

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

Summary record of the fifteenth (15th) meeting of re-constituted expert appraisal committee held during 16-17th January, 2020 for environmental appraisal of Industry-1 sector projects constituted under the provisions of Environmental Impact Assessment (EIA) notification, 2006.

The fifteenth 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 16-17th January, 2020 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 14th meeting held during 23-24th December, 2019 were confirmed by the EAC as already uploaded on PARIVESH.

16th January, 2020

15.1 Expansion of Integrated Steel Plant; Sponge Iron (from 297000 MTPA to 594000 MTPA), MS Billet (from 330000 MTPA to 653400 MTPA), Captive power (from 53 MW to 80.5 MW) and New Pellet plant establishment-792000 MTPA by **M/s. Gallant Ispat Limited** located at AL 5, Sector 23, GIDA Industrial Area, Tehsil Sahjanwa, District Gorakhpur, **Uttar Pradesh**- [Online Proposal No. IA/UP/IND/119401/2016, File No. J-11011/229/2008-IAII(I)] – **Re-consideration for grant of Environment Clearance based on ADS reply – regarding.**

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

M/s Gallantt Ispat Limited has made online application vide proposal no. IA/UP/IND/119401/2016 dated 26th September, 2019 in the prescribed Form -2 along with copies of EIA/EMP report and other documents 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 proposal is appraised at Central level.

Details submitted by the project proponent

The expansion project proposal of M/s. Gallantt Ispat was initially received in the Ministry on 28th January, 2019 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Reconstituted Expert Appraisal Committee (Industry) [EAC (I)] during its 4th meeting held on 20th to 22nd 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 on 27th May, 2019 vide Lr. No. J-11011/229/2008-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 26th September 2019, vide Online Application No. IA/UP/IND/119401/2016.

The project of M/s Gallantt Ispat Limited is for expansion of Integrated Steel Plant; Sponge Iron (from 297000 MTPA to 594000 MTPA), MS Billet (from 330000 MTPA to 653400 MTPA), Captive power (from 53 MW to 80.5 MW) and New Pellet plant establishment 792000 MTPA. The existing project was accorded environmental clearance vide Lr.no J-11011/229/2008-IA-II (I) dated 18th October, 2017.

The Status of compliance of earlier EC was obtained from Regional Office, Lucknow vide letter no. IV/Env/UP/Ind-154/459/ 2017/104 dated 19thSeptember, 2019. There are no non-compliances reported by Regional officer. The proposed capacity for different products for site area as below:

Name of Unit	Existing Capacity and configuration	Additional Capacity and configuration	Capacity after expansion and configuration
Sponge Iron Plant	2,97,000 MTPA	2,97,000 MTPA	5,94,000 MTPA
	2 x 450 TPD	1 x 750 TPD & 1 x 150 TPD	2x 450 TPD, 1 x 750 TPD & 1 x 150TPD
M.S. Billets	3,30,000MTPA	3,23,400 MTPA	6,53,400 MTPA
	2 x 20 T* + 2 X 30 T	2x 22.5 T, 2 x 27.5 T	4 x 30 T, 2 x 22.5 T, 2 x 27.5 T
Captive Power Plant	53 MW (35 MW of FBC and 18MW of WHRB)	27.5 MW	80.5 MW (44.5MW of CFBC and 36 MW of WHRB)
Pelletization Plant	-	7,92,000 MTPA	7,92,000 MTPA
*Existing 2 x 20T Induction Furnace will be modified into 2 x 30 T after expansion.			
**MTPA refers to Metric Tons Per Annum			

The total land required for the project is 45.903 ha which is an industrial land. No /forest land involved. The entire land has already been acquired for the project. No River passes through the project area (p./c). 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 flat and reported to lie between 26°45'16.12" to 26°45'44.48"N Latitude and 83°11'37.63" to 83°12'15.71" E Longitude in Survey of India topo sheet No. 63N1, 63 N2, 63 N5 and 63 N6, at an elevation of 84 m AMSL. The ground water table reported to range between 2.5 to 4.49 m below the land surface during the post-monsoon season and 2.13 to 6.5 m below the land surface during the pre-monsoon season. The project area falls in Sahjanwa block which falls under Safe Category and stage of ground water development is 68.44%.

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 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 are shown below.

Basic raw materials used in the process:

S. No.	Raw Material	Consumption (TPA)			Source of Supply	Mode of Transport
		Existing	Additional	Total after Expansion		
SPONGE IRON PLANT						
1.	Iron Ore	237600	-	66528	Open market	Rail
2.	Pellets	237600	557172	794772	Self/ Manufacturer	Conveyer/ Rail
3.	Coal	267300	267300	534600	Import/ Linkage auction/ Open Market	Rail
4.	Dolomite	14850	14850	29700	Open Market	Road
PELLETIZATION PLANT						
1.	Iron Ore Fines	-	883872	883872	Open Market	Rail
2.	Bentonite	-	6336	6336	Open Market	Road
3.	Lime Stone	-	7920	7920	Open Market	Road
4.	Dolomite	-	3960	3960	Open Market	Road
5.	Coal (for PGP/ mix)	-	43560	43560	Open Market	Rail
STEEL MELT SHOP DIVISION (INDUCTION FURNACE WITH CONTINUOUS CASTER)						
1.	Sponge Iron	297000	297000	594000	In House	Conveyers
2.	MS Scraps	109267	91512	200779	Local Market	Road
3.	Ferro Alloy	4950	2891	7841	From Local Manufacturer	Road
CAPTIVE POWER PLANT						
1.	Coal	124740	89760	214500	Linkage auction/open market	Rail
2.	Rice Husk	83160	-	35244	Local Market	Road
3.	Dolochar	41580	38610	80190	In house	Conveyers

The targeted production capacity after expansion will be Sponge iron from 297000 MTPA to 594000 MTPA, MS Billet from 330000 MTPA to 653400 MTPA, Captive Power from 53.0 MW to 80.5 MW. A new pellet plant, 792000 MTPA capacity, will be installed. Iron ore fines/ coal for the plant will be procured from Open Market. The major raw materials viz., iron ore, coal is being/will be transported through Rail.

The total water requirement of the project is estimated as 6776 m³/day (Existing 4254 m³/ day + Proposed 2522 m³/ day) which will be obtained from groundwater.

Permission for withdrawal of ground water requirement for the existing unit has been obtained by CGWA NOC no. 21-4(161)/NR/CGWA/2008-908 dated 14th May, 2018. The application for the withdrawal of additional water requirement was submitted to CGWB on 17th June, 2019. As per the current status of the application, the same has been examined & recommended by CGWB to CGWA.

The total power requirement of the project is estimated as 80.5 MW (Existing 53.0 MW + Additional 27.5 MW) which is being / will be sourced from Captive Power Plant, WHRB & D.G. Set (for back-up) and 10.0 MW from Purvanchal Vidyut Vitran Nigam Limited for emergency requirement.

Baseline Environmental Studies were conducted during Summer Season i.e. from March to May, 2019. Ambient air quality monitoring has been carried out at 8 locations during March to May, 2019 and the data submitted indicated: PM₁₀ (58.3 µg/m³ to 93.6 µg/m³), PM_{2.5} (26.5 to 54.5 µg/m³), SO₂ (7.0 to 20.6 µg/m³) and NO_x (12.9 to 36.7 µg/m³). The results of the modelling study indicates that the maximum increase of GLC for the proposed project is 3.65 µg/m³ with respect to the PM₁₀, 1.51 µg/m³ with respect to the SO₂ and 0.9 µg/m³ with respect to the NO_x.

Ground water quality has been monitored in 8 locations in the study area and analyzed. pH: 7.35 to 8.02, Total Hardness: 164.9 to 414.8 mg/l, Chlorides: 27.07 to 192.47 mg/l, Fluoride: 0.57 to 0.84 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 4 locations. pH: 7.45 to 8.08; DO: 5.2 to 7 mg/l and BOD: 2.4 to 14.0 mg/l. COD from 10.8 to 52.4 mg/l.

Noise levels are in the range of 52.6 to 68.9 LeqdB(A) for day time and 41.4 to 62.6 LeqdB(A) for Night time.

The expansion project will be executed in the existing plant premises & additional land (industrial) which is already acquired by the company and thus no R & R is involved.

The details of existing and additional solid & hazardous waste generation have been shown in the table below. It has been envisaged that greenbelt has already been developed in an area of 13.41 ha i.e. 33 % of the total plant area. During expansion, additional greenbelt will be developed in an area of 1.88 ha to attenuate the noise levels and trap the dust generated due to the project development activities. Therefore, 15.29 ha i.e. ~ 33.3% of the total plant area (45.903 Hectare), is being/ will be developed under greenbelt & plantation.

Solid & Hazardous Waste Generation & Management

Solid waste	Existing (TPD)	Total after Expansion (TPD)	Management
Dolochar	126.0	243	Dolochar is being/will be utilized in AFBC boiler for captive power generation and after expansion it would be managed through the same technique.
Slag	111.0	198	SMS Slag is being used in filling of Low-lying area and in road making and after expansion

Solid waste	Existing (TPD)	Total after Expansion (TPD)	Management
			will be utilized in same way.
Ash & Dust	239.0	350	Fly ash from the Boiler and APCS is being/will be sold to Cement industry and brick manufacturing unit
Ash-Pellet plant	-	20	Ash will be sold to cement manufacturers.

It has been reported that the Consent to Operate from the Uttar Pradesh Pollution Control Board (UPPCB) has been obtained for air vide letter no. H12172/C-6/Air Pollution/121/17/GKP dated 17.11.2017 and valid from 01.01.2018 to 31.12.2019 and for water vide letter no. H12171/C-6/Water Pollution- 121/17/GKP dated 17.11.2017 and valid from 01.01.2018 to 31.12.2019.

The Public hearing of the project was held on 22nd August, 2019 at 04:00 pm at plant site under the chairmanship of Shree Rakesh Kumar Shrivastav (Additional District Magistrate City, Gorakhpur) and Shree Pankaj Yadav (Assistant Environmental Engineer, UPPCB, Gorakhpur, UP for expansion of Integrated Steel Plant; Sponge Iron (from 297000 MTPA to 594000 MTPA), MS Billet (from 330000 MTPA to 653400 MTPA), Captive power (from 53 MW to 80.5 MW) and New Pellet plant establishment 792000 MTPA. The issues raised during public hearing are employment and environmental pollution. An amount of 452 Lakhs (of total capital cost i.e. Rs. 602.53 Crores) has been earmarked for Enterprise Social Commitment based on public hearing issues.

The capital cost of the project is Rs. 602.53 Crores and the capital cost for environmental protection measures is proposed as Rs. 35.44 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 4 Crores/annum. The detailed CSR plan has been provided in the EMP in its page No. 197 to 199. The total employment generation from the expansion is 405 persons (Existing 720 persons, Total employment after expansion will be 1125 persons).

About 13.41 ha i.e.~33% of the existing plant area (40.5 ha) has already been developed under greenbelt & plantation. An additional area of 1.88 ha will be developed under greenbelt & plantation. Therefore, 15.29 ha i.e. ~ 33.3% of the total plant area (45.903 Hectare), is being/ will be developed under greenbelt & plantation. A 10 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been/ will be developed as greenbelt and green cover as per CPCB/ MoEF&CC, New Delhi guidelines. Presently 15026 trees are planted in the existing plant premises and as a part of expansion additionally 21319 trees will be planted. After expansion the density of plantation with the trees will be 2377 trees/ ha.

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

The Project Proponent and the accredited Consultant M/s. J.M. EnviroNet Pvt. Ltd. (Serial. No. 88) made a detailed presentation on the salient features of the project and informed that:

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

The committee noted that a complaint dated 30.05.2019 against M/s Gallant Ispat Ltd was received in the Ministry related to violation of EC conditions and Consent to Operate and setting up of Joint Inspection Committee by Hon'ble National Green Tribunal (NGT) in the case of Meera Shukla vs Muncipal Corporation, Gorakhpur & Others vide order dated 17.12.2018 in original application No. 116/2014. The Committee examined the complaint.

The Committee observed that as per the declaration submitted in the EIA report, the project proponent stated that "there is no litigation pending against the project and/or any direction/ order passed by any Court of law against the project & land in which the project is set up and that for any such litigation whatsoever, the sole responsibilities will be borne by company".

15.1.3 However, the Committee noted that a case (Original Application No. 116/2014; Meera Shukla Vs Municipal Corporation, Gorakhpur &Ors.) was filed in Hon'ble National Green Tribunal regarding the contamination of water bodies and ground water, specifically Ramgarh lake, Ami river, Rapti river and Rohani river in and around the District Gorakhpur. In this regard, the Hon'ble Tribunal vide order dated 23/8/2018 constituted a Monitoring Committee. The recommendations of the Monitoring Committee with respect to the existing unit of M/s. Gallant Ispat Limited as narrated in the Tribunal Order dated 17/12/2018 is as below:

- i. M/s Gallant Ispat Ltd (Integrated Steel Plant), Gorakhpur may be saddled with exemplary cost of Rs. Fifty lakhs or more for having failed in following the norms provided by law (supra) while running the industry.
- ii. M/s Gallant Ispat Ltd (Integrated Steel Plant), Gorakhpur be directed to ensure the compliance of all norms prescribed by law while running the industry within a month so that the citizens of the locality may not suffer any further from variety of problems and health hazards.
- iii. A team from the Directorate of Medical Health Services, Government of UP may visit M/s Gallant Ispat Ltd (Integrated Steel Plant), Gorakhpur to make a survey of health problems of the citizens residing within 2 kms surrounding area of the industry and take remedial measures.
- iv. The ground water of 2 kms surrounding area of M/s Gallant (spat Ltd (Integrated Steel Plant), Gorakhpur be tested by Ground Water Department of Government of India to find out the level of contamination, if any, within two months and the U.P. Government may take remedial measures as required.
- v. M/s Gallant (spat Ltd (Integrated Steel Plant), Gorakhpur be directed to install an ambient air quality monitoring station expeditiously, say within two months.
- vi. Let the District Level Environmental Impact Assessment Authority as well as the District Level Expert Appraisal Committee constituted as mentioned in

3(A) of the Notification dated 14.09.2006 as amended by Notification dated 15.01.2016 expeditiously within 3 months, if already not constituted.

