 14.11.2019. There is no non-compliances reported by Regional officer. The proposed capacity of the upcoming units is given below:

Name of Unit	**Proposed capacity**
Dutile Iron Spun pipe plant	0.2 MTPA
Non-recovery coke oven plant	0.18 MTPA
Cogen captive power plant	10 MW

13.26.6 The total available land with KIOCL is 166.16 acre. The land required for DISP plant is about 11 acre and for coke oven plant it is about 9.26 acre. The entire land falls under industrial area. No forestland is involved. The entire land is under the possession of KIOCL. No water body exists in the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

13.26.7 The topography of the area is flat lies between 12^0 56' 19.45" to 12^0 56' 29.88" N latitude and 74^0 49' 46.52" to 74^0 49' 44.14" E longitude for DISP plant and 12^0 56' 40.43" 12^0 56' 45.20" N latitude 74^0 49' 47.13" to 74^0 49' 38.12" E longitude in Survey of India topo sheet No. D43U13 and D43O16 at an elevation of 3 to 5m AMSL for DISP plant and 18-20m AMSL for non-recovery coke oven plant. The ground water table is reported in range of 0.74 to 18.43m below the land surface during March to May 2019 i.e, pre monsoon season. Ground water extraction is not envisaged. The area is designated as safe area.

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

13.26.9 Basic raw material for the project along with their annual requirement and source is listed below

Sl. No.	Raw materials	Annual requirement (in tonne)	Source
1.	Hot metal	214,800	From existing BF
2.	Pure magnesium	680	Indigenous
3.	Sand for core making	5,600	Indigenous
4.	Scrap	11,600	Indigenous
5.	Fe-Si	1690	Indigenous
6.	Fe-Si powder	40	Indigenous
7.	Zinc	800	Indigenous
8.	Ca-Si	40	Indigenous
9.	Cement	15,000	Indigenous
10.	Inoculant	100	Indigenous
11.	Sand for cement lining	28,000	Indigenous
12.	Bitumen	840	Indigenous
13.	Coal at 8% moisture (Ash content: 9-10%)	2,64,392	Imported
14.	Furnace oil	9000	From nearby oil companies
15.	LDO	8000	From nearby oil companies
16.	LPG	79200 NM^3	From nearby gas agencies

13.26.10 The process consists of desulphurization to reduce the sulphur content in the hot metal to less than 0.02%, if required by charging of steel scrap to reduce the carbon content in the molten iron, pure Magnesium (Mg) converter process for producing Spheroid Graphite (SG) grade metal, centrifugal casting machines, continuous annealing furnace, zinc coating with dust collector, pipe grinding facilities, hydro pressure testing, ovality correction units, internal cement lining, curing oven, bitumen coating & drying chamber and associated utilities are envisaged to produce DISP.

13.26.11 A Non-Recovery Coke Oven Plant with stamp charging facility has been proposed. A waste heat recovery boiler has been envisaged to generate about 10 MW Power from the waste flue gases of coke oven.

13.26.12 The plants are designed to achieve minimal air emissions, zero discharge of liquid effluents and less noise levels. The proposed plant will not be generating any trade effluent and designed with maximum re-use and re-utilisation of solid waste generated from the plant.

13.26.13 The targeted production capacity of the DISP plant is 0.2 MTPA and for non-recovery coke oven plant is 0.18 MTPA. The hot metal from blast furnace will be used for pipe making whereas coking coal will be imported and transported from New Mangalore Port Trust (NMPT).

13.26.14 The make-up water requirement for DISP plant and coke oven plant is estimated as 150 m^3/hr and 115 m^3/hr respectively. The water recovered from KIOCL's pellet plant is used for existing blast furnace complex. The water from cooling pond will be recirculated back into the process. Thus, no new source of water has been envisaged and water utilization is within the water quantity consented for the existing plant.

13.26.15 The total estimated power requirement is about 16.5 MVA (Coke Oven Plant requires 2.5 MVA and for DISP plant it is 14 MVA) including associated utilities. At present, power supply for KIOCL plant is availed from 110 kV substation of KPTCL/MESCOM.

13.26.16 Baseline environmental studies were conducted during summer season 2019 i.e. from March to May 2019. Ambient air quality has been carried out at eight locations during March to May 2019 and the data submitted indicated: PM_{10} (42 to 78 µg/m^3), $PM_{2.5}$ (18 to 42 µg/m^3), SO_2 (4.1 to 9.5 µg/m^3) and NO_x (8.6 to 19.3 µg/m^3). The results of the modelling study indicate that the maximum increase of GLC for the proposed project is 8.6 µg/m^3 with respect to $PM_{10,}$ 14.8 µg/m^3 respect to SO_2 and 13.1 µg/m^3 with respect to NOx.

13.26.17 Ground water quality has been monitored in eight locations in the study area and analysed. pH: 6.5 to 7.4, Total Hardness: 24 to 320 mg/l, Chlorides: 19 to 87 mg/l, Fluoride: 0.45 to 0.19 mg/l. Heavy metals are within the limits. Surface water samples were analysed from ten locations. pH: 6.7 to 7.34; DO: 5.2 to 6.5 mg/l and BOD: 2 to 4 mg/l.

13.26.18 Noise levels are in the range of 39.2 to 55.9 dBA for daytime and 36.4 to 47.3 dBA for nighttime.

13.26.19 It has been reported that there is no habitant in the core zone of the project. No R&R is involved.

13.26.20 It has been reported that a total of 3360 tons of burnt sand core will be generated due to the project which will be reused or will be used for landfilling. No trade effluents are generated from the plant. It has been envisaged that an area of 54.8 acres will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

13.26.21 It has been reported that the Consent to Operate (CTO) from the Karnataka State Pollution Control Board has been obtained for existing blast furnace vide letter no. AW-302446 dated 12.04.2017 and consent is valid till 30.06.2021

13.26.22 The Public hearing of the project was held on 10.10.2019 at St. Anthony's mini church hall, Kuluru, Mangalore under the Chairmanship of Deputy Commissioner, Dakshina Kannada district. The issues raised during public hearing are concern over dust from nearby industries, medical facilities for villagers and job opportunities for locals. An amount of Rs. 4 Crore (0.5% of project cost) has been earmarked for CER based on public hearing issues.