Further in the order dated 17/12/2018, it is mentioned that “...as regards the issue of taking action under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 by way of coercive measures against the industrial units/medical college for violation of statutory provisions and conditions for Consent to Operate, we direct the UPPCB to take appropriate action to ensure compliance and recover damages for the past violations. The amount suggested by the Committee may be treated as a proposal and final amount may be determined after following due procedure within one month. Steps for closure may be considered on merits. A report of compliance in this regard may be furnished to this Tribunal...”

15.1.4 In this regard, the Committee asked the PP to provide the present status of aforesaid case. In response to this, PP submitted a letter dated 23/10/2019 of Uttar Pradesh Pollution Control Board (UPPCB) wherein it is stated that UPPCB have sent their report of compliance to Hon’ble Tribunal on 2/05/2019 and 8/07/2019. The matter is further posted for hearing on 9/12/2019. However, no record has been made available by the PP regarding the corrective action taken by them on the recommendations of the Monitoring Committee.

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

The Committee after detailed deliberations sought for the following additional information for further consideration of the proposal.

- i. the PP shall furnish explanations regarding the reasons for not disclosing the case details in the final EIA report submitted to the Ministry.
- ii. the PP shall furnish a comprehensive report regarding various corrective actions, with relevant details taken by them on the recommendations of the Monitoring Committee.

The Committee also requested the Ministry to obtain a status report from UPPCB on the aforesaid matter inter-alia a report regarding the status of compliance by M/s. Gallant Ispat Limited on the recommendations of the Monitoring Committee.

15.1.6 The Project Proponent has submitted the reply as below:

1st ADS: PP shall furnish explanations regarding the reasons for not disclosing the case details in the final EIA report submitted to the Ministry.

Reply: It is a matter of fact that a case bearing Original Application No. 116/2014; Meera Shukla Vs Municipal Corporation, Gorakhpur & Ors.) was filed in Hon’ble National Green Tribunal regarding the contamination of water bodies and ground water, specifically Ramgarh lake, Ami river, Rapti river and Rohani river in and around the District Gorakhpur wherein Gallant Ispat Limited was not an impleaded party, thus, we have not mentioned the case details in the final EIA report submitted to the Ministry.

2nd ADS: PP shall furnish a comprehensive report regarding various corrective actions, with relevant details taken by them on the recommendations of the Monitoring Committee.

Reply: UPPCB issued a letter on 31.12.2018 for clarification regarding violation of the environmental norms as per NGT order dated 17.12.2018. The company submitted an action taken report on 17.01.2019. After Final technical presentation (for EC) of our project in front of EAC, MoEFCC, New Delhi we again approached UPPCB to intimate us the status of our action taken report. The company again submitted the action taken report on 08.11.2019 and thereafter UPPCB visited our plant for the verification of the submitted action taken report on 11.11.2019. During the visit it was found that the reasons for which the letter was issued to GIL, were resolved. Thus, the letter was revoked on 23.11.2019. Thereafter, renewed Consent to Operate was obtained from U.P.C.B. under Section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 vide letter no. 75100/UPPCB/Gorakhpur(UPPCBRO)/CTO/air/GORAKHPUR/2019 on 11.12.2019 and valid from 01.01.2020 to 31.12.2021 and Consent to Operate for discharge of Effluent under Section 25/26 of the Water (Prevention & Control) of Pollution Act, 1974 75090/ UPPCB/ Gorakhpur (UPPCBRO) / CTO /water/GORAKHPUR /2019 on 02.12.2019 and valid from 01.01.2020 to 31.12.2021.

The recommendations of the monitoring committee and the corrective actions taken by PP are as below:-

S. No.	Recommendation in NGT order	Status as on date
1	M/s Gallant Ispat Ltd (Integrated Steel Plant), Gorakhpur may be saddled with exemplary cost of Rs. Fifty lakhs or more for having failed in following the norms provided by law (supra) while running the industry.	As per letter from UPPCB to MoEFCC, New Delhi dated 01.01.2020 an environmental compensation of Rupees 49.5 lakhs has been filed in the Hon'ble Tribunal vide its letter No. H 34466/C-6/Normal-454/OA No. 116/2014/2019 dated 08.07.2019. No order has yet been passed on the said proposal by the Honorable Tribunal. Till date, the company has not been directed to pay any fine. The company has already submitted an undertaking to EAC to pay the fine as imposed by the concerned authority.
2.	M/s Gallant Ispat Ltd. (Integrated Steel Plant), Gorakhpur be directed to ensure the compliance of all norms prescribed by law while running the industry within a month so that the citizens of the locality may not suffer any further from variety of problems and health hazards.	The company is complying all the norms prescribed by the law while running the industry. UPPCB visited plant for the verification of the submitted action taken report on 11.11.2019. During the visit it was found that the reasons for which the letter was issued to GIL, were resolved. Thus, the letter was revoked on 23.11.2019 and issued renewed Consents on dated 11.12.2019 for air and water valid from

S. No.	Recommendation in NGT order	Status as on date
		01.01.2020 to 31.12.2021. Also, during the visit of the Regional Officer, MoEFCC, Lucknow on 4.09.2019 for issuance of Certified Compliance Report for the conditions stipulated in EC the company was found complying all the conditions as per the EC and the RO, MoEFCC, Lucknow issued the Certified Compliance Report on 19.09.2019. The company ensures to comply all norms prescribed by the law while running the industry in future as well.
3.	A team from the Directorate of Medical Health Services, Government of UP may visit M/s Gallant Ispat Ltd (Integrated Steel Plant), Gorakhpur to make a survey of health problems of the citizens residing within 2 kms surrounding area of the industry and take remedial measures.	In the letter from UPPCB to MoEFCC, New Delhi dated 01.01.2020, it is mentioned that the health test of the local residents were conducted and the ground water was also examined. As per the report, all the parameters were found to conform to the standards set by the board.
4.	The ground water of 2 kms surrounding area of M/s Gallant Ispat Ltd (Integrated Steel Plant), Gorakhpur be tested by Ground Water Department of Government of India to find out the level of contamination, if any, within two months and the U.P. Government may take remedial measures as required.	
5.	M/s Gallant Ispat Ltd (Integrated Steel Plant), Gorakhpur be directed to install an ambient air quality monitoring station expeditiously, say within two months.	Four ambient air monitoring stations are installed in the plant premises – one at the main gate, one at the colony, one at the north east boundary and fourth at south west corner. Ambient air quality is regularly monitored by the company and report is submitted to UPPCB on monthly basis.

The points in the order issued by NGT and the status of corrective active taken by GIL as on date is detailed below: -

S. No.	Point as in NGT	Status of Corrective Action as on date
1	The team found that there was an open channel for discharging effluent near a railway track	As on date the company is operating completely on Zero Liquid Discharge. No wastewater is discharged from plant.

S. No.	Point as in NGT	Status of Corrective Action as on date
	which was going into water body and ultimately joining Ami river. Unit was not operating as ZLD as required in terms of the Consent to Operate.	Wastewater generated from process is treated in neutralization pit and after treatment 100% recycling is done. Domestic wastewater is treated in sewage treatment plant and water is used for greenbelt development.
2	Huge amount fugitive emissions were observed from induction furnace plant.	In SMS unit, induction furnaces are provided with moveable hood and Bag filters. Bag filters limit the particulate emission from the stack within the permissible limit. They are provided at different locations to control fugitive emission within premises.
3	Disposal of iron slag was not satisfactory.	Slag from SMS is processed into magnetic and non-magnetic particles. Magnetic particles are reused in SMS and non-magnetic particles are used as sand in construction activities.
4	Ash was not being disposed of scientifically.	Fly ash is stored in silo and supplied for cement/brick manufacturers. Transportation of Fly ash is done by closed bulkers and loading & unloading is done through pneumatic system. The company has already signed MoUs with Ashok Traders, M/s Arun Kumar Singh, R.V. Trading Company, Rishi Ji Sales Corporation & M/s Agrawal Associates for utilization of fly ash.
5	Green belt was not developed as per norms.	13.41 ha i.e. ~33% of the existing plant area (40.5 ha) is developed under greenbelt & plantation. At present, total numbers of trees planted are 15026 and further 10000 numbers of trees are proposed to be planted within plant.
6	Ambient air quality was not satisfactory.	Four ambient air monitoring stations are installed in the plant premises – one at the main gate, one at the colony, one at the north east boundary and fourth at south west corner. Ambient air quality is regularly monitored by the company and report is submitted to UPPCB on monthly basis.
7	Citizens in the vicinity complained that root tops are covered with fly ash causing bronchitis, asthma, etc.	All stacks are connected to pollution control equipment viz., bag filter & ESP. Stacks in Power Plant & Sponge Iron plants are connected to SPCB/ CPCB server and all parameters are within norms. Fly ash is

S. No.	Point as in NGT	Status of Corrective Action as on date
		stored in silo and supplied for cement/ brick manufacturing.
8	There was noise pollution.	Noise producing equipment and machineries undergo proper maintenance for oiling, greasing on regular basis. Acoustic enclosures in the turbines are provided. Greenbelt also helps to attenuate the noise level.
9	The Committee recommends recovery of Rs. 50 Lakhs on "Polluter Pays" principle as cost for damage to the environment apart from requisite compliance.	<p>Committee constituted by NGT recommended a fine of Rs. 50 lakh on Gallantt Ispat Ltd on the basis of Polluter Pays Principal. NGT directed UPPCB to take into consideration the recommendation of the above-mentioned committee to determine whether any fine has to be paid by Gallantt Ispat Ltd. Consequently, UPPCB issued notice to Gallant Industries, asking why should fine be not levied on Gallantt Ispat Ltd pursuant to the recommendations of the committee constituted by NGT. Gallant has given its reply to the notice issued by UPPCB stating that it is fully compliant with the applicable environmental norms and that no fine is leviable on it.</p> <p>UPPCB, Lucknow recommended Environmental Compensation of Rs. 49.50 lacs vide their letter 34466 dated 08.07.2019 which is pending before Hon'ble NGT for final decision.</p>

3rd ADS: Committee also requested the Ministry to obtain a status report from UPPCB on the aforesaid matter inter-alia a report regarding the status of compliance by M/s. Gallantt Ispat Limited on the recommendations of the Monitoring Committee.

Reply: On the recommendations of EAC, MoEFCC, New Delhi wrote a letter dated 12.12.2019 to Member Secretary, UPPCB to obtain a status report from them on the NGT matter and also regarding the status of compliance by GIL on the recommendation of the monitoring committee. UPPCB, Lucknow has sent a letter to your good office vide reference letter no. H45780/C-6/NOC/304/LokSunwai/20 dated 01.01.2020.

15.1.7 In the meanwhile, the Ministry has received a complaint against M/s Gallantt Ispat Ltd vide letter dated 20.01.2020 which was put before the Committee.

Observations of the Committee

- 15.1.8 The Committee noted that reply to the ADS furnished by the project proponent is satisfactory. However, the Committee felt that the written response from project proponent to the issues raised in the complaint dated 09.01.2020 received by the Ministry is not satisfactory. This included, *inter-alia*, the operations of rerolling mill, number of trees cut, requisite statutory permissions for tree cuttings, if any.

Recommendations of the Committee

- 15.1.9 In view of the foregoing and after detailed deliberations, the Committee deferred the consideration of the proposal cited above and asked the proponent to submit the response to the issues raised in the complaint cited above for further consideration of the proposal.

- 15.2 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.**

- 15.2.1 **M/s. Kashmir Cements** has made an online application vide proposal no. IA/JK/IND/76457/2018 dated 15th November 2019 in prescribed Form – 2 along with EIA Report and other documents to seek Environmental Clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category “A” EIA Notification, 2006 and the project is appraised at the Central level.

Details submitted by the Project Proponent

- 15.2.2 The project proposal of M/s Kashmir Cements was initially received in the Ministry on 28th August, 2018 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project proposal was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 35th meeting held on 17th to 18th September, 2018 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 9th October, 2018 vide Lr. No. IA-J11011/269/2018-IA-II(I).
- 15.2.3 Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 15th November, 2019 vide Online Proposal No. IA/JK/IND/76457/2018.
- 15.2.4 The project of M/s Kashmir Cements located in Bhatayan Village, Pampore Tehsil, Pulwama District, Jammu and Kashmir State is for setting up of a new cement plant for production of 0.396 million tons per annum (million TPA) of cement.
- 15.2.5 The total land required for the project is 3.89 ha which falls within the notified Industrial Limestone Area of Pulwama District. No forestland is 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.

- 15.2.6 The topography of the area is hilly terrain and reported to lie between 34.05211 to 34.05322 N Latitude and 75.01749 to 75.01954 E Longitude in Survey of India topo sheet No. 43J/13, at an elevation of 1894 m AMSL. The ground water table reported to range between 1.5 to 2.5 m below the land surface during the post-monsoon season and 2 to 3 m below the land surface during the pre-monsoon season. The stage of ground water development is reported to be 8.38 % and thereby these are designated as safe areas.
- 15.2.7 The Dachigam National Park is located at a distance of 3.37 km from the site.
- 15.2.8 The cement plant process will have process steps namely - Crushing of Limestone, Prehomogenisation, Grinding of Raw Materials, Homogenisation, Pyroprocessing, Clinker Formation, Cement Grinding, Cement Storage, Packing & Dispatch.
- 15.2.9 The targeted production capacity of the project is 0.396 million TPA of cement. The limestone for the plant would be procured from local mines located nearby the project site. The mineral transportation will be done through road.
- 15.2.10 The water requirement of the project is estimated as 40 m³/day, out of which 40 m³/day of fresh water requirement will be obtained from the tube well. The permission for drawl of groundwater will be obtained from before the commissioning of the project.
- 15.2.11 The power requirement of the project is estimated as 9 MW, which will be obtained from the state electricity supply.
- 15.2.12 Baseline Environmental Studies were conducted during post monsoon season i.e. from 1st October, 2018 to 31st December, 2018. Ambient air quality monitoring has been carried out at eight locations during the study period and the data submitted indicated: PM₁₀ (32 µg/m³ to 71 µg/m³), PM_{2.5} (18 to 39 µg/m³), SO₂ (5.4 to 10.2 µg/m³) and NO_x (9.8 to 23.4 µg/m³). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 9.6 µg/m³ with respect to the PM, 3.7 µg/m³ with respect to the SO₂ and 2.4 µg/m³ with respect to the NO_x.
- 15.2.13 Ground water quality has been monitored in eight locations in the study area and analysed. pH: 7.26 to 7.46, Total Hardness: 118 to 145 mg/l, Chlorides: 44.6 to 57.2 mg/l, Fluoride: 0.21 to 0.29 mg/l. Heavy metals are below detectable limits. No surface water body is present within the study area.
- 15.2.14 Noise levels are in the range of 42.2 to 63.9 dB(A) for daytime and 37.3 to 47.8 dB(A) for night time.
- 15.2.15 It has been reported that no population is there in the core zone of the project. No R&R is involved.
- 15.2.16 It has been reported that no solid wastes will be generated from the project. All the wastes generated would be reused for the production of cement. It has been envisaged that an area of 1.3 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.
- 15.2.17 The Public hearing of the project was held on 18th May, 2019 at Town Hall, Pampore under the chairmanship of Additional District Magistrate (designation) for production of 0.396 million TPA of green field cement plant. The issues raised during public hearing are employment to local youth and pollution problems due to the existing cement plants. An amount of 125 Lakhs (0.85 % of Project cost) has been earmarked

for Enterprise Social Commitment based on public hearing issues.