13.26.23 The capital cost of the project is Rs. 836.9 Crore and the capital cost for environmental protection measures is proposed as Rs. 40.5 Crore. The annual recurring cost towards the environmental protection measures is proposed as Rs 1.4 Crore. The direct employment generation from the project is 511.

13.26.24 Green belt will be developed in 54.8 acre which is about 33% of the total acquired area. A 100 m wide green belt, consisting of at least 3 tiers around plant boundary will be developed as green belt and green cover as per CPCB/ MOEF&CC, New Delhi

guidelines. Local and native species will be planted with a density of 1500 trees per ha. Total no. 33285 saplings will be planted and nurtured in 54.8 acre.

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

13.26.26 Name of the consultant: MECON Limited, (A Govt. of India Enterprise)QCI No. 103.

Observations of the committee:

13.26.27 At present the blast furnace is not in operation. The proposed project activity is revival of the existing facilities, forward and backward integration with coke plant, ductile iron pipe and cogen power plant.

Recommendations of the Committee:

13.26.28 In view of the forgoing and after detailed deliberations, the committee recommended the project for grant of Environmental Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 for Integrated Steel Plants.

i. Modified wet quenching with sampling facilities shall be provided.

ii. CER shall be completed in two years.

iii. Green belt shall be developed in 55 acres.

iv. No ground water abstraction is permitted.

v. Adequate provisions be made to control zinc dust and grinding dust.

vi. Particulate emission from the magnesium treatment, bitumen plant and boiler shall be restricted to less than 30 mg/Nm^3.

vii. No pig iron will be produced and production shall be restricted to ductile iron pipes.

13.27 Expansion of Integrated Cement Plant - Clinker (6.5 to 10.0 MTPA), Cement (9.0 to 14.0 MTPA) and WHRS (20 to 36 MW) by **M/s. UltraTech Cement Ltd.** (Unit: Andhra Pradesh Cement Works) located at Village: Bhogasamudhram, Mandal: Tadipatri, District: Anantapur and Village: Tummalapenta, Mandal: Kolimigondla, District: Kurnool, **Andhra Pradesh** - [Online Proposal No. **IA/AP/IND/125644/2019**, File No. **J-11011/303/2008-IA-II(I)**] – **Prescribing of Terms of Reference** – regarding.

13.27.1 **M/s UltraTech Cement Ltd** has made an online application vide proposal no. IA/JH/IND/123137/2019dated 16/11/2019 along with copy of prefeasibility report and Form – 1to propose Terms of Reference under the provisions EIA Notification, 2006 to undertake detailed EIA study for the proposed project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details Submitted by the Project Proponent:

13.27.2 M/s. UltraTech Cement Limited (Unit: Andhra Pradesh Cement Works) has proposed Expansion of Integrated Cement Plant - Clinker (6.5 to 10.0 MTPA), Cement (9.0 to 14.0 MTPA) and WHRS (20 to 36 MW) at Village: Bhogasamundram, Mandal: Tadipatri, District: Anantapur and Village: Tummalapenta, Mandal: Kolimigundla,

District: Kurnool (Andhra Pradesh). It is proposed to set up the plant for manufacturing of cement / clinker based on dry process technology. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 16th Nov., 2019 vide Online Application No. IA/AP/IND/125644/2019.

13.27.3 The existing plant was accorded environmental clearance as mentioned below -

- Clinker (6.5 MTPA) and Cement (9.0 MTPA) *vide* MoEFCC letter no. J-11011/303/2008-IA-II (I) dated 8th Oct., 2008.
- CPP (100 MW) - *vide* SEIAA letter no. SEIAA/AP/ANT-26/2010-1113 dated 16thJuly, 2011.
- WHRS (4.0 MW) – v*ide*MoEFCC letter no. J-11011/324/2006-IA II (I) dated 05thMarch, 2007 & WHRS (16.0 MW) - *vide* CFE letter No: Order No. 184 /APPCB/CFE/RO-KNL/HO/2011 on dated 18th May, 2018.

13.27.4 Consent to Operate was accorded by Andhra Pradesh Pollution Control Board *vide* letter no. APPCB/KNL/TPT/184/HO/CFO/2019 on dated 22nd March, 2019 for Clinker (6.5 MTPA), Cement (9.0 MTPA), CPP (100 MW) and WHRS (20 MW); which is valid up 30th Sept., 2021.

13.27.5 The plant site is located at Village: Bhogasamundram, Mandal: Tadipatri, District: Anantapur and Village: Tummalapenta, Mandal: Kolimigundla, District: Kurnool (Andhra Pradesh).

13.27.6 Total existing plant area is 320.68 ha; and the proposed expansion will be done within the existing plant premises. No additional land will be acquired for proposed expansion project. No forest land is involved. 119.2 ha (~37% of the total plant area i.e. 320.68 ha) has already been developed under greenbelt / plantation.

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

13.27.8 Total project cost is Rs. 1250 Crores. Proposed Employment generation from proposed expansion project will be 750 direct employments and 1000 indirect employment.