- 15.2.18 The capital cost of the project is ₹146.98 Cr and the capital cost for environmental protection measures is proposed as ₹8.40 Cr. The annual recurring cost towards the environmental protection measures is proposed as ₹ 2.15 Cr. The detailed CSR plan has been provided in the chapter 8 in its page No. 95 to 96. The employment generation from the proposed project is 100.
- 15.2.19 Greenbelt will be developed in 1.3 ha which is about 33 % of the total acquired area. Adequately wide greenbelt, consisting of at least three 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 2500 trees per hectare. Total no. of 3250 saplings will be planted and nurtured in 1.3 hectares within 1 year of the project installation.
- 15.2.20 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 15.2.21 Name and Address of EIA Consultants :Enviro Infra Solutions Pvt. Ltd., Vasundhara, Ghaziabad (NABET Accredited Consultants having Accreditation No. NABET/EIA/1619/IA0018 valid upto February 13, 2020). The name of the consultants exists at S. No. 49 of latest list of NABET displayed at the website of MoEF&CC.

Observations of the Committee

- 15.2.22 The Committee noted that EIA report is not in line with Appendix III of the EIA Notification, 2006. Besides, there are several inadequacies in the report such as non-coverage of ecological biodiversity and socio-economic study aspects, hydrogeological aspects, approved wildlife conservation plan, disaster management plan and social impact assessment etc.,

Recommendations of the Committee

- 15.2.23 In view of the foregoing and after detailed deliberations, the Committee returned the proposal in present form and asked the project proponent to submit fresh EIA report as per Appendix III of the EIA Notification, 2006.
- 15.3 Expansion from 3,00,000 TPA to 3,40,000 TPA Newsprints, Kraft, Writing and Printing and Industrial Paper Board/ Packaging Board Production in the existing unit through de-bottlenecking by **M/s. Emami Paper Mills Limited** located at Village Balgopalpur, Tehsil Remuna, **District Balasore, State Odisha** - [Online Proposal No. IA/OR/IND/128016/2019, File No. IA-J-11011/437/2010-IA-II(I)] – **Environment Clearance under para 7(ii) of the EIA Notification, 2006 - regarding.**
- 15.3.1 M/s. Emami Paper Mills Limited (EPML) has made an online application vide proposal no. IA/OR/IND/128016/2019 dated 30/12/2019 along with Form – 2, updated Form I, pre-feasibility report & addendum to the EIA report and sought for environmental clearance under para 7(ii) of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 5(i) Pulp & Paper Industry under Category “A” EIA Notification, 2006 and appraised at the Central level.

Details submitted by the project proponent

15.3.2 M/s Emami Paper Mills has obtained Eenvironmental Clearance from MoEF&CC vide letter no. J-11011/437/2010-IA-II (I) dated 13/01/2012 for expansion of paper mill from 1,30,000 TPA to 4,60,000 TPA of newsprint/paper/board, 2,00,000 BD TPA wood based pulp, 2,60,000 BD TPA de-inked pulp and expansion of captive power plant from 20 MW to 140 MW power located at village Balgopalpur, District Balasore, Odisha.

15.3.3 The implementation status of environment clearance dated 13/01/2012 is given as below:

Product/ Intermediate	Units	As per EC dated 13/01/2012	Implemented as on date**
Paper and board*	TPA	4,60,000	3,00,000
Wood based pulp	BD TPA	2,00,000 (manufactured in-house)	89,000 (imported)
De-inked (RCF) pulp	BD TPA	2,60,000	2,60,000
Captive power plant	MW	140	33.5
Project Area	acres	967	158.35

*comprising of Newsprint, Kraft, Writing and Printing and Industrial Paper Board/ Packaging Board

** - For the unimplemented portion, EC validity extension has not been obtained.

15.3.4 Consent to Operate (CTO) has been obtained from Odisha Pollution Control Board vide letter no.3105/IND-I-CON-96 dated 27.03.2019 for a capacity of 3,00,000 TPA paper/board, De-inked (RCF) pulp of 2,00,000 BD TPA and 33.5 MW power. The consent is valid up to 31.03.2020.

15.3.5 The present proposal of EPML is for enhancement of production of paper/board from 3,00,000 to 3,40,000 TPA through de-bottlenecking with corresponding increase in import of wood based pulp from 89,000 to 1,20,000 TPA. No change in de-inked pulp production (2,60,000 BD TPA) or Captive power plant (33.5 MW) is proposed.

15.3.6 The Status of compliance of earlier EC was obtained from Regional Office, Bhubaneswar vide Lr. No. 101-735/EPE dated 01.10.2019 wherein 11 non-compliances have been reported by Regional Officer. The company had submitted Action Taken Report (ATR) on the observed non-compliances which was examined and report was furnished by the Regional Office on 6/11/2019. The non-compliances raised, ATR submitted by the company and the comments of Regional Office are summarized as below:

Sl.No	Observation made by RO, MoEF&CC, Bhubaneswar vide letter dated 01.10.2019	Compliance status as per ATR submitted by EPML vide letter dated 23.10.2019	Review of ATR by MoEF&CC, Bhubaneswar vide letter dated 06.11.2019
1	It has been observed that the annual average of PM ₁₀ has been exceeded the prescribed limit of 60 µg/m ³ in the AAQ monitoring stations. It is	PM ₁₀ data mentioned in your Letter No – 101-735/EPM Dt; 01/10/19 on page 5 of 43 are day average figures in respective dates. We	Being Complied. As per the ATR submitted, it has been observed that, by considering the data

Sl.No	Observation made by RO, MoEF&CC, Bhubaneswar vide letter dated 01.10.2019	Compliance status as per ATR submitted by EPML vide letter dated 23.10.2019	Review of ATR by MoEF&CC, Bhubaneswar vide letter dated 06.11.2019
	required to take corrective measures to control the same.	have taken the data for the entire year 2018 (Jan – Dec) and for 2019 up to Sep and the annual average calculated data is 56.64 and 55.53, respectively. Hence, PM ₁₀ annual average is within the prescribed limit of 60 µg/m ³ .	for the entire year 2018 (Jan-Dec) and for 2019 upto Sep, the annual average of PM ₁₀ are 56.64 µg/m ³ and 55.53 µg/m ³ , respectively. The annual average of PM ₁₀ are within the prescribed limits.
2	It has been informed that, as the mill is using only waste paper for manufacturing of paper neither wood /bamboo nor any agro residues are being used and there is no black liquor generation and hence no chemical recovery plant exist. PAs have written to Ministry vide letter dated 18.01.2012 and reminder on 18.05.2012 that this clause may be exempted. However, as the Ministry has not amended the condition yet, continuous monitoring shall be carried out for H ₂ S near the major source of emission and in the ambient air near the plant boundary at three CAAQMS locations.	In integrated pulp and paper industry having captive pulping/bleaching process, emission of H ₂ S or mercaptan gas occurs. But in our case, since all grades of paper viz Writing/Printing, Newsprint, Packaging Board/Kraft paper are manufactured from waste paper & purchased virgin grade pulp, there is no source for emission of H ₂ S gas from the process. It was therefore requested to MoEF&CC vide our letter dated 18.01.12 & 18.05.12 to exempt this condition. This matter shall be again taken up with MoEF&CC. In view of the absence of a source of H ₂ S emission, we are unable to install a monitoring station for the same.	Being Complied. It has been observed that PAs have requested Ministry for exemption of the conditions vide letters dated 18.01.12 & 18.05.12. It has been assured that the matter shall be again taken up with Ministry.
3	It is required conduct the environmental parameters monitoring by an MoEF & CC/ NABL approved third- party laboratory and the reports to be	Environmental parameters as monitored by NABL approved lab were submitted as	Being Complied. As per the ATR submitted, it has been assured to submit the

Sl.No	Observation made by RO, MoEF&CC, Bhubaneswar vide letter dated 01.10.2019	Compliance status as per ATR submitted by EPML vide letter dated 23.10.2019	Review of ATR by MoEF&CC, Bhubaneswar vide letter dated 06.11.2019
	submitted along with six monthly compliance reports.	<p>attachments as follows:</p> <ul style="list-style-type: none"> • PM from stack emission by M/s Kalyani Lab, BBSR • ETP treated water quality by M/s R.V. Briggs, Kolkata <p>Besides this, we have installed continuous emission monitoring system for all stacks (3 Nos) along with remote calibration facility. AAQ stations for monitoring AAQ parameters & continuous monitoring system for final treated water and all the data are being transmitted to the server of SPCB & CPCB continuously.</p> <p>As advised we shall submit the environmental parameters monitored by NABL accredited third party lab in the six monthly compliance reports.</p>	<p>monitoring reports of environmental parameters monitored by NABL accredited third party lab in the six monthly compliance reports. The monitoring reports of M/s. Kalyani Laboratories Pvt. Ltd., Bhubaneswar and M/s R.V. Briggs & Co. Pvt. Ltd. has been submitted and the parameters are within prescribed limits.</p>
4	It is required to monitor the fugitive emissions from all the vulnerable sources like spillage /raw materials / coal handlings etc. on regular basis and the monitoring reports to be provided along with six monthly compliance reports.	<p>Fugitive emissions as monitored by NABL accredited Lab by M/s Mitra S. K. Private Limited, Kolkata have been submitted as an annexure.</p> <p>All possible measures are in place at our end to minimize the fugitive emissions. Henceforth, the monitoring reports will be enclosed along</p>	<p>As per the ATR submitted, PAs have submitted the fugitive emissions monitoring report, which is done by M/s Mitra S.K. Private Limited, Kolkata and the parameters are within prescribed limits. It has been informed that all possible measures are in place at their end to minimize the</p>

Sl.No	Observation made by RO, MoEF&CC, Bhubaneswar vide letter dated 01.10.2019	Compliance status as per ATR submitted by EPML vide letter dated 23.10.2019	Review of ATR by MoEF&CC, Bhubaneswar vide letter dated 06.11.2019
		six monthly compliance reports.	fugitive emissions. It has been ensured that the monitoring reports will be enclosed along with six monthly compliance reports.
5	It is required to construct the barrage on the river in consultation with the state government (EC dated 13.01.2012).	<p>The EC under reference above was obtained on 13.01.2012 for paper & board production capacity of 4,60,000 TPA, 2,00,000 TPA of Wood pulping with recovery and 140 MW Captive Power Plant. In this scenario it was anticipated to use 75000 M3/day water and it was proposed to be taken from nearby river.</p> <p>Due to failure in developing plantation for wood pulping raw material, the Company dropped the project for wood pulping and additional power generation. The present production capacity is 3,00,000 TPA writing/printing, newsprint and packaging board and 33.5 MW co-generation power plant. The present water requirement is 11700 M3/day (max) & copy of permission for ground water withdrawal has been submitted. No river water is withdrawn for the above purpose.</p>	<p>It has been informed that the EC dated 13.01.2012 for paper & board production capacity of 4,60,000 TPA and wood pulping of 2,00,000 TPA and 140 MW Captive Power Plant. In this scenario it was anticipated to use 75000 M3/day water and it was proposed to be taken from nearby river.</p> <p>Due to failure in developing plantation for wood pulping raw material, PAs have dropped the project for wood pulping and additional power generation. The present production capacity is 3,00,000 TPA writing/printing, newsprint and packaging board and 33.5 MW co-generation power plant. The present water requirement is 11700 M3/day (max) & copy of permission for ground water withdrawal has been submitted. No river water is withdrawn for the above purpose.</p>

Sl.No	Observation made by RO, MoEF&CC, Bhubaneswar vide letter dated 01.10.2019	Compliance status as per ATR submitted by EPML vide letter dated 23.10.2019	Review of ATR by MoEF&CC, Bhubaneswar vide letter dated 06.11.2019
		Therefore, construction of barrage in the river is not applicable which had already been intimated to MoEF in earlier six-monthly compliance report.	Therefore, construction of barrage in the river has not been done by PAs. It is requested to Ministry that the matter may be considered for further needful actions.
6	It is required to provide the copy of authorization for disposal of hazardous waste as per the provision of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2016.	Online application for renewal of authorization for disposal of hazardous waste as per provision of Hazardous Waste (Management, Handling & Transboundary movement) Rules, 2016 has already been submitted vide our letter dated 28/03/2019. It is in progress and expecting to receive the same shortly. OSPCB web page Screen snapshot copy was enclosed	Being complied. It has been observed that the online application for renewal of authorization for disposal of hazardous waste as per provision of Hazardous Waste (Management, Handling & Transboundary movement) Rules, 2016 has already been submitted vide letter dated 28/03/2019. As per the screenshot submitted, the application is in progress.
7	As there is no captive pulping, the wastewater should be colour less. However, it has been observed that the wastewater being discharged from the ETP having mild brown colour and is not completely colour less. It is required to take corrective measures to remove the colour from treated wastewater.	Our effluent treatment system comprises of Equalization system, Primary Clarification, UASBR (Up-flow Anaerobic Sludge Blanket Reactor), Aeration system, Secondary clarification & finally multigrade filter followed by chlorination. In the biological activated sludge process light	Being complied It has been informed that the effluent treatment system comprises of Equalization system, Primary Clarification, UASBR (Up-flow Anaerobic Sludge Blanket Reactor), Aeration system, Secondary clarification & finally multigrade filter followed by

Sl.No	Observation made by RO, MoEF&CC, Bhubaneswar vide letter dated 01.10.2019	Compliance status as per ATR submitted by EPML vide letter dated 23.10.2019	Review of ATR by MoEF&CC, Bhubaneswar vide letter dated 06.11.2019
		brownish colour develops due to oxidation reaction which indicates aeration is working perfectly. Colour of the final treated effluent remains in the range of 100 -150 PCU. Which after mixing with river Sono water becomes non-perceptible even during lean season.	chlorination. In the biological activated sludge process light brownish colour develops due to oxidation reaction which indicates aeration is working perfectly. Colour of the final treated effluent remains in the range of 100 -150 PCU. Which after mixing with river Sono water becomes non-perceptible even during lean season.
8	It is required to provide the detailed compliance status of all the environmental protection measures and safeguards recommended in the EIA/EMP report (EC dated 13.01. 2012).	All environmental protection measures and safeguards as recommended in the EIA have been implemented and are being of the same has been intimated vide our letter dated 08.03.2008 (Copy was submitted)	Being Complied. As per the ATR submitted, It has been observed that PAs are in process of implementing and have implemented most of the environment protection measures and safeguards as recommended in the EIA/EMP report.
9	It is required to upload the environmental statement for each financial year ending 31 st March in Form-V in company's website and regularly updated.	Environmental Statement for the year 2018-19 i.e. upto 31 st March 2019 in Form – V has been uploaded in our website www.emamipaper.in. (Copy was also submitted).	Complied. It has been observed that the Environmental Statement for the year 2018-19 has been uploaded in the company's website (http://www.emamipaper.in/compliances.php)
10	As per RO file records, information regarding advertisement of EC (EC dated 17.05.2007) in two	Information regarding advertisement of EC (EC dated 17.05.2007) in two local newspaper	Complied. As per the ATR submitted, information regarding newspaper

Sl.No	Observation made by RO, MoEF&CC, Bhubaneswar vide letter dated 01.10.2019	Compliance status as per ATR submitted by EPML vide letter dated 23.10.2019	Review of ATR by MoEF&CC, Bhubaneswar vide letter dated 06.11.2019
	local newspapers is not available. Information regarding the same to be provided.	were already sent vide our letter dated 08.03.2008 (Copy was submitted)	advertisement has been provided. Two local newspapers viz. "Samaj"(Odiya) dated 27.05.2007 and "Indian Express" dated 26.05.2007 advertisement copies were submitted.
11	As per RO file records, information regarding the date of financial closure and final approval of the project (EC dated 17.05.2007) by the concerned authorities and the data of commencing the land development work is not available. Information regarding the same to be provided.	Our financial year is from 1 st April to 31 st March of subsequent year. We have already submitted the report vide our letter dated 08.03.2008 along with supporting documents regarding land development/requirement (Copy was submitted)	Complied. As per the ATR submitted, the documented information regarding land development works has been provided.

15.3.7 The details of the existing and proposed expansion are given as below:

Product	Units	As per EC dated 13.01.2012	Present scenario as per CTO dated 27.03.2019	Proposed Production	% increase
Paper and board	TPA	4,60,000	3,00,000*	3,40,000*	13.33%
Wood based pulp	BD TPA	2,00,000 (to produce in house)	89,000 (purchased, not produced in house)	120000 (purchased, not produced in house)	Change from in house production to purchase 34.8%
De-inked (RCF) pulp	BD TPA	2,60,000	2,00,000	2,60,000	No change
Captive power plant	MW	140	33.5	33.5	No change

15.3.8 The total land available for the project is 158.35 acres (64.09 ha), which is entirely under industry & allied uses. No forestland is involved. The entire land is already in possession for the project. No River passes through the project area. It has been

reported that water bodies that exist around the project are Sona (Sunai) Nadi (2.4 km, N), Prasana Nala (2.9 km, NE), Dalua Nala (4.3 km, SSE), Tina Jhor (4.5 km, S), Gangahar Nadi (6.8 km, NE), Ghagra Nadi (6.9 km, W), Manitrikundi Nala (8.3 km, N), Burhabalanga River (7.6 km, E), Sindhua Nala (8.9 km, WNW), Chakunda Nala (9.4 km, NW) and Pag Nadi (9.9 km, SE).

- 15.3.9 The topography of the area is flat and reported to lie between 21°31'26.71" to 21°32'09.47" N Latitude and 86°49'28.51" to 86°49'59.34" E Longitude in Survey of India Open Series Map No. F45O10, 11, 14 & 15 at an elevation of 18-29 m AMSL. The ground water table reported to range between 1.24-5.42 m below the land surface during the post-monsoon season and 2.21-7.49 m below the land surface during the pre-monsoon season.
- 15.3.10 No National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Tiger Reserve/ Elephant Corridor etc. are reported to be located in the core and buffer zone of the project. The area also does not report any corridor for Schedule-I fauna.
- 15.3.11 The process involves manufacturing of newsprint paper, Kraft paper, writing and printing paper, industrial paper board and packaging board using different pulp types. The virgin wood based pulp is imported and will continue to be imported. De-inked (RCF) pulp is and will continue to be processed in plant using locally procured & imported waste paper. The raw material required for the project after capacity enhancement shall be 2.75 lakh TPA waste paper to make 2.6 lakh TPA de-inked (RCF) pulp and 1.2 lakh BDTPA wood pulp. Proposed enhancement in production is occurring by de-bottlenecking of present equipment and process in the paper making by converting equipment and also change in product due to market conditions. The fresh water consumption shall remain unchanged after capacity enhancement. The additional make up water requirement for enhancement will be met by addition of two clarifiers for recycling water. The total waste water discharge after enhancement shall also remain unchanged. Additional power requirement of 2 MW shall be met the existing CPP.
- 15.3.12 The proposed debottlenecking details are given as below.

S.No	De-bottlenecking of present equipment and Processes modification	Purpose
1	Pre - treatment system - 20mDia x 3.5 M (H) clariflocculator at PM # 4	Reduce freshwater consumption
2	Pre - treatment system -9mDia x 3 M (H) clarifier at PM # 3	Reduce freshwater consumption
3	Waste paper sorting machine	Improve pulp yield & process efficiency
4	Vacuum pump (Nos : 4)	Reduce power consumption and increase process efficiency
5	Crane at BM # 4	Optimizing utilization of Rewinder -2

- 15.3.13 The targeted production capacity of the newsprint/ paper/ board is 3,40,000 TPA. The wood pulp for the plant would be procured from various countries such as New

Zealand, Indonesia, Canada, United States, Russia and Estonia. The wood pulp is imported via ship and received at Haldia Port (140 km from plant) and transported to plant by road. Waste paper is procured from local open market and also from Indonesia. Local transportation as well as from port shall be by road.

- 15.3.14 The daily fresh make up water requirement of the project is estimated as 11,700 m³/day, which will be obtained from ground water. The permission for drawl of groundwater is obtained from CGWA vide Lr. No. 21-4(2)/SER/CGWA/2006-53 dated 05.01.2018. After de-bottlenecking & consequent increase in production (Paper making by change of GSM in various quality of paper and board) no increase in fresh water consumption shall be there for enhancement. The additional makeup water will be recovered from two new pre-treatment systems (Clarifier#1: 500 cum/day and Clarifier#2: 1000 cum/day). Thus, the additional water requirement shall be met through recycling of water through new clarifier that will be installed.
- 15.3.15 The power requirement of the project is estimated to increase from 29 MW to 31 MW, 100% of which will be obtained from the in-house 33.5 MW CPP.
- 15.3.16 Baseline Environmental Studies were conducted during post monsoon season i.e. from 1st October to 31st December 2019. Ambient air quality monitoring has been carried out at two locations during Oct-Dec 2019 and the data submitted indicated: PM₁₀ (25-97 µg/m³), PM_{2.5} (10.6 to 58 µg/m³), SO₂ (15 to 48 µg/m³) and NO_x (15-53 µg/m³). The results of the modeling study indicates that the maximum increase of GLC for the proposed project will be 0.225 µg/m³ with respect to the PM₁₀, 4.742 µg/m³ with respect to the SO₂, 2.478 µg/m³ with respect to the NO_x.
- 15.3.17 Ground water quality has been monitored in one location in the study area and analysed. pH: 8.5, Total Hardness: 124 mg/l, Chlorides: 52 mg/l, Fluoride:0.80 mg/l. Iron : 0.10 mg/l. Surface water samples was analysed from one location. pH: 7.1; DO: 5.1 mg/l and BOD: 3.3 mg/l. COD 7 mg/l.
- 15.3.18 Noise levels are in the range of 55 to 57 dB(A) for daytime and 53 to 54 dB(A) for nighttime.
- 15.3.19 It has been reported that a total of 401 TPD ash is generated at present which will increase to 441 TPD. This will be 100% used in brick manufacturing. Used oil 25 TPA is sold to authorized vendors. Primary sludge will marginally increase from 100 to 101 BD MTPD and 100% used in company's own power boiler as fuel. Secondary sludge is 3.5 TPD which is used in house horticulture as manure. Waste Plastic 20 TPD is sent to authorized cement industry for co-processing in lime kiln. An area of 53 acres (21.45 ha) has been developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.
- 15.3.20 The Public hearing for the existing unit was held on 27.05.2011 as per the procedure prescribed under the EIA Notification, 2006.
- 15.3.21 The capital cost of the enhancement project (from 3,00,000 to 3,40,000 TPA paper/board) is ₹ 7.3 Cr and the capital cost for environmental protection measures is proposed as ₹ 175 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as ₹ 3.5 Lakhs. An amount of 7.3 Lakhs (1% of Project cost) has been earmarked for Corporate Environment Responsibility based on

MoEF&CC O.M. dated 01.05.2018. No additional manpower shall be required for due to enhancement of production.

- 15.3.22 Greenbelt has been developed in 21.45 ha which is 33.5% of the total acquired area. A 11 ft wide greenbelt, consisting of at three tiers around plant boundary has been developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species have been planted with a density of 2200 trees per hectare.
- 15.3.23 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 15.3.24 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

- 15.3.25 The Committee noted from above that compliance to some of the present EC conditions as reported in para 15.3.6 are yet to be achieved. Besides, the existing EC conditions need to be amended as the project proponent has changed the scope of project with respect to raw material and hence the present proposal cannot be considered under para 7(ii) of the EIA Notification, 2006.

Recommendations of the Committee

- 15.3.26 In view of the forgoing and after detailed deliberations, the committee recommended to return the proposal in present form.
- 15.4 Proposed Expansion of M.S. Billets Plant from 29,000 to 2,00,000 TPA by installation of induction furnace (2x12 Ton), Re-rolling mill of 600 TPD capacity by **M/s. A-One Steel & Alloys Pvt. Ltd.** located at Plot no. IP-62 & IP-63, KIADB Industrial Area, Taluka-Gowribidanur, District Chikkaballapura, **Karnataka** [Online Proposal No. IA/KA/IND/126601/2016, File No. J-11011/244/2016-IAII(I)]-**Environment Clearance - regarding.**
- 15.4.1 **M/s. A-One Steel & Alloys Pvt. Ltd** has made online application vide proposal no. IA/KA/IND/126601/2016 dated 23rd December 2019 in the prescribed Form -2 along with copies of EIA/EMP report and other documents 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 proposal is appraised at Central level.

Details submitted by the project proponent

- 15.4.2 The Proposed expansion of manufacturing of MS Billets (29,000 TPA to 2,00,000 TPA) of M/s A One Steel and Alloys Pvt. Ltd. located in Kudumalakunte Village Gowribidanur Taluk, Chikkaballapura District Karnataka State was initially received in the Ministry on 05/11/2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 15th meeting held on 3rd February, 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 28/03/2017 vide F.No.J-11011/244/2016.

- 15.4.3 Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 22/11/2019 vide Online Application No. IA/KA/IND/126601/2016.
- 15.4.4 The project of M/s A One Steel and Alloys Pvt. Ltd. Located Kudumalakunte Village Gowribidanur Taluk, Chikkaballapura District Karnataka State is for setting up of expansion of manufacturing of MS Billets of capacity 2,00,000 MTPA /enhancement of production of MS Billets from 29,000 TPA to 2,00,000 TPA
- 15.4.5 The total land required for the project is 3.29 ha. Entire land is an industrial land. The entire land has been acquired for the project. No River passes through the project area. It has been reported that no water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.
- 15.4.6 The topography of the area is flat and reported to lies between 13°42' 32.56" N to 30° 42'53.4 "N Latitude and 72°30'2.80" to 77°30'3.84 "E Longitude in Survey of India topo sheet No. B43R5, B43R6, B43R9 AND B43R10, at an elevation of 684 m AMSL.
- 15.4.7 The ground water table reported to ranges between 4.92 to 69.51 bgl below the land surface during the post- monsoon season and 5.4 to 79.7 mbgs. below the land surface during the pre-monsoon season.
- 15.4.8 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc.to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The authenticated list of flora and fauna provided through the EIA reporting presence of no schedule-I fauna in the study area.
- 15.4.9 The targeted production capacity of the MS Billets is 2,00,000 TPA. The ore for the plant would be procured from authorized vendors. The ore transportation will be done Through Road/ Rail (Rail/Road/Conveyor/Slurry Pipeline).
- 15.4.10 The water requirement of the project is estimated as 72 m³ /day, out of which 67.5 m³/day of fresh water requirement will be obtained from the KIADB and the remaining requirement of 4.5 m³ /day will be met from the Recycle water from STP plant. The permission for drawl of groundwater / surface water is obtained from KIADB vide the possession letter issued by KIDB.
- 15.4.11 The power requirement of the project is estimated as 22 MW which will be obtained from the BESCOM.
- 15.4.12 Baseline Environmental Studies were conducted during pre-monsoon season i.e. from March 2017 to May 2017, Ambient air quality monitoring has been carried out at eight locations during 1st March 2017 to 31st May 2017 and the data submitted indicated: PM₁₀ (41.7 µg/m³ to 64.8 µg/m³), PM_{2.5} (16.8 µg/m³ to 22.6 µg/m³), SO₂(12.7 µg/m³ to 19.4 µg/m³) and NO_x (17.3 µg/m³ to 22.5 µg/m³). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 0.5µg/m³ with respect to the PM₁₀.