13.27.9 The targeted production capacity of the Clinker is 10.0 MTPA, Cement - 14.0 MTPA, WHRS - 36 MW and CPP 100 MW. The limestone for the plant would be sourced from Captive Limestone Mines; which will be done via covered conveyor belt, AI laterite / Bauxite and Iron ore would be procured from AP / Karnataka; which will be transported through road. The proposed capacity for different products is given as below:

Unit	Existing Capacity	Additional Capacity	Total capacity after expansion
Clinker (MTPA)	6.5 (Line I: 2.7 & Line II: 3.8)	New Line III: 3.5	10.0*
Cement (MTPA)	9.0 (Line I: 3.2 & Line II: 5.8)	New Line III: 5.0	14.0
CPP (MW)	100	Nil	100
WHRS (MW)	20	16	36

**Part of Clinker will be dispatched to split Grinding Units*

13.27.10 The electricity load of 140 MW will be sourced from CPP, Andhra Pradesh Electricity Board Grid and WHRS.

13.27.11 The raw materials required for the expansion project are Limestone; which will be sourced from Captive Limestone Mines; Al Laterite/Bauxite; which will be sourced from AP/Karnataka, Iron ore; which will be sourced from AP/Karnataka, Gypsum will be sourced from CFL, Spic, Sterilite, Fact, Fly Ash will be sourced from TTPP, CPP and Slag will be sourced from JSW/Arja Steels. Fuel required for proposed expansion project includes Indian Coal; which will be sourced from SCCL, Imported Coal which will be imported from US and Petcoke which will be sourced from MRPL/BPCL/US / Saudi.

13.27.12 The existing water requirement for the project is 3645 KLD. Additional 1300 KLD water will be required for proposed expansion project. Thus, the total water requirement after proposed expansion project will be 4945 KLD; which will be sourced from Existing Rainwater water sump at Mine site, Ground water and treated water from STP. No waste water will be discharged from the cement plant. Domestic wastewater generated from the plant and colony will be treated in STPs and treated water will be used for greenbelt development / plantation.

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

13.27.14 Consultant: J.M.Enviro Net, S.No. in QCI List - "92" (as updated on 15thOct., 2019)

Recommendations of the Committee

13.27.15 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in **addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:**

i. No ground water drawl is permitted except for drinking purpose.

ii. Thick dense green belt shall be developed between the plant and residential complex.

iii. Rainwater harvesting plan shall be prepared and furnished by the project proponent.

iv. District wise Public Hearing is to be conducted by the concerned State Pollution Control Board.

v. The issues raised during the public hearing and commitment of the project proponent to address the same shall be compiled and submitted in a time bound action plan. The action plan shall, inter alia, contain the year-wise activities with corresponding financial allocations.

13.28 Manufacturing of Steel Ingot/Billets from 28,800 TPA to 75,240 TPA by **M/s Trishala Alloys Pvt. Ltd**. located at Village- Jandiali, Budhewal Road, Near Kohara, Ludhiana, **Punjab** - [Online Proposal No. **IA/PB/IND/125558/2019,** File No. **J-11011/355/2019-IAII(I)**] – **Prescribing of Terms of Reference** – regarding**.**

13.28.1 **M/s Trishala Alloys Pvt. Ltd.** has made an online application vide proposal no. IA/PB/IND/125558/2019dated 15/11/2019 along with copy of prefeasibility report

and Form – 1to propose Terms of Reference under the provisions EIA Notification, 2006 to undertake detailed EIA study for the proposed project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details Submitted by the Project Proponent:

13.28.2 M/s Trishala Alloys Pvt. Ltd. proposes for the expansion of existing manufacturing unit for steel manufacturing for Steel Ingots/Billets based on I.F. technology. The project proponent submitted an application in the prescribed format along with Form-I and other documents to the Ministry online on 15.11.2019 vide online application no.- IA/PB/IND/125558/2019, F. No.- J- 11011/356/2019-IA.II(I).

13.28.3 The existing project did not require EC. CTO for water was accorded by Punjab Pollution Control Board vide lr. No. CTOW/Renewal/LDH1/2018/7863420 and validity of CTO is up to 30/06/2023. Consent to Operate of Air was accorded by Punjab pollution Control Board vide lr. No. CTOA/Renewal/LDH1/20187863486 and validity of CTO is up to 30/06/2023.

13.28.4 The proposed unit will be located at Village- Jandiali, Budhewal Road, Near Kohara, Ludhiana, Punjab.

13.28.5 The land area already available is 1.21Ha (3.0 Acre) and the same is industrial land. The entire land is in the name of project proponent. Out of total area of 1.21ha, 0.42 ha (35%) of total area will be used for green belt development.

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

13.28.7 Total project cost is approx Rs. 8.20 Crores and cost of expansion is Rs. 7.0 Cr. Employment generation from proposed project will be 250.

13.28.8 The targeted production capacity of the unit after expansion will be 75,240TPA Steel Ingots/Billets. The proposed capacity for different products after expansion is given below:-

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Induction Furnace	2	12 TPH & 7 TPH	75,240 TPA

13.28.9 The electricity load of 9600 KVA for expansion will be procured from Punjab State Power Corporation Limited, Punjab. A D.G. set of 100 KVA is already available in the existing unit and a D.G. set of 250 KVA will be required after expansion as backup power back up power source for lighting purpose and operation of STP.

13.28.10 Proposed raw material and fuel requirement for project are MS Scrap, Ferro Alloys & electricity. The requirement of scrap will be fulfilled by local as well as international market. Electricity will be mainly required for induction furnace, concast and rolling mill.

13.28.11 No water is required in the manufacturing process. Cooling water will be recirculated and only make up equivalent to evaporation loss & blow down will be required. Domestic waste water will be treated in STP and treated water used as make up water

for cooling tower. Green belt development and dust suppression. No industrial waste water will be generated.

13.28.12 There is no court case against the project or the related activity. Also, there has not been any violation of consent conditions.

13.28.13 Name of Consultant- Chandigarh Pollution Testing Lab.-EIA Division, Sl. No. - 26 in Accredited Consultant List QCI List as October, 2019

Recommendations of the committee:

13.28.14 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-1 read with additional ToRs at Annexure-2:**

i. No ground water drawl is permitted except for drinking purpose.

ii. Rain water harvesting shall be in place.

iii. Action plan for use of alternate energy resources shall be furnished.

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

v. The issues raised during the public hearing and commitment of the project proponent to address the same shall be compiled and submitted in a time bound action plan. The action plan shall, inter alia, contain the year-wise activities with corresponding financial allocations.