- 15.4.13 Ground water quality has been monitored eight locations in the study area and analysed. pH: 7.28 to 7.93, Total Hardness: 280 mg/l to 799 mg/l, Chlorides: 125 mg/l to 408 mg/l, Fluoride: 0.38 to 2.83 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 1 locations. pH: 7.5, Do 4.5 mg/l, BOD 12.8 mg/l, COD 46.3 mg/l;
- 15.4.14 Noise levels are in the range of 43.8 to 61.8 dBA for daytime and 29.3 to 42.7 dBA for night time.
- 15.4.15 Rehabilitation and resettlement (R&R) is not applicable to proposed project as the project is located in KIADB Industrial Area, Kudumalkunte Village, Gowribidanur.
- 15.4.16 It has been reported that a total of 20,000 tons of waste will be generated due to the proposed project, out of which 4000 ton will be used in Induction furnace and 16,000 Tons will be utilized of base material for Road making. It has been envisaged that an area of 0.44 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.
- 15.4.17 It has been reported that the Consent to Establish/Consent to Operate from the Karnataka State Pollution Control Board / Pollution Control Committee obtained vide Combined Consent Order No: AW-300580.dated 08/07/2016 and consent is valid up to 30/09/2020
- 15.4.18 The Public hearing of the project was held on 5/9/2019 at project site under the chairmanship of Smt. R Latha (District commissioner) for production of Billets manufacturing / setting up of Mild Steel (M.S) Billets Plant. The issues raised during public hearing are related to employment to local people, rain water harvesting, green belt development providing health and education facility to school etc. An amount of 20 Lakhs (1% of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues.
- 15.4.19 The capital cost of the project is Rs. 20 Crores and the capital cost for environmental protection measures is proposed as Rs. 100 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 20 Lakhs. The detailed CSR plan has been provided in the EMP in its page No.10-4 to 10-5. The employment generation from the proposed expansion project is 35 nos.
- 15.4.20 Greenbelt will be developed in 0.44 ha which is about 13.36% 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 250 nos. of tree and 220 nos. of shrub/plants etc. will be planted in 0.44 ha within premises. Remaining 6.65 ha which is 9.46 % of total plat area will be developed as greenbelt at outside the plant premises. Total 3147 nos of sampling will be planted within the 5 years.
- 15.4.21 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Observations of the Committee

- 15.4.22 The Committee noted that EIA report is not in line with Appendix III of the EIA Notification, 2006. Besides, there are several inadequacies in the report such as no specific ToR compliance, process flow sheet, lay out, site description, ecological and biodiversity aspects etc.,

Recommendations of the Committee

- 15.4.23 In view of the foregoing and after detailed deliberations, the Committee returned the proposal in present form.
- 15.5 Expansion /Modernization of Integrated Steel Plant by installing ancillary facilities for process optimization and resource conservation at Visakhapatnam Steel Plant of **M/s Rashtriya Ispat Nigam Ltd (RINL)** located at Visakhapatnam, **Andhra Pradesh** [Online Proposal No IA/AP/IND/132773/2019, File No. J-11011/196/2005-IAII(I)] -**Environment Clearance under para 7(ii) of the EIA Notification, 2006 - regarding.**
- 15.5.1 **M/s Rashtriya Ispat Nigam Ltd (RINL)** has made online application vide proposal no. IA/AP/IND/132773/2019 dated 3rd January 2020 in the prescribed Form -2 along with copies of EIA/EMP report and other documents seeking Environmental Clearance (EC) under provisions of para 7(ii) 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.

Details submitted the Project Proponent:

- 15.5.2 RINL-VSP is operating an integrated steel plant with capacity of 7.3 MTPA liquid steel as per existing Environmental Clearance (EC) at Gajuwaka, Visakhapatnam district, Andhra Pradesh. RINL-VSP obtained EC for increase in Liquid Steel production from 3.5 MTPA to 6.3 MTPA from Ministry of Environment, Forest and Climate Change (MoEFCC) vide their letter no. J-11011/196/2005-IA II (I) dated 11.08.2005. Subsequent to this, RINL obtained existing EC for capacity expansion from 6.3 MTPA to 7.3 MTPA of liquid steel vide MoEFCC's letter no. J-11011/196/2005-IA-II(I) dated 03.06.2019.
- 15.5.3 The present proposal of M/s. RINL-VSP includes amendment in capacities of some facilities mentioned in the EC letter in line with the design capacities of the same facilities as well as other facilities considered in the EIA-EMP report.
- 15.5.4 In addition, some additional ancillary facilities for process optimization such as 500 TPD standby kiln, 850 TPD standby Air Separation Unit (ASU) and augmentation facilities at existing raw material storage area are proposed. Revamping of TB-3 is proposed for resource conservation by reduction in coke rate. Conservation of energy is envisaged by installing Hot gas generator in Sinter Waste Heat Recovery plant and revamping of existing GETS-1 & 2. An STP water pipeline for use of 10 MGD treated STP water within plant is proposed for natural water resource conservation. Facilities for solid waste utilization like BOF briquette / brick making and Micro pellets preparation on BOO basis are also proposed. All the facilities are proposed without change in overall capacity of 7.3 MTPA liquid steel in the present proposal.
- 15.5.5 The overall plant configuration at 7.3 MTPA liquid steel capacity after present proposal is as follows:

S.No.	Production unit	Capacities as per present proposal at 7.3 MTPA liquid steel production capacity	
		Facilities	Design capacity (MT)
1	Coke Ovens and Coal Chemicals	COB-1	0.84
		COB-2	0.84
		COB-3	0.84
		COB-4	0.84
		COB-5	0.84
2	Sinter Plant	SP-1	3.64
		SP-2	3.04
		SP-3	3.61
3	Blast Furnace	BF-1	2.5
		BF-2	2.5
		BF-3	2.5
4	SMS	SMS-1	3.5
		SMS-2	3.8
5	Rolling Mills	WRM1&2	1.78
		LMMM & SBM	1.77
		MMSM & STM	1.91
		Rebar	0.6
		Semis	0.51
6	Captive Power Generation	Coal based	315 MW
		Gas based	120 MW
		Coke oven waste heat recovery	43 MW
		NEDO Sinter cooler	20.6 MW
		BF-TRT	43 MW
		Solar power	5 MW
7	Lime & Dolo Plant	Existing kilns	4x325 TPD (4W/1S) + 2x500 TPD + 1x500 TPD (Standby) = 2625 TPD (max)
8	Air Separation Units (ASU)	-	2700 TPD + 1700 TPD + 1x850 TPD (Standby) = 4400 TPD (max)
9	Additional facilities	TB-5 as Standby blower to TB-4	
		Upgraded TB-3	
		Kanithi Balancing Reservoir-2	
		STP water pipeline from Tap-off of GVSCCL	
		Installation of LPG storage facility	
		Installation of Nitrogen Buffer vessel	
		Guard Pond with marine discharge facility	
		Augmentation of existing RMHS facilities	
Provisions for Briquetting & Agglomeration plant			

- 15.5.6 The project cost due to the additional Capital Cost for the proposed new lime kiln is Rs. 106.2 Crores. Additional CER envisaged due to the additional cost is Rs. 1.05 Crores over and above the already allocated Rs. 17.0 Crores as CER on account of ongoing 7.3 MTPA expansion of VSP.
- 15.5.7 The certified compliance report for the existing unit was obtained from AP Pollution Control Board (APPCB) vide letter No. APPCB/VSP/VSP/108/CFO/HO/2015 dated 25.01.2019. Subsequently, M/s RINL-VSP RINL-VSP is taking all necessary steps to comply to all conditions stipulated in EC's as provided to RINL by APPCB Vide Consent Order: APPCB/VSP/VSP/108/CFO/HO/2015-499, dated 06/02/2019.
- 15.5.8 There is no additional land requirement for the proposed facilities. Raw material requirement for CRMP complex as per EC at 7.3 MTPA stage is 21,08,000 TPA and after present proposal is estimated to be 24,68,500 TPA. All raw material requirements after present proposal will also be met from the existing raw material sources of RINL-VSP.
- 15.5.9 There will be no additional water requirement for the proposed facilities from the 45 MGD water already allocated to RINL-VSP at 7.3 MTPA stage. No ground water consumption is envisaged. Use of treated STP water as proposed in present proposal will promote water reuse and conservation.
- 15.5.10 The overall power requirement of VSP of 546 MW, as envisaged at 7.3 MTPA liquid steel production capacity and there will be no additional power required for proposed changes.
- 15.5.11 Proposed lime kiln is a vertical shaft kiln of 500 TPD calcined flux capacity. Mixed gas will be used as fuel. Dust/Fume Extraction Systems will be provided at material transfer points and points of dust/fume generation, which will be connected to a bag filter unit. Stack emissions will be designed for PM < 30 mg/Nm³ and SO₂ and NO_x within permitted limits. Proposed new 850 TPD ASU will comprise of air purification unit, feed air compressor, pre-cooling equipment, cold box unit, booster air compressor, medium pressure nitrogen compressor, different defrost and purging equipment, and other auxiliaries. Proposed augmentation of raw material handling facilities include addition of new reclaiming & tipping stream, new imported limestone storage bed as well as infrastructure facilities for direct transport of imported limestone from Gangavaram port to new storage bed.
- 15.5.12 Existing TB-3 will be revamped for facilitating higher PCI injection in BF and in turn reduce coke rate. Existing GETS-1 and GETS-2 will be revamped for utilizing additional pressure energy & flow of BF Gas generated from modernized BF-1 & BF-2, increasing their power recovery capacity from 12 MW each to 14 MW each. Proposed STP water pipeline along with open RCC tank will enable utilization of treated STP water of GVSSCL in VSP plant. Proposed Hot Gas generator will utilize unutilized fuel gases for supplementing waste heat recovery in Sinter plant.
- 15.5.13 Baseline Environmental Studies were conducted during post-monsoon season, 2018 as part of recent EIA-EMP study. Ambient Air Quality Monitoring was carried out at eight locations and the baseline data indicates the ranges of mean concentrations as PM₁₀ – 68 to 98 µg/m³; PM_{2.5} – 32 to 46 µg/m³; SO₂ – 11.5 to 20.8 µg/m³; NO_x – 15.4 to 29.7 µg/m³. AAQ modeling study emissions indicates that the maximum incremental GLCs from the overall plant at 7.3 MTPA stage after implementation of the present proposal at the monitoring locations shall be 2.303 µg/m³ with respect to PM₁₀, 3.309 µg/m³ with respect to SO₂ and 2.405 µg/m³ with respect to NO_x.

- 15.5.14 Ground water quality were monitored in the study area and analyzed and were found to be within the limits of IS:10500. Surface water samples analyzed within the study area were also within found to be within CPCB's surface water quality criteria. A sea sample was also collected and analyzed and the results were within Coastal Water Quality Criteria.
- 15.5.15 The solid waste generation will not increase as the plant production is not going to increase. The major solid waste that shall be generated from the new CRMP kiln shall be lime-dolo screenings and dust collected from air pollution control equipment, which shall be collected and reutilized within the plant process along with other solid wastes. Additionally, RINL-VSP is also planning to improve its existing solid waste management practices by introducing new techniques viz. BOF briquette / brick making and Micro pellets preparation (on BOO basis), which would enable utilization of all the iron bearing wastes in the plant.
- 15.5.16 A court case has been filed against RINL by APPCB on 09.01.2019 as part of action taken under Section 19 of the Environment (Protection) Act. The case no. is CNR.APVSOB 40272019, SR No.: CC/24/2019 in the Court of VIII Additional Chief Metropolitan Magistrate, Gajuwaka, Visakhapatnam. RINL is yet to receive hearing summons from the Court.
- 15.5.17 Name of the Consultant: - M/s MECON Limited (Sl. No. 105, List of QCI Accredited Consultant Organizations (Alphabetically) as published on Dec. 05, 2019).

Observations of the Committee

- 15.5.18 The Committee noted that instant proposal does not qualify under clause 7(ii) of the EIA Notification, 2006 as the proposed activity will lead to increase in pollution load, usage of additional raw materials i.e., water, energy and limestone etc.,
- 15.5.19 Besides, the Committee also noted M/s. KIOCL is setting up 2 MTPA pellet plant with the RINL premises and no reference has been made by RINL in the instant proposal. The Committee is of the view of that RINL should indicate area under its project and delineate this clearly on the ground. The green belt developed under a project should be part of this area. At present, the project area is shown to be a part of the total area possessed by RINL and the green belt is shown outside the project area but part of their land. This may create confusions about the green belt under different projects in the total land. Thus, RINL should develop proper site maps/ site plans for each project including the green belt area and all associated and common facilities for each project. This will require RINL to get its existing EC amended.

Recommendations of the Committee

- 15.5.20 In view of the foregoing and after detailed deliberations, the Committee returned the proposal in present form. Meanwhile, the project proponent is advised to seek amendment in the existing ECs with regard to area under its control.
- 15.6 Proposed expansion in manufacturing of Sponge Iron, Billets, TMT Bars, Coal based Captive Power Plant and WHRB by **M/s. Yazdani Steel and Power Limited** located at Mantira, Kalinga Nagar Growth Centre, District Jajpur, **Odisha** [Proposal No. IA/OR/IND/96910/2019, MoEF&CC File No. J-11011/1028/2007-IA.II(I)] – **Prescribing of Terms of Reference – regarding**

- 15.6.1 M/s. Yazdani Steel and Power Limited has made application vide online proposal no. IA/OR/IND/96910/2019 dated 15/06/2019 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

- 15.6.2 M/s Yazdani Steel & Power Limited has proposed expansion of existing manufacturing unit for Sponge Iron plant with Billet, TMT Bars and Captive Power plant & WHRB. It is proposed to set up the plant for expansion of sponge iron plant 2 x 100 TPD to 2 x 100 and 2x 350 TPD, Billets 1,10,000 TPA to 363,500TPA, TMT bars 48,000TPA to 3,48,000 TPA with CPP 6 MW to 50 MW, WHRB 4 MW to 20 MW, based on DRI Kilns and production of billet through Induction Furnace melting technology.
- 15.6.3 The existing project was accorded Environmental Clearance vide letter no.- J-11011/1028/2007-IA-II(I) dated 16/04/2008. Consent to Operate was accorded by State Pollution Control Board, Odisha vide letter no. 3043/IND-I-CON-5000 dated 26/03/2019 Validity of CTO is up to 31.03.2020.
- 15.6.4 The proposed expansion unit will be located at Village - Mantira Kalinganagr, Industrial Complex, District- Jajpur, State-Odisha.
- 15.6.5 The land area acquired for the plant is 170 acres. No forest land involved. The entire land has been acquired for the project. Of the total area 56.5Acre (33.24%) land will be used for green belt development.
- 15.6.6 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.
- 15.6.7 Total project cost is approx. ₹ Rs. 780.64 Crore (Existing- 138.50 Crore; Proposed- 642.14Crore). Proposed employment generation from project will be 1028 direct employment (Existing - 519; Proposed – 509) and 100 indirect employments.
- 15.6.8 The targeted production capacity of the Sponge Iron 2 x 100 TPD to 2 x 100 and 2x 350 TPD, Billets 1,10,000 TPA to 363,500TPA, TMT bars 48,000TPA to 3,48,000 TPA with CPP 6 MW to 50 MW, WHRB 4 MW to 20 MW. Iron ore shall be used from Odisha mines and transported to site by rail/road. The Coal for the plant would be procured from Imported/Indian origin. The Imported Coal transportation will be by ships to nearest port and later transported via dumper/ Rail to the site.

15.6.9 The proposed capacity after expansion for different products are as below:

Sr. No.	Units	Existing Capacity (TPA)	Proposed Capacity (TPA)	Total capacity After Expansion (TPA)
1.	DRI Kiln (Sponge Iron Plant)	2 x 100TPD	2 x 350 TPD	2 x 100TPD 2 x 350TPD
2.	SMS – I 2 x 12 T (IF) 2 x 6 T (IF) (Billets)	1,10,000	-	1,10,000
3.	SMS – II 4 x 25 T(IF) 1 x 25T (LRF) (Billets)	-	2,53,500	2,53,500
4	Billet Caster	1x 2 strand	1 x 3 strand	1x 2 strand 1 x 3 strand
5.	Reheating Furnace	10 TPH	60TPH	1 x 10TPH 1 x 60TPH
6.	Rolling Mill -1 (TMT Bars)	48,000	-	48,000
7.	Rolling Mill-2 (TMT Bars)	-	3,00,000	3,00,000
8.	Captive Power Plant	WHRB (4 MW) AFBC (6 MW)	WHRB-2 x 8 MW CFBC-2 x 22MW	70 MW

15.6.10 The electricity load of 58 MWH will be procured from existing & proposed CPP and remaining will be met from State Grid as and when required. No DG set to be proposed.

15.6.11 Proposed raw material and fuel requirement for project are Iron ore, Coal, Sponge, Scrap, MS Billets, MS Billets. The requirement would be fulfilled by:

Sr. No	Raw Material	Existing Requirement (TPA)	Proposed additional Requirement (TPA)	Total After expansion (TPA)	Source	Mode of transportation
For DRI Kilns						
1	Iron ore (Calibrated)	150,000	472,200	622,200	Joda	Rail / Road
2	Imported Coal	75,000	251,000	326,600	Paradeep Port	Rail / Road
3.	Dolomite	5300	18000	23,400	Biramitrapur Raipur, Katn	Road
For Steel Melting Shop (Billets)						
1	DRI	58,500	281,500	340,000	Captive	Belt Conveyor
2	Pig Iron / Scrap	16,350	68,650	85,000	Merchants	Road / Rail
3	Ferro Alloys	1400	4200	5600	Merchants	Road
For Rolling Mill						

Sr. No	Raw Material	Existing Requirement (TPA)	Proposed additional Requirement (TPA)	Total After expansion (TPA)	Source	Mode of transportation
1	Billets	60,800	283,900	344,700	Captive mostly	-
For CFBC/AFBC Boiler-CPP and WHRB						
1	Coal – Talcher	44,000	262,000	306,000	Talcher	Rail / Road
2	Char	16,000	54000	70,000	Inhouse	-

15.6.12 Water Consumption for the project after proposed expansion will be 11966 KLD (fresh water 11206 KLD, recycle 760 KLD) and wastewater generation will be 1065 KLD. Domestic wastewater will be treated in the STP and industrial wastewater generated will be treated in ETP and treated water of 760 KLD reused in the process and for green belt development and dust depression.

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

15.6.14 Name of EIA consultant: M/s Overseas Min-Tech Consultants, Jaipur, QCI Accredited (S.No.115, List of Accredited Consultant Organizations (Alphabetically) Rev. 82, Dec. 05, 2019).

Observations and recommendations of the Committee

15.6.15 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. 100% hot charging shall be adopted and no reheating furnace shall be installed.
- ii. 60 acres of land has to be allotted for green belt development.
- iii. No ferro-chrome shall be manufactured.
- iv. No ground water abstraction is permitted.
- v. CER shall be based on the lease agreement conditions with IDCO as per the Ministry's O.M. dated 1/05/2018.
- vi. Capacity of the DRI kiln to be reviewed for production of 3,40,000 TPA.
- vii. Particulate matter emissions from the stack shall be limited to 30 mg/Nm³.

15.7 Proposed Integrated Cement Project - Clinker (2.5 MTPA), Cement (3.0 MTPA), CPP (45 MW) & WHRS (5 MW) by **M/s. Revati Cements Pvt. Ltd.**, located at Village - Saha, Tehsil - Raghuraj Nagar, District- Satna, **Madhya Pradesh** [Online Proposal No. IA/MP/IND/132842/2019, File No. J-11011/554/2007-IAII(I)] – **Prescribing of Terms of Reference – regarding.**

15.7.1 **M/s Revati Cements Pvt Ltd** has made an online application vide proposal no. IA/MP/IND/132842/2019 dated 23/12/2019 in prescribed Form – 1 along with Prefeasibility Report and other documents to propose Terms of Reference (TOR) to

undertake detailed EIA study 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 project is appraised at the Central level.

Details Submitted by the Project Proponent

- 15.7.2 M/s. Revati Cements Private Limited proposes to install a new Integrated Cement Project - Clinker (2.5 MTPA), Cement (3.0 MTPA), Captive Power Plant (45 MW) & WHRS (5 MW) at Village: Saha, Tehsil: Raghuraj Nagar, District: Satna (Madhya Pradesh). It is proposed to set up the plant based on dry process technology.
- 15.7.3 The proposed Integrated Cement Project of M/s. Revati Cements Pvt. Ltd. (RCPL) was accorded Environmental Clearance by MoEFCC vide letter no. F. No. J-11011/554/2007-IA-II (I) dated 29th March, 2011. The project could not be implemented due to delay in land acquisition. In the meanwhile, the validity of the Environmental Clearance got expired for the Cement Plant & CPP. However, EC for both the mines stands valid. Now, M/s. Revati Cements Pvt. Ltd. is now applying afresh for obtaining Environmental Clearance having subject matter as “Proposed Integrated Cement Project - Clinker (2.5 MTPA), Cement (3.0 MTPA), CPP (45 MW) & WHRS (5 MW) at Village - Saha, Tehsil - Raghuraj Nagar, District- Satna (Madhya Pradesh)”.
- 15.7.4 The land area acquired for the proposed plant is 58.32 ha. Out of the total land 45.958 ha has been converted from agriculture to industrial use and rest 12.362 ha land is to be converted from agriculture to Industrial. No forest land is involved. The entire land has been acquired for the project. Out of the total project area, 19.24 ha (33%) will be used for greenbelt development.
- 15.7.5 No National Park / Wildlife Sanctuary / Biosphere Reserve/ Tiger Reserve/ Elephant Reserve, 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.
- 15.7.6 Total project cost is Rs. 2000 Crores. Total 714 persons will be required for the proposed project out of which approx. 157 contract labours during construction and approx. 557 regular workers during operational phase will be provided employment. Moreover, during implementation phase 1500 persons will be employed. Preference will be given to locals as per eligibility.
- 15.7.7 The targeted production capacity of Integrated Cement Project: Clinker (2.5 MTPA), Cement (3.0 MTPA), Captive Power Plant (45 MW) & WHRS (5 MW). The Limestone for the plant would be transported via covered conveyer belt from Captive Mines. Iron Ore will be transported by road. The proposed capacity for different products for new site area is as below:

Name of Unit	Proposed Capacity
Clinker (MTPA)	2.5
Cement (MTPA)	3.0
Captive Power Plant (MW)	45
WHRS (MW)	5

- 15.7.8 The electricity load of 45 MW will be sourced from proposed Captive Power Plant, WHRS & Grid.
- 15.7.9 Proposed Raw materials required for the project are Limestone which will be sourced from Captive Mine. Iron Ore will be sourced from Agaria, Sehora (MP); Gypsum from Lunkaransar, Bikaner (Rajasthan); Clay from Captive mines; fly ash from Captive Power Plant (CPP) & Vindhya Thermal Power Station Sidhi. Fuel for Cement Plant will be Indian Coal which will be sourced from Chirmiri, Shahdol collieries of SECL and Indian & Imported Petcoke will be sourced from Bharat Oman Refinery Ltd (BORL), Bina, MP/Reliance Refinery (RIL), Jamnagar, Gujarat/ Import.
- 15.7.10 Water Consumption for the proposed project will be 2900 KLD; which will be sourced from Satna River and no waste water will be discharged from the cement plant. Domestic wastewater will be treated in STP and treated water will be used for greenbelt development/plantation. Waste water generated from CPP & RO reject will be collected in neutralization pit and it will be used in fly ash quenching after neutralization which will further be used in cement manufacturing process.
- 15.7.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity. However, a court case under Prevention of Money Laundering Act, 2002 (15 of 2003) has been file against the company. The company has challenged the Proceeding of attachment of Land & same has been stayed by the Delhi H. C. Order dated 09th July, 2019.
- 15.7.12 Name of Consultant - J.M. EnviroNet Pvt. Ltd. Sl. No.93 in QCI List (as updated on 5th December 2019)

Observations of the Committee

- 15.7.13 The Committee noted that land on which the project is to be established is under dispute with the Government and the matter is sub-judice and the property title is not clear.

Recommendations of the Committee

- 15.7.14 In view of the foregoing and after detailed deliberations, the Committee recommended to return the proposal in present form.
- 15.8 Proposed Expansion of Integrated Cement Plant-Clinker (2.00 MMTPA to 5.00 MMTPA), Cement (2.85 MMTPA to 7.00 MMTPA), WHRB (12 MW to 30 MW) and Installation of new 25 MW Captive Thermal Power Plant **by M/s. Udaipur Cement Works Limited** located at Shripati Nagar, CFA, P.O. -Dabok, Tehsil Mavli, **District Udaipur, Rajasthan**. [Online Proposal No. IA/RJ/IND/133073/2019, File No. J-11011/807/2007-IAII(I)] – **Prescribing of Terms of Reference – regarding.**
- 15.8.1 **M/s. Udaipur Cement Works Limited** has made an online application vide proposal no. IA/RJ/IND/133073/2019 dated 24/12/2019 in prescribed Form – 1 along with Prefeasibility Report and other documents to propose Terms of Reference (TOR) to undertake detailed EIA study 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 project is

appraised at the Central level.

Details submitted the Project Proponent:

- 15.8.2 M/s. Udaipur Cement Works Limited (UCWL), Udaipur is proposing expansion of Integrated Cement Plant within the existing premises of UCWL. Clinker from 2.0 Million Metric Tonnes Per Annum (MMTPA) to 5.0 MMTPA, Cement from 2.85 MMTPA to 7.0 MMTPA, Waste Heat Recovery Boiler Based Power Plant (WHRB) from 12.0 Mega Watt (MW) to 30.0 MW and Installation of a new Captive Thermal Power Plant (CTPP) of capacity 25 MW. The Proposed expansion of the plant will be based on dry process technology for cement manufacturing with pre-heater and pre-calciner technology. The project proponent has submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 24th December 2019 vide Online Application No. IA/RJ/IND/133073/2019.
- 15.8.3 The existing plant was accorded environmental clearance vide Ir.no.J-11011/807/2007-IA II (I) dated 09/01/2008. Consent to Operate was accorded by Rajasthan State Pollution Control Board vide Ir. no. F (CPM)/Udaipur(Girwa)/9(1)/2013-2014/8716-8718 Order No : 2016-2017/CPM/4709 validity of CTO is up to 30/11/2019. CTO renewal application was submitted vide application No. 246646 dt. 30thJul. 2019 to RSPCB Jaipur.
- 15.8.4 The proposed expansion will be done within the existing plant premises of UCWL located at M/s Udaipur Cement Works Limited (UCWL), Shripati Nagar, P.O. CFA, Near Dabok, Taluka: Mavli, District: Udaipur, State: Rajasthan-313022.
- 15.8.5 The Proposed Expansion will be done within the existing UCWL premises area of 161.87 Ha. (Industrial Land-Integrated Cement Plant +Township). No forest land involved. Out of the total area, 55 ha (33.98 %) land has already been used for green belt development and it will be maintained further.
- 15.8.6 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.
- 15.8.7 Total project cost is approx. ₹1600 Crore. Proposed employment generation from the expansion will be 120 direct employments and many more indirect employments.
- 15.8.8 The Proposed capacity after the expansion shall be upgraded for Clinker from 2.0 MMTPA to 5.0 MMTPA, Cement from 2.85 MMTPA to 7.0 MMTPA, WHRB from 12.0 MW to 30.0 MW, installation of a new Captive Thermal Power Plant (CTPP) of 25.0 MW capacity & Solar Power Plant from 7.6 MW to 15.2 MW. The Limestone for the plant is being/will be catered from Daroli- Limestone Mine -1 Project (ML-No.-02/88) & Daroli- Limestone Mine -2 Project (ML-No.-64/79)) through Over Land Belt Conveyor (OLBC) & Road. The proposed capacity for different products are tabulated here:

S. No.	Product	Existing (MMTPA)	Proposed (MMTPA)	Total After Expansion (MMTPA)
1	Cement (Ordinary Portland Cement (OPC), Portland	2.85	4.15	7.0