13.29 Iron ore pellet plant- 0.4 MTPA and Iron ore Beneficiation plant- 0.6 MTPA by **M/s Dinanath Allied Steel Manufacturing Pvt. Ltd.** located at Kh. No. 311, 312,313,315,351,357,358 & 359, Mohadi, Nagbhir, Chandrapur, **Maharashtra** - [Online Proposal No. **IA/MH/IND/126013/2019,** File No. **J-11011/356/2019-IAII(I)**] – **Prescribing of Terms of Reference** – regarding.

13.29.1 **M/s Dinanath Allied Steel Manufacturing Pvt. Ltd**. has made an online application vide proposal no. IA/MH/IND/126013/2019dated 18/11/2019 along with copy of prefeasibility report and Form – 1to propose Terms of Reference under the provisions EIA Notification, 2006 to undertake detailed EIA study for the proposed project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details Submitted by the Project Proponent:

13.29.2 M/s Dinanath Allied Steel Manufacturing Pvt. Ltd proposed to install manufacturing unit for Iron Ore Beneficiation and Iron Ore Pellets. It is proposed to set up the Iron Ore Beneficiation plant of 6,00,000 TPA (0.6 MTPA) and 4,00,000 TPA (0.4 MTPA) iron ore pellets. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 18thNovember2019 vide Online Application No. IA/MH/IND/126013/2019.

13.29.3 The proposed unit will be located at KH No. 311,312,313,315,351,357,358 & 359, Village:Mohadi(M),Taluka: Nagbhir, District: .Chandrapur, State: Maharashtra.

13.29.4 The land area identified for the proposed plant is 13.65 Ha. No forestland involved.

Of the total area 4.50 ha (33%) land will be used for green belt development. N.A. order is obtained for part of land.

13.29.5 There is 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. There is no report of any corridor for Schedule-I fauna.

13.29.6 Total project cost is approx.Rs.90 Crore. Proposed employment generation from proposed project will be140.

13.29.7 The targeted production capacity of the proposed beneficiation plant will be 0.6 million TPA and production capacity of pellet plant will be 0.4million TPA. The ore for the plant would be procured from mines in Gadchiroli or local market . The ore transportation will be by Road. The proposed capacity is given below:

Name of unit	No. of units	Production Capacity
Beneficiation Unit	1	0.6 million TPA
Kiln with Gasifier	1	0.4 million TPA

13.29.8 The power requirement for the Pellet Plant is 5 MVA and will be met by MSEDCL.

13.29.9 Proposed raw material and fuel requirement for project are given below:-

Sl. No.	**Raw material**	**Annual Requirement**	**Probable Source**
Iron Ore Pellet Plant			
1.	Iron ore fines	460000 TPA	Captive Beneficiation Plant
2.	Pulverised Coal	6000 TPA	Imported Coal
3.	Bentonite	4500 TPA	Gujarat
4.	Limestone/Dolomite	4800 TPA	Local Market
5.	Coal for Gasifier	15000 TPA	Imported Coal, WCL
Iron Ore Beneficiation Plant			
1.	Iron Ore Fines	6,00,000TPA	Mines &Local Market

13.29.10 Water Consumption for the proposed project will be 535 KLD. Domestic waste water will be treated in Packaged Type STP and the wastewater generated from the pellet plant will be treated in settling tank and reused in the process. Iron Ore Beneficiation plant would also maintain a zero discharge of water from the unit. Source of water will be Ground water.

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

13.29.12 Consultant: Pollution and Ecology Control Services, Sl. No. in the QCI list: 118

Recommendations of the committee:

13.29.13 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in **addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:**

i. Filter press and thickener shall be provided.

ii. No dumping of waste is permitted.

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

iv. The issues raised during the public hearing and commitment of the project proponent to address the same shall be compiled and submitted in a time bound action plan. The action plan shall, inter alia, contain the year-wise activities with corresponding financial allocations.

13.30 Installation of Induction Furnace, Rolling Mill & Submerged Arc Furnace for production of Ingots, Billets, 5,00,000 TPA, TMT & long Product: 5,00,000 TPA & Ferro alloys 25,000 TPA by **M/s Lloyds Metals & Energy Limited** located at MIDC area Ghugus, Chandrapur, **Maharashtra** [Online Proposal No. **IA/MH/IND/108959/2019**, File No. **J-11011/243/2019-IAII(I)**] - **Prescribing of Terms of Reference** – regarding.

13.30.1 **M/s Lloyds Metals & Energy Limited** has made an online application vide proposal no. IA/MH/IND/108959/2019 dated 24.06.2019 along with copy of prefeasibility report and Form – 1to propose Terms of Reference under the provisions EIA Notification, 2006 to undertake detailed EIA study for the proposed project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details Submitted by the Project Proponent:

13.30.2 M/s Lloyd and Metal and Energy Limited (LEML) has proposed Installation of Induction Furnace for manufacturing 5,00,000 TPA ingots, Billets, Rolling Mill for 5,00,000 TPA hot rolled long products and TMT and Submerged Arc furnace to produce 25,000 TPA Ferro Alloys. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 24th June 2019 vide Online Application No IA/MH/IND/108959/2019.

13.30.3 The proposed project was considered in 9th Meeting of the Re-constituted EAC (Industry-I) held on 30-31st July, 2019 and the committee deferred the consideration of the project and asked the project proponent to obtained confirmation from CPCB regarding location of the plant site with respect to critically polluted area.

13.30.4 MOEF&CC has issued a letter dated 24.10.2019 regarding of mechanism for environmental management of critically and severe polluted area and the proponent will follow all the mitigation measures as per given conditions mentioned in OM No-Q-16017/38/2018-CPA dated 24th October 2019.

13.30.5 In view of above M/s Lloyds Metals and Energy Limited are ready to execute all conditions as mentioned in letter dated 24.10.2019 and follow the mechanism suggested by MOEF&CC, New Delhi.

13.30.6 The existing projects for sponge iron manufacturing plant was accorded environmental clearance vide lr.no. Env (NOC)2005/747/CR.97/D.I dated 28th December 2005, for coal washery environmental clearance was accorded vide lr.no. J-11015/272/2007-IA.II (M) dated 9th April 2008 and for waste Heat Recovery based captive power plant of 25 MW capacity environmental clearance was accorded vide lr.no. J-13012/123/07-IA-II dated 12th October 2009.Consent to Operate was accorded by Maharashtra State pollution Control Board vide letter no. Format 1.0/BO/CAC-Cell/EIC No. : CH1695-14/CAC-421 validity of CTO is up to 31-12-2019.

13.30.7 The proposed unit will be located at Plot A-1 and A-2, MIDC Area, Ghugus,

Chandrapur, Maharashtra.

13.30.8 Total land leased by MIDC to Lloyds Metals & Energy Limited (LMEL) is 93.52 ha in which plot no. A-1 is 4.00 ha & A-2 is 89.52 ha. Additional 8.56 ha adjacent private land is purchased for the proposed project. No forestland involved. Trees planted till date is 2,05,000 and survival are 1,94,000

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

13.30.10 Total project cost is Rs. 760 Crore. Proposed employment generation from proposed project will be 750 direct employment and indirect employment.

13.30.11 The targeted production capacity of ingots, Billets 5,00,000 TPA, Rolling Mill for hot rolled long products and TMT 5, 00,000 TPA and Submerged Arc furnace to produce Ferro Alloys 25,000 TPA.

Name of unit	Existing Unit	Proposed Unit	Capacity of each Unit	Total Production
Sponge Iron	Sponge Iron	-	4 X100 TPD and 1x500 TPD	3,24,000 MT/Year
Coal Washery	Coal Washery	-	0.21 6 MTPA	0.21 6 MTPA
Electricity Generation	WHRB) +AFBC (for	-	25 MW	25 MW
Ingots/ Billets	-	Induction	6 X 30 T	5,00,000 TPA
Hot rolled long product / TMT	-	Rolling Mills(2 Nos)	-	5,00,000 TPA
Ferro Alloys (Silico Manganese,	-	Submerged Arc Furnace	2X 9MVA	25,000 TPA

13.30.12 The power required for the proposed project will be 35 MW which will be sourced from own power plant & MSEDCL.

13.30.13 Proposed raw material requirement for project are sponge iron & scrap. LEML is manufacturing 3,24,000 TPA sponge iron at Ghugus plant and proposed plant at Konsari, District Gadchiroli will be manufacture additional 72000 TPA. The raw material requirement for Ferro alloy (Ferro-manganese) unit are coal, Manganese ore, coke, carbon paste, Quartz and Dolomite which will be procured from local market andraw material requirement for Silico –manganese unit is Ferro manganese slag.

13.30.14 Water Consumption for the proposed project will be 260 KLD. An agreement has been signed with Irrigation Department, Chandrapur for supply of water. The waste water generated from industrial process and cooling purpose will be 30 KLD which will be treated in settling tank within the premises and treated water will be reused back in the process. About 11 KLD of Domestic waste water will be treated in Packaged Type STP of 15 KLD capacity and treated water will be used for green belt development.

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

13.30.16 Name of Consultant: M/s Pollution Control Ecology Service, Sr No in QCI List: 118

Observations of the Committee:

13.30.17 Project is located in critically polluted area, i.e., MIDC Chandrapur. The proposal was considered in the EAC meeting held during 30-31st July 2019. As per the Order dated 10/07/2019 passed by the Hon'ble National Green Tribunal in Original Application No. 1038/2018, no further industrial activities or expansion was allowed with regard to 'red' and 'orange' category units in Chandrapur, Maharashtra till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms. In view of the aforesaid, the Committee deferred the consideration of the project and asked the project proponent to obtain confirmation from CPCB regarding location of the plant site with respect to critically polluted area.

13.30.18 Now, MoEF&CC has issued mechanism for appraisal of Environment Clearance proposals which are located in Critically and Severely Polluted Areas vide OM No. 22-23/2018-IAIII (Pt) 31.10.2019.

Recommendations of the Committee:

13.30.19 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-1 read with additional ToRs at Annexure-2:**

i. Particulate emissions from the stack shall be less than 10 mg/Nm^3.

ii. No reheating and 100% hot charging shall be adopted.

iii. No ground water abstraction is permitted.

iv. Rain water harvesting to the tune of 100%.

v. Fourth hole extraction shall be provided in the furnaces to control secondary emissions.

vi. Wind breaking walls around the storage area and covered storage area for material transportation and paved roads shall be provided.

vii. No dumping of waste is permitted.

viii. Funds for CER activities shall be allocated two times than prescribed I the OM dated 1st May 2018.

ix. 50 % green belt development and all additional conditions as specified by MPCB in their directions dated 24/10/2019.

13.31 Expansion of Iron Ore Beneficiation plant from 10.7 MTPA(throughput) capacity to 16.0 MTPA (throughput), Relocation of tailing Dam at village Sankari, (Gram Panchayat Phuljhar), District Keonjhar, laying of Tailing Pipeline and Return Water Pipeline from Beneficiation Plant to Tailing Dam and laying of water pipeline and

slurry pipeline from Beneficiation Plant to Ghoraburhani-Sagashi Iron Ore Block by **M/s. Essar Steel India Ltd** located at village Dabuna & Sankari,District Keonjhar, **Odisha** [Online Proposal No. **IA/OR/IND/58662/2016**, File No. **J-11011/222/2016-IA.II(I)**] **-Amendment in Terms of Reference** -regarding.

13.31.1 M/s. Essar Steel India Limited has made online application vide proposal no. IA/OR/IND/58662/2016dated 28th October, 2017 along with revised Form I and pre-feasibility project report and sought for amendment in the Terms of Reference (ToR) accorded by the Ministry vide letter no. F.No. J-11011/222/2016- IA-II(I) dated 20/07/2017.