S. No.	Product	Existing (MMTPA)	Proposed (MMTPA)	Total After Expansion (MMTPA)
	Pozzolana Cement (PPC), Portland Slag Cement (PSC), Sulphate Resisting Portland Cement (SRPC) and Composite Cement)			
2	Clinker	2.00	3.0	5.0
Power Generation (MW)				
3	CTPP	0	25	25
4	WHRB	12	18	30
5	Solar Power (MW/Day)	7.6	7.6	15.2
6	DG Set	0.5	2.0	2.5

- 15.8.9 The total electricity load after expansion project will be 70.0 MW which will be sourced from Captive Thermal Power Plant (CTPP), Waste Heat Recovery Boiler (WHRB) based power plant, Solar Power Plant & Rajasthan State Electricity Board (RSEB). Udaipur Cement Works Limited also proposes to install a new CTPP (25 MW), DG Sets (2 MW) and Solar Power Plant. DG Sets will be used as an Emergency Back-up only.
- 15.8.10 Proposed raw material and fuel requirement for project are Limestone, Additives (Red Ochre, Alumina clay, China Clay, Slag, Pond Ash, Feldspar, Siliceous Sand/stone Sand, Laterite, Iron Dust, Black Cotton soil, Bentonite clay) Gypsum (Mineral and Chemical), Fly ash (Dry and Wet), and Fuel (viz. AFR, MSW, RDF, Biomass, Coal & Pet coke etc.). The Requirement would be fulfilled by Captive Limestone Mines, Fly ash from own CTPP/nearby PPs, Gypsum from nearby Districts & States, Slag from nearby Districts & States, AFR, MSW, RDF, Biomass from nearby areas, coal & pet coke from indigenous/imported sources. Fuel Consumption will be mainly used in Cement Manufacturing and Power generation.
- 15.8.11 Water Consumption for the proposed project will be 3280 KLD (Industrial + Township). Thus, total fresh water requirement after expansion will be 6130 KLD (Industrial + Township), which will be sourced from Groundwater and Daroli Mine Pits. Wastewater generation after proposed expansion will be 675 KLD (475 KLD from CTPP & WHRB and 200 KLD from Domestic). Domestic waste water will be treated in STP (Cap. 250 KLD) & industrial waste water generated will be recycled & reused 100% in green belt development and industrial cooling purposes.
- 15.8.12 M/s. Udaipur Cement Works Limited (UCWL) has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 15.8.13 Name of the consultant: Enkay Enviro Services Pvt. Ltd. Jaipur Sl. No.93 in QCI List (as updated on 5th December 2019).

Observations and recommendations of the Committee

- 15.8.14 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. Green belt shall be developed in additional 10 acres of land.
 - ii. For maximizing the use of alternate sources for energy, a detailed plan of action shall be prepared and proposed as part of the Environment Management Plan.
- 15.9 Expansion of the Ductile Iron Pipe Plant b installing 4x100 TPD Sponge Iron (1,30,000 TPA) Steel Making facility (1,25,000 TPA), 4X9 MVA Ferro Alloy (Fe-Si: 25,000 TPA or Si-Mn: 60,000 TPA or Fe-Mn: 75,000 TPA) along with 12 MW Captive Power Plant (8 MW WHRB and 4 MW FBC) within the existing plant premises of **M/s Srikalahasthi Pipes Ltd.**, located at Villages Merlapaka & Rachagunneri, Mandal Yerpedu & Srikalahasthi, District Chittoor, **Andhra Pradesh** [Online Proposal No. IA/AP/IND/134563/2020, File No. J-11011/158/2011-IAII(I)] – **Validity extension of Environmental Clearance – regarding.**
- 15.9.1 M/s Srikalahasthi Pipes Ltd., has made an online application vide proposal no. IA/AP/IND/134563/2020 dated 02.01.2020 in prescribed Form – 6 seeking extension of validity of Environmental Clearance 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:**
- 15.9.2 The existing Environmental Clearance was accorded to M/s Lanco Industries Ltd for ‘Expansion of the Ductile Iron Pipe Plant b installing 4x100 TPD Sponge Iron (1,30,000 TPA) Steel Making facility (1,25,000 TPA), 4X9 MVA Ferro Alloy (Fe-Si: 25,000 TPA or Si-Mn: 60,000 TPA or Fe-Mn: 75,000 TPA) along with 12 MW Captive Power Plant (8 MW WHRB and 4 MW FBC) within the existing plant premises’ located at Villages Merlapaka & Rachagunneri, Mandal Yerpedu & Srikalahasthi, District Chittoor, Andhra Pradesh vide letter J-11011/158/2011-IAII(I) dated 11.01.2013.
- 15.9.3 Later on, the project was taken over by M/s Sirkalahasthi Pipes Ltd. Subsequently, the Environmental Clearance dated 11.01.2013 was transferred to M/s Srikalahasthi Pipes Ltd vide letter dated 17.10.2016.
- 15.9.4 Due to low market demand and non-availability of funds, the Project Proponent was unable to complete the expansion project.
- 15.9.5 AP Pollution Control Board was accorded CFE/CTE for the project vide order No. 391/APPCB/CFE/RO-TPT/HO/2005 dated 21.07.2016 which is valid for a period of 7 years from date of issuance.

15.9.6 The status of implementation of the project is given below:

Sl.No.	Product	Capacity as per EC dt. 11.01.2013	Capacity already installed and CFO obtained	Balance capacity to be set up	Implementation status
1	Ductile Iron Pipes	4,00,000 TPA	3,50,000 TPA	50,000 TPA	Will be completed by Mar 2021
2	Pig Iron	5,25,000 TPA	3,50,000 TPA	1,75,000 TPA	Will be completed by Dec 2022 in Phases
3	LAM Coke	4,62,000 TPA	2,80,000 TPA	1,82,000 TPA	Will be completed by Dec 2022 in Phases
4	Captive Power generation	52.5 MW	16 MW	36.5 MW	Will be completed by Dec 2022 in Phases
5	Slag Cement	3,90,000 TPA	99,000 TPA	2,91,000 TPA	Will be completed by Dec 2022
6	Sponge Iron (4x100 TPD)	1,30,000 TPA	Yet to be implemented	1,30,000 TPA	Will be completed by Dec 2022
7	Steel Products	1,25,000 TPA	Yet to be implemented	1,25,000 TPA	Will be completed by Dec 2022
8	Ferro Alloys Unit	FeSi-25,000 TPA SiMn-60,000 TPA FeMn-75,000 TPA (4x9 MVA)	FeSi-16,000 TPA SiMn-32,000 TPA FeMn-42,000 TPA (2x9 MVA)	FeSi-9,000 TPA SiMn-28,000 TPA FeMn-33,000 TPA (2x9 MVA)	Will be completed by Dec 2022

Observations and recommendations of the Committee

15.9.7 After detailed deliberations, the Committee recommended to extend the validity of the EC for a period of three years i.e., from 11/01/2020 to 10/01/2023 subject to the following additional conditions.

- i. Green belt shall be developed in 50 acres of land.
- ii. New norms as notified by MoEF&CC and as applicable to the project shall be adhered to.

15.10 Setting up of 2 MTPA pellet plant by **M/s KIOCL Ltd.**, in the premises of Rashtriya Ispat Nigam Limited (RINL) at Visakhapatnam, **Andhra Pradesh** [Proposal No. IA/AP/IND/133773/2019; MoEF&CC File No. J-11011/160/2019-IAII(I)] – **Amendment in Terms of Reference – regarding.**

15.10.1 **M/s KIOCL Ltd.**, has made an online application vide proposal no. IA/AP/IND/133773/2019 dated 27.12.2019 in prescribed Form-3 seeking amendment to Terms of Reference prescribed for undertaking EIA study as per 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 the Project Proponent

15.10.2 M/s. KIOCL has proposed to set up a pellet plant for producing 2 MTPA of Iron Ore Pellets based on Travelling Grate Technology. The project proponent has submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 18.03.2019 vide Online Application No. IA/AP/IND/99687/2019. The proposal was considered by the Reconstituted Expert Appraisal Committee on 29th April 2019 for prescribing TOR and TOR was issued by MOEF&CC vide letter no. IA-J-11011/160/2019-IA.II(I) dated 20.05.2019

15.10.3 The location of the proposed pellet plant is changed by a distance of 1.5 km from the earlier location for which TOR was issued. An application in the prescribed format for amendment in TOR was submitted vide online application no. IA/AP/IND/13373/2019 on 27.12.19. The following amendment is sought by PP on the issued TOR:

Reference of approved TOR	Description as per approved TOR	Description as per proposal	Remarks
Clause no. 2	The proposed unit will be located within existing premises of M/s. Rashtriya Ispat Nigam Limited, Village: Kanithi (part), Pegantayada (part), Nellimukkee (part), Taluka: Visakhapatnam, District: Visakhapatnam, State: Andhra Pradesh	The proposed unit will be located within existing premises of M/s. Rashtriya Ispat Nigam Limited, Village: Kanith, Taluka: Gajuwaka, District: Visakhapatnam, State: Andhra Pradesh	Change in location
Clause no. 3	The land area identified for the proposed plant is 92 acres which is an industrial area and is located within the premises of RINL. The entire land has already acquired by RINL for the project.	The land area identified for the proposed plant and railway siding is 92 acres which is an industrial area and is located within the premises of RINL. The entire land has already been	

Reference of approved TOR	Description as per approved TOR	Description as per proposal	Remarks
	Of the total area of 92 acre about 37 acre of land (40.2% of the total area) is planned for green belt development.	acquired by RINL for the project. Of the total area of 92 acre about 30.5 acre of land (33.1% of the total area) is planned for green belt development.	
Clause no. 5	Total project cost is approx. Rs 1032.8 Crore (INR). Proposed employment generation from proposed project will be 197 no.s direct employment.	Total project cost is approx.. Rs 1027.6 Crore (INR). Proposed employment generation from proposed project will be 197 no.s direct employment.	
Clause no.7	The ore transportation is planned through rail upto Gangavaram	The ore transportation is planned through ships/rail upto Gangavaram	

- 15.10.4 The proposed unit will be located within existing premises of RINL. Village: Kanith Taluka: Gajuwaka, District:. Visakhapatnam, State: Andhra Pradesh.
- 15.10.5 The revised land area identified for the proposed plant and railway siding is 92 acres which is an industrial area and is located within the premises of RINL. Of the total area of 92 acre about 30.5 acre of land (33% of the total area) is planned for green belt development.
- 15.10.6 No national park/wild life sanctuary/bio sphere reserve /tiger reserve /elephant reserve etc., are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.
- 15.10.7 The revised project cost is approx. Rs.1027.6 Crore (INR). Proposed employment generation from proposed project will be 197 nos. direct employment.
- 15.10.8 The targeted production capacity of the pellet plant is 2 MTPA. The iron ore fines and other raw materials for the plant would be sourced from following locations:

Sl. NO	Raw material	Quantity (T/Year)	Source
1	Iron ore fines	20,65,380.4	Indigenous(NMDC, Chhattisgarh and other sources from Odisha)

Sl. NO	Raw material	Quantity (T/Year)	Source
2	Limestone	59,098.21	Indigenous (Nearby locations)
3	Coke breeze	28,859.63	Indigenous (From RINL and other sources)
4	Bentonite	13,592.59	Indigenous (From Kutch)

- 15.10.9 The ore transportation is planned through port/rail up to Gangavaram. The list of facilities is same as in the earlier proposal and are given below.

List of facilities for the proposed pellet plant

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

- 15.10.10 The estimated power requirement of the proposed plant is 20 MVA. A new transmission line is proposed for drawing power from Gangavaram port grid sub-

station of APTRANSCO, through double circuit 132 kV overhead transmission line.

- 15.10.11 Proposed raw material requirement is given in Table 01 and fuel requirement for project are Furnace oil - 30,928 m³/yr (from nearest oil storage company), LDO and LPG. Fuel consumption mainly is LDO for pelletisation process and LPG is planned for initial startup of the project.
- 15.10.12 Water consumption for the proposed project will be 84 m³/hr and effluent generation is not expected as complete recirculation of waste water generated from the plant is envisaged. Domestic waste water will be treated in MBR based sewage treatment plant and treated water will be reused.
- 15.10.13 The proponent, M/s KIOCL Limited has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 15.10.14 Name of the Technical Consultant: M/s MECON Limited, (Govt. of India Enterprise) Ranchi / Bangalore. Sl. No. in the QCI list - 105 is entrusted as environmental consultant for this project.

Observations of the Committee

- 15.10.15 The Committee noted that instant proposal is located within the RINL premises and no reference has been made by RINL in the their proposal presented under agenda item 15.5. The Committee is of the view that, RINL has to amend its existing ECs with regards to area under its control before considering the KIOCL proposal. Further, the Committee noted that KIOCL has no documentary evidence to prove the ownership of the land.

Recommendations of the Committee

- 15.10.16 In view of the foregoing and after detailed deliberations, the Committee recommended to return the proposal in present form.
- 15.11 Expansion Integrated Steel Complex of **M/s. Maruti Ispat & Energy Pvt. Ltd.**, located at Sy No. 158, part of 159, 160,163-168 and 171 at Madhavaram and 13-19 located at Rassamarri Village, Mandal-Mantralayam, **District Kurnool, Andhra Pradesh** [Online Proposal No. IA/AP/IND/133564/2019, File No. J-11011/1149/2007-IAII(I)] - **Amendment in Terms of Reference (ToR) – regarding.**
- 15.11.1 M/s Maruti Ispat & Energy Pvt. Ltd has made an application has made online an application to the Ministry on 26th December, 2019 vide Proposal No. IA/AP/IND/133564/2019 in prescribed Form -3, pre-feasibility report and other documents to seek amendment in Terms of Reference for undertaking detailed EIA study for proposed expansion of the project mentioned in the subject. 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.