13.31.2 The aforesaid proposal was considered in the 26th meeting of the Expert Appraisal Committee meeting held during 11-13thDecember, 2017 and the relevant portion of the minutes of the meeting is given as below:

Proceedings of the 26th EAC meeting held during 11-13th December, 2017

M/s. Essar Steel India Ltd (EStIL) proposes for amendment of ToR for expansion of its Iron Ore Beneficiation Plant from existing capacity of 10.7 MTPA (throughput) to 16.0 MTPA (throughput), Relocation of Tailing Dam at Village-Sankari, Gram Panchayat-Phuljhar, Dist-Keonjhar, Odisha, Laying of Tailing Pipeline and Return Water Pipeline from Beneficiation Plant to Tailing Dam & Laying of Water Pipeline and Slurry Pipeline from Beneficiation Plant to Ghoraburhani-Sagasahi Iron Ore Block.

Land use break-up of the proposed expansion project is given below:

SL	Land Description	Beneficiation Plant	Truck Unloading Station	Tailing Dam	Pipelines from BP to Tailing Dam at Sankari	Pipeline from BP to Sagasahi Iron Ore Block
1.0	Govt. Land (Non-Forest) In Ha/Acres	Nil	Nil	127.56ha (315.20 acres)	2.929ha (7.24 acres)	7.420ha (18.33 acres)
2.0	Private Land in Ha/Acres	34.40ha (85.0 acres)	1.92ha (4.75 Acres)	2.67ha (6.6 acres)	6.362ha (15.72 acres)	Nil
3.0	Forest Land in Ha/Acres	Nil	Nil	Nil	12.728ha (31.45 acres)	16.466ha (40.69 acres)
4.0	Total Land in Ha/Acres	34.40ha (85.0 acres)	1.92ha (4.75 acres)	130.23ha 321.80 acres	22.019ha (54.40 acres)	23.886ha (59.02 acres)

It was informed that during the detailed engineering, total area of the Tailing Dam has increased from 110 ha to 130.23 ha & there is no forest land in it. Total area involved in laying of underground tailing pipeline and return water pipeline from Beneficiation Plant to Tailing Dam is 22.019 ha including 12.728 ha of forest land. Total area involved in laying of water pipeline and slurry pipeline from Beneficiation Plant to Ghoraburhani - Sagasahi Iron Ore Block is 23.886 ha including 16.466 ha of forest land.

Therefore, it was requested for a following amendments:

- Total area of the Tailing Dam has now increased from 110 ha to 130.23 ha & there is no forest land in it.
- Total area involved in laying of underground tailing pipeline and return water pipeline from Beneficiation Plant to Tailing Dam is 22.019 ha including 12.728 ha of forest land.
- Total area involved in laying of water pipeline and slurry pipeline from Beneficiation Plant to Ghoraburhani - Sagasahi Iron Ore Block is 23.886 ha including 16.466 ha of forest land.
- Location of approved Tailing Dam is at Sankari village in Phuljhar Gram Panchayat of Banspal Tehsil of Keonjhar District, Odisha

The project proponent along with EIA Consultant has made detailed presentation on the requirement of the proposed amendment.

Recommendations of the Committee held during 11-13thDecember, 2017

After detailed deliberations, the Committee agreed to amend the ToRs as requested by the PP. As per the amended ToRs, the tailing pond will now be located at village Sankari, (GrampanchayatPhuljhar), district Keonjhar. The area of the tailing pond would now be 130.23 ha without involving any forest land. The PP shall submit a letter from the state forest department confirming that the new location of the tailing pond does not involve any forest land and does not require any clearance under Forest (Conservation Act) 1980. One third of the tailing pond area shall be used for green belt development. Further, the green belt shall be designed to control the dust pollution.

In view of the change of location of tailing pond dam, the title of the project shall now be read as "*Expansion of Iron Ore Beneficiation plant from the existing capacity of 10.7 MTPA (throughput) to 16.0 MTPA (throughput), Relocation of tailing Dam at village Sankari, (GrampanchayatPhuljhar), Laying of Tailing Pipeline and Return Water Pipeline from Beneficiation Plant to Tailing Dam and Laying of Water Pipeline and Slurry Pipeline from Beneficiation Plant located at Dabuna, Tehsil Barbil, District Kendujhar Odisha to Ghoraburhani-Sagashi Iron Ore Block by* ***M/s Essar Steel India Ltd****.,*"

13.31.3 The formal issuance of ToR amendment letter was kept on hold due to certain clarification from company and due to non-receipt of same the proposal was delisted.

13.31.4 M/s. Essar Steel India Limited vide letters dated 24/09/2019 & 4/11/2019 requested the Ministry to relist the instant proposal. M/s ESIL further stated that the company is out of NCLT proceedings. It was stated that the resolution plan submitted by Arcelor Mittal India Pvt. Lt. (AMIPL) was approved by Company of Creditors (COC). This plan was approved by the Hon'ble NCLT vide its order dated 8/03/2019 which was further upheld by Hon'ble NCLAT wherein the NCLAT re-stated AMIPL as the Successful Resolution Applicant/Successful Bidder. An appeal has been filed before the Hon'ble Supreme Court against the NCLAT order dated 4/07/2019 with regards to distribution of funds amongst the creditors which was disposed of by the Hon'ble Supreme Court vide its order dated 15/11/2019. In addition to this, another amendment was sought in the ToR dated 20/07/2017 regarding exemption from conduct of public hearing in the Sundergarh District, Odisha for the iron ore slurry pipeline as it does not attract the provisions of the EIA Notification, 2006.

13.31.5 The request of project proponent regarding exemption from conduct of public hearing in the Sundergarh District, Odisha for the iron ore slurry pipeline was placed before the Committee for consideration.

13.31.6 The project proponent along with the EIA consultant namely M/s. Visiontek Consultancy Services Pvt. Ltd. (Sl. No. 161 in the List of Accredited Consultant Organizations (Alphabetically) Rev. 81, Nov., 2019) made a brief presentation before the Committee.

Details submitted by the project proponent

13.31.7 MoEF&CC has accorded Terms of Reference to M/s. Essar Steel India Limited on 20/07/2017 for the preparation of EIA report for the project titled "Expansion of Iron Ore Beneficiation plant from the existing capacity of 10.7 MTPA (throughput) to 16.0 MTPA (throughput), Relocation of tailing Dam at Sankari, Laying of Tailing Pipeline and Return Water Pipeline from Beneficiation Plant to Tailing Dam & Laying of Water Pipeline and Slurry Pipeline from Beneficiation Plant to Ghoraburhani-Sagasahi Iron Ore Block at Dabuna, Tehsil Barbil, District Kendujhar Odisha".

13.31.8 The amendment sought by the PP in the ToR dated 20/07/2017 are summarized as below:

i. Location of Tailing Dam will be at Sankari village in Phuljhar Gram Panchayat of Banspal Tehsil of Keonjhar District, Odisha. Total area of the Tailing Dam has now increased from 110 ha to 130.23 ha & there is no involvement of forest land in it.

ii. Total area involved in laying of underground tailing pipeline and return water pipeline from Beneficiation Plant to Tailing Dam is 22.019 ha including 12.728 ha of forest land.

iii. Total area involved in laying of water pipeline and slurry pipeline from Beneficiation Plant to Ghoraburhani - Sagasahi Iron Ore Block is 23.886 ha including 16.466 ha of forest land.

iv. Exemption from conduct of public hearing at Sundergarh District for the iron ore slurry pipeline as it does not attract the provisions of the EIA Notification, 2006.

13.31.9 The revised land break up furnished by the project proponent is given as below.

Sl. No.	Land Description (in ha)	Beneficiation Plant	Truck Unloading Station	Tailing Dam	Tailing and Return Water Pipelines from Beneficiation Plant to Tailing Dam	Water and Slurry Pipelines from Beneficiation Plant to Ghoraburhani - Sagasahi Iron Ore Block
01	Govt. Land (Non-Forest)	Nil	Nil	127.56	2.929	7.420
02	Pvt. Land	34.40	1.92	2.67	6.362	Nil
03	Forest Land	Nil	Nil	Nil	12.728	16.466
04	Total Land	34.40	1.92	130.23	22.019	23.886

13.31.10 The reasons furnished by the PP for exemption from conduct of public hearing at Sundergarh District is given below:

i. The Beneficiation Plant & Tailing Dam both are located in Keonjhar district.

ii. All the basic requirement of the project like – land, water and power are met from Keonjhar district.

iii. Only part (11.089 km out of 27.881 Km) of Underground Slurry Pipeline (an eco-friendly mode of transportation of iron ore fines) falls in Sundergarh District.

iv. Proposed Slurry Pipeline does not pass through any National Park/Sanctuary/Coral Reef or notified Eco Sensitive Zone, thus precludes the requirement of EC as per Sl. No. 1a(ii) of the schedule of the EIA Notification 2006.

v. Also mineral slurry pipeline has been categorized under "Green Category" by the Odisha State Pollution Control Board vide Order No. 8333/Ind-I-Con-1505, dated 11.07.2018.

13.31.11 Total revised project cost is approx. Rs. 388.84 Crores. Proposed employment generation from proposed project will be 100 direct employments and 350 indirect employments. The targeted production capacity of the expansion plant is 16.0 MTPA (throughput), which will produce 12 MTPA iron ore concentrate. The raw materials (16 MTPA iron ore fines) will be sourced from private merchant miners in the region and will be transported by trucks covered with tarpaulin. Out of which, 6MTPA will be received from Ghoraburhani-Sagasahi captive mine through slurry pipeline.

Observations of the Committee

13.31.12 The Committee noted that the proposed expansion of iron beneficiation plant and tailing dam are located in Keonjhar District. Only part (11.089 km out of 27.881 Km) of Underground Slurry Pipeline falls in Sundergarh District. The Committee also noted that as per the MoEF&CC notification no. S.O. 6067 (E) dated 1/12/2009, the slurry pipelines passing through national parks/sanctuaries/coral reefs and ecologically sensitive areas **only requires the prior environmental clearance under the provisions of the EIA Notification, 2006**.

Recommendations of the Committee

13.31.13 After detailed deliberations, the Committee recommended to accept amendments in the ToR dated 20/07/2017 as requested by the PP as mentioned below.

i. Location of Tailing Dam will be at Sankari village in Phuljhar Gram Panchayat of Banspal Tehsil of Keonjhar District, Odisha. Total area of the Tailing Dam has now increased from 110 ha to 130.23 ha & there is no involvement of forest land in it.

ii. Total area involved in laying of underground tailing pipeline and return water pipeline from Beneficiation Plant to Tailing Dam is 22.019 ha including 12.728 ha of forest land.

iii. Total area involved in laying of water pipeline and slurry pipeline from Beneficiation Plant to Ghoraburhani - Sagasahi Iron Ore Block is 23.886 ha including 16.466 ha of forest land.

iv. Exemption from conduct of public hearing at Sundergarh District for the iron ore slurry pipeline as it does not attract the provisions of the EIA Notification, 2006.

13.31.14 In addition, the following specific ToRs are also recommended to be added for under taking EIA study.

i. Stage I Forest Clearance with respect to the forest land involved in the tailing and iron ore slurry pipeline route shall be submitted.

ii. Traffic study shall be carried out including, *inter-alia,* the existing road details with traffic load, proposed quantum of material to be transported by road with anticipated vehicle details, line source modelling and road strengthening details etc., These details shall be included in the EIA report.

iii. Scheme for rain water harvesting shall be prepared including, inter-alia, the recharge of ground water and construction of check dams to ensure harvesting of water to the extent abstracted from river Baitarniand the. The details shall be included in the EIA report.

iv. Socio-economic survey in the project influenced area, that is 10 Kms radial coverage from the project site, shall be carried out and included as a part of EIA report.

v. The list of flora and fauna with their corresponding Schedules to which they belong (as per the Wildlife (Protection) Act) that occur in the study area – duly authenticated by the concerned Divisional Forest Officer - shall be prepared and submitted along with the EIA report.

vi. Contour survey of the plant site and slime storage area with drainage pattern shall be undertaken and included in the EIA report.

vii. All dwellings within the slime storage area shall be rehabilitated. Resettlement and Rehabilitation of the PAFs shall be carried out in accordance with the extant provisions of Rules in place and the details shall be furnished in the EIA report as a separate chapter.

viii. Mass balance of Iron Ore Grinding and De-Sliming Plant (Beneficiation Plant) shall be submitted in the EIA report.

ix. A separate chapter on slime management including, *inter-alia*, the reuse of slime, slime pond location, pipeline route, pumping arrangement envisaged, lining arrangement at the bottom of the slime pond, leachate collection system if any, and its monitoring etc., shall be prepared and included in the EIA report.

x. Risk assessment and safety and surveillance systems to be adopted the pipeline route shall be included in the EIA report.

xi. Public Hearing for the project shall be conducted in Keonjhar District by the concerned State Pollution Control Board in accordance with the extant provisions of the Rules.

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

xiii. The project proponent should carry out social impact assessment of the project and submit the same along with the EIA report.

xiv. The project proponent shall submit the Corporate Environment Responsibility plan as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1/05/2018.

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ANNEXURE –1

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

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

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

4. Site Details
   - i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

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

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

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

6. **Environmental Status**

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

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

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

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

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

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

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

viii. Soil Characteristic as per CPCB guidelines.

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

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

xi. Socio-economic status of the study area.

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

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

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

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

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

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

vi. Measures for fugitive emission control

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

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

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

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

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

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

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

8. **Occupational health**

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

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

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

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

9. **Corporate Environment Policy**

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

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

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

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

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

11. Corporate Environment Responsibility (CER)

i. To address the Public Hearing issues, an amount as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 amounting to Rs. .....crores, shall be earmarked by the project proponent, towards Corporate Environment Responsibility (CER). Distinct CER projects shall be carved out based on the local public hearing issues. Project estimate shall be prepared based on PWD schedule of rates for each distinct Item and schedule for time bound action plan shall be prepared. These CER projects as indicated by the project proponent shall be implemented along with the main project. Implementation of such program shall be ensured by constituting a Committee comprising of the project proponent, representatives of village Panchayat& District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office. No free distribution/donations and or free camps shall be included in the above CER budget

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

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

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

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

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report

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

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

ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCBshall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

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

ADDITIONAL ToRS FOR PELLET PLANT

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

ADDITIONAL ToRs FOR CEMENT INDUSTRY

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

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

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

ADDITIONAL ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

ADDITIONAL ToRs FOR COKE OVEN PLANT

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

ADDITIONAL ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

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

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

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

Executive Summary

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

i. Project name and location (Village, Dist, State, Industrial Estate (if applicable)
ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
vi. Capital cost of the project, estimated time of completion
vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest, eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
x. Likely impact of the project on air, water, land, flora-fauna and nearby population
xi. Emergency preparedness plan in case of natural or in plant emergencies
xii. Issues raised during public hearing (if applicable) and response given
xiii. CSR plan with proposed expenditure.
xiv. Occupational Health Measures
xv. Post project monitoring plan

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LIST OF PARTICIPANTS IN 13th MEETING OF EAC (INDUSTRY-I) HELD ON 27-29 NOVEMBER, 2019

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE		
			27/11/2019	28/11/2019	29/11/2019
1	Dr. Chhavi Nath Pandey, IFS(Retired) Email: pandeychhavinath55@gmail.com	**Chairman**			
Members					
2.	, Representative of Central Pulp and Paper Research Institute, Saharanpur. Email: director.cppri@gmail.com	**Member**		Absent	Absent
3.	Dr. Siddhartha Singh, Representative of Indian Meteorological Department, New Delhi. Siddhartha.singh77@gmail.com	**Member**		Absent	29.11.2019
4.	Dr. G. Bhaskar Raju Email: gbraju55@gmail.com	**Member**	Absent	Absent	Absent
5.	Dr. Jagdish Kishwan, IFS (Retd.) Email: jkishwan@gmail.com	**Member**	Absent	Absent	
6.	Dr. G.V. Subramanyam Email: sv.godavarthi@gmail.com	**Member**			
7.	Shri. Ashok Upadhyaya Email: ahupadhy@rediffmail.com	**Member**			
8.	Shri. R.P. Sharma Email: rpsh3@hotmail.com	**Member**			
9.	Shri. Sanjay Deshmukh Email: docsvd@yahoo.com	**Member**			Absent

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE		
			27/11/2019	28/11/2019	29/11/2019
10.	Prof. S.K. Singh Email: sksinghdee@gmail.com **singhsk@email.com**	**Member**	Absent		
11.	Dr. R. Gopichandran Email: r.gopichandran@vigyanprasar.gov.in	**Member**	Absent		
12.	Shri. Jagannath Rao Avasarala Email: avasaralajagan@gmil.com	**Member**			
13	Shri. J.S. Kamyotra Email: kamyotra@yahoo.co.in	**Member**			
14.	Shri. Aravind Kumar Agrawal Director, MoEF&CC Email: dirind-moef@gov.in	**Member Secretary**			

SPECIAL INVITEES

SL. No.	NAME AND DESIGNATION	ORGANISATION	ATTENDANCE SIGNATURE
			28/11/2019
1.	DR. S.K. Upadhyay R.O. CE.C.B. Raipur (CG)	C.E.C.B.	28/11/19
2.			

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