Details submitted by the Project Proponent

- 15.11.2 The company has obtained Environmental Clearance for the existing units vide F.No. J-11011/1149/2007-IA II (I) dated 02.01.2009 for integrated steel complex at Sy. No. 158,159, 160, 163-168 & 171, village Madhavaram and 13-19 of village Rassamarri. Company has also taken EC extension on 16.12.2016. But till date company has installed only 4 x 100 TPD sponge iron plant and 8 MW WHRB Plant. As the validity of Environment for 10 years lapse, management planned to file the application for Terms of reference as per the guidelines of EIA notification 2006.
- 15.11.3 M/s Maruti Ispat & Energy Pvt Ltd was prescribed ToRs vide letter dated 08.11.2019 for expansion of Integrated Steel Complex. Now, the Project Proponent made application for revising the capacities for amendment in the configuration and production capacities as given below:

S.no	Product / Activity (Capacity/ Area).	Quantities in prescribed ToR		Revised Quantities as proposed	
1	Pelletization Plant	1x3000 TPD	900000 TPA	1x3000 TPD	900000 TPA
2	Sinter Plant	1x2000 TPD	600000	1x3000 TPD	1050000
3	Sponge iron kilns	6x100 TPD	180000	8x100 TPD+2x500 TPD	592000
4	Mini Blast furnace (Hot Metal/Pig Iron)	1x380 M ³	240000	1x500 M ³	525000
5	Induction furnace (Billet from CCM)	1x40 TPC	240000	4x40 TPC	480000
6	Billet Casting Machine/Continuous casting machine	1x1000 TPD	300000	2x1000 TPD	600000
7	Rolling Mill	1x1000 TPD	300000	2x1000 TPD	600000
8	Power Generation	2x100 TPH AFBC; 1x20 MW WHRB	36 MW AFBC; 20 MW WHRB	8x10 TPH WHRB+2x50 TPH WHRB+ 2x100 TPH CFBC	50 MW CFBC; 36 MW WHRB
9	Ladle Furnace	1x40 TPH	-	1x40 TPH	-
10	Oxygen Plant	1x3000 TPD	900000	1x3000 TPD	900000

Observations of the Committee

- 15.11.4 The Committee noted that proposal involves amendment in configuration and production capacities of various units envisaged in the ToR. In addition, the Committee stated that in view of considerable higher pollution potential of sinter plant project proponent may install pelletization plant.

Recommendations of the Committee

- 15.11.5 In view of the foregoing and after detailed deliberations, the Committee recommended for amendment in the ToR as cited above subject to the following additional specific ToR. In addition, the Committee, considering the higher pollution potential of sinter plant suggested the project proponent to install pelletization plant in place of sinter plant.
- i. No ground water abstraction is permitted
 - ii. 100% waste utilization
 - iii. Rainwater harvesting more than 100% utilization of water
 - iv. Particulate matter emission shall be less than 30mg/Nm³.
 - v. Green belt shall be developed in an area of 40 hectares.
 - vi. Air cooled condenser shall be used in the power plant.

- 15.12 Proposed 0.8 MTPA capacity Pelletisation Plant of **M/s Petro Carbon and Chemicals Private Limited** at Village Bardhanyaghat-I&II, Kismatdhanyaghat, Haldia. **District Purba Medinipur, West Bengal** [Online Proposal No. IA/WB/IND/134758/2020, File No. J-11011/5/2020-IAII(I)] – **Prescribing of Terms of Reference (ToR) – regarding**

- 15.12.1 M/s. Petro Carbon and Chemicals Private Limited has made application vide online proposal no. IA/WB/IND/134758/2020 dated 02/01/2020 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

- 15.12.2 M/s Petro Carbon and Chemicals Private Ltd. proposes to install a new Iron Ore Pelletisation Plant of 0.8 MTPA capacity for production of 0.8 MTPA pellets at Village Bardhanyaghat-I & II, Kismatdhanyaghat, Haldia, District Purba Medinipur, West Bengal. Its geographical co-ordinates are 22°03'36.46"N to 22°03'40.51"N latitude and 88°07'0.29"E to 88°07'12.16"E longitude with above mean sea level (AMSL) 5.2 m (17 ft.).
- 15.12.3 The proposed project will be installed on total 4.16 hectares (10.29 acres) of land. The entire land has been acquired for the project. No forest land involved. Of the total area 1.37 ha (33%) land will be used for green belt development.
- 15.12.4 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.
- 15.12.5 Total project cost is approx. Rs. 160 Crores. The estimated manpower requirement will be about 200 (Permanent - 100 and Contractual - 100).
- 15.12.6 The targeted production capacity of the proposed iron ore pelletisation plant is 0.8 MTPA pellets. The raw material transportation will be done through Rail and road

linkages. The proposed capacity for different products is given below:

Name of unit	No. of units	Capacity of each unit	Production Capacity
Iron Ore Pelletisation plant	1	0.8 MTPA	0.8 MTPA pellets

15.12.7 Power requirement will be about 5 MW. Power shall be sourced from WBSEDCL grid.

15.12.8 Proposed raw materials and fuel requirement for major products of the project are as follows:

S. No.	Raw Material	Source	Transportation mode	Requirement in MTPA
Iron Ore Pellet Plant				
1.	Iron Ore Fine (Dry) 55% Fe	Iron Ore mines	Rail / Road	1.1
2.	High Grade I.O fines (64%) –for pellets	Nearby mines	Road / Rail	0.02
3.	Coke Breeze	Open Market	Road	0.02
4.	Limestone	Biramitrapur	Road	0.01
5.	Bentonite	Gujarat	Road	0.01

15.12.9 Water consumption for the proposed project will be 360 m³/day and the plant shall be designed as a zero discharge plant. Domestic wastewater will be treated in Sewage Treatment Plant and industrial waste water generated will be treated in wastewater treatment facility and reused completely.

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

15.12.11 Name of the consultant: Envirotech East Pvt. Ltd. [Sr. No. 55, List of Accredited Consultant Organizations (Alphabetically) Rev. 82, Dec. 05, 2019].

Observations and recommendations of the Committee

15.12.12 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 abstraction is permitted
- ii. No producer gas plant shall be installed.
- iii. Action Plan for maximum rainwater harvesting should be proposed.
- iv. Particulate matter emission shall be less than 30mg/Nm³.
- v. Fuel requirement shall be met through liquid fuel.
- vi. SO₂ emission from scrubber shall be limited to less than 300mg/Nm³.
- vii. Ambient Air Quality monitoring shall be carried out all the 12 parameters prescribed in the NAAQS.
- viii. AAQ assessment shall be carried out with input parameters of land and

water interaction, topography and meteorological conditions.

15.13 Enhancement of production capacity of various Forgings, Machining & Finishing facilities from 80000 TPA to 130000 TPA by addition of forging Press Lines 1 x 2000T, 1 x 2500T, 1 x 6300T and Hollow Spindle Line along with improvement in operational parameters by **M/s. Ramkrishna Forging Limited (Plant-V)** at Village: Bholadih, P.O: Kolabira, **District: Saraikela-Kharsawan, Jharkhand** [Online Proposal No. IA/JH/IND/134355/2019, File No. J-11011/4/2020-IAII(I)] – **Prescribing of Terms of Reference (ToR) – regarding**

15.13.1 M/s. Ramkrishna Forging Limited (Plant-V) has made application vide online proposal no. IA/JH/IND/134355/2019 dated 31/12/2019 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 project is listed under activity 3(a) Metallurgical Industries (Ferrous & Non-ferrous) of EIA Notification, 2006 and falls under Category ‘B’. However, due to non-availability of SEIAA at Jharkhand the proposal is being appraised at Central level as a Category ‘B’ project.

Details submitted by the project proponent

15.13.2 M/s. Ramkrishna Forging Limited (Plant-V) proposes for expansion of existing manufacturing unit for production of various Forgings, Machining & Finishing Components from 80000 TPA to 130000 TPA by addition of forging 1 x 2000T Press Line, 1 x 2500T Press Line, 1 x 6300T Press Line and Hollow Spindle Line along with correspondingly augmentation of machining and finishing facilities. The company has established its Ramkrishna Forgings Limited (Plant-V) for production of 29,100 TPA Various Forged, Machined and Finished Products through Press Lines of 1x12500T, 1x4500T and 1x3150T after obtaining Consent to Establish (CTE) from Jharkhand State Pollution Control Board vide Ref. No. G-294, dated 21.01.2014. M/s RKFL (Plant-V) obtained Environmental Clearance vide F.No- EC/SEIAA/2014-15/516/2014/1929, dated 23.11.2015 for expansion of its production capacity from 29100 TPA to 80000 TPA for various Forged, Machined and Finished products through addition of 1x12500T and 1x6300T Press Lines.

15.13.3 The proposed unit will be located within existing plant area of 10.02 Ha. (24.75 acres) at village –Bholadih, P.O- Kolabira, District: Saraikela-Kharsawan, Jharkhand.

15.13.4 The project does not envisage additional land for the expansion. The entire project will be installed in the vacant land of the existing plant. No forestland involved. Out of the total area, 3.30 ha (33%) will be developed as green belt.

15.13.5 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.

15.13.6 Total project cost is Rs. 591.18 crores. Employment generation from proposed project will be 302 direct employments and approx. 600 indirect employments.

15.13.7 The targeted production capacity of the plant is 0.13 million TPA of Forged product. The Raw material for the plant (Various type/grade of steel ingots/billets/Rounds etc.)

would be procured from Tata Steel, RINL, JSW, Jaiswal Neco etc. Raw material transportation will be done by road. The capacity of different units after the proposed expansion shall be as follows:

Name of Unit	Existing Units		Proposed Units		Final Configuration	
	No. & Capacity of Unit	Production TPA	No. & Capacity of Unit	Production TPA	No. & Capacity of Unit	Production TPA
Various Forged, Machined & Finished Components						
Press Line	1x12500 T 1x4500 T 1x3150 T 1x6300 T	80000 (Various Forged, Machined & Finished Product)	1x2000T 1x2500T 1x6300T Hollow Spindle Line	50000	1x12500 T 1x4500 T 1x3150 T 1x2000T 1x2500T 2x6300T Hollow Spindle Line	130000 (Various Forged, Machined & Finished Product)
*Machining and finishing facilities (Phosphating & Painting) will be upgraded to match with the additional production capacity of Forgings – 50,000 TPA						
*Shot Blasting & Heat Treatment, existing facilities will be used. No addition						

- 15.13.8 Electricity load of 20 MW will be source from Jamshedpur Utilities and Service Company (JUSCO). The company has already installed 2x2000 KVA DG Set.
- 15.13.9 Raw material requirement and fuel requirement after the expansion will be 178,000 Tons of Billets/Rounds of various grades of steel per annum and 5,200 TPA Propane gas for Hardening & Tempering Furnace.
- 15.13.10 Water consumption for the proposed project will be 164.8 KLD (Total 492.8 KLD after the expansion). Domestic waste water will be treated in STP and Industrial waste water generated will be treated in ETP and reused.
- 15.13.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 15.13.12 Name of the consultant: Vardan Environet [Sr. No. 160, List of Accredited Consultant Organizations (Alphabetically) Rev. 82, Dec. 05, 2019].

Observations and recommendations of the Committee

- 15.13.13 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 road shall be made pucca.
 - ii. Propane gas shall be used for heat treatment.
 - iii. Particulate matter emissions shall be less than 30mg/Nm³.
 - iv. Existing ETP shall be upgraded to treat additional effluent from expansion.

- v. Action Plan for maximum rainwater harvesting should be proposed.

15.14 Proposed expansion of existing Steel Plant by installation of Sponge Iron Plant (1,32,000 TPA), Billets (1,20,000 to 2,24,300 TPA), Rolling Mill (0.192 MTPA) with 1x15 TPH Reheating Furnace and Captive Power Plant [13 MW (9 MW WHRB + 4 MW AFBC)] within the existing plant premises of **M/s. AIC Iron Industries Pvt. Ltd.**, located at village Benipur; P.O.: Saltor, P.S.: Neturia, **Dist: Purulia, West Bengal** [Online Proposal No. IA/WB/IND/135080/2020, File No. J-11011/566/2008-IAI(I) – **Prescribing of Terms of Reference (ToR) – regarding**

15.14.1 M/s. AIC Iron Industries Private Limited has made application vide online proposal no. IA/WB/IND/135080/2020 dated 04/01/2020 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

15.14.2 M/s. AIC Iron Industries Private Limited has proposed for expansion of existing Steel Plant by installation of 1x400 TPD DRI Kiln (1,32,000 TPA Sponge Iron), 3x15 T Induction Furnaces (1,46,000 TPA Billets) with matching LRF & CCM, 0.192 MTPA Rolling Mill with 1x15 TPH Reheating Furnace and 13 MW capacity Captive Power Plant (9 MW WHRB + 4 MW AFBC) at village: Benipur, P.O.: Saltor, P.S.: Neturia, Dist: Purulia in West Bengal.

15.14.3 The details of Clearances obtained for the existing Units and the details of the proposed units have been mentioned as below:

Name of the Units	Units As per NOC from WBPCB	Units as per EC dated 27-08-2010)**	Units under Operation	Proposed units	Total Units
Sponge Iron Plant	-	4x100 TPD (1,20,000 TPA Sponge Iron)	-	1x400 TPD DRI Kiln (1,32,000 TPA Sponge Iron)	1x400 TPD DRI Kiln (1,32,000 TPA Sponge Iron)
Induction Furnaces with matching LRF & CCM	1x3 T + 1x6 T (28,800 TPA Billets) (As per NOC from WBPCB vide Memo No. 498-WPBA / NOC(816)/ 05 dated 3-5-2010 and Sl. No. NO31961 dated 9/11/2003)	2x15 T (1,20,000 TPA Billets)	1x3 T + 1x6 T + 1x15 T (28,800 TPA + 49,500 TPA = 78,300 TPA Billets)	3x15 T (1,48,500 TPA Liquid Steel) (1,46,000 TPA Billets)	1x3 T, 1x6T & 4x15 T (2,24,300 TPA Billets)
Rolling Mill	-	-	-	1,92,000 TPA Structural Steels (Angles, Channels, Joist, TMT Bars,	1,92,000 TPA Structural Steels (Angles, Channels, Joist, TMT

Name of the Units	Units As per NOC from WBPCB	Units as per EC dated 27-08-2010)**	Units under Operation	Proposed units	Total Units
				Wire Rod, Strips & Pipes etc.) with 1x15 TPH Reheating Furnace	Bars, Wire Rod, Strips & Pipes etc.) with 1x15 TPH Reheating Furnace
Captive Power Plant	-	12 MW CPP (8 MW WHRB + 4 MW AFBC)	-	13 MW CPP (9 MW WHRB + 4 MW AFBC)	13 MW CPP (9 MW WHRB + 4 MW AFBC)

**** Now EC from MoEF&CC dated 27-8-2010 is not valid.**

- 15.14.4 The proposed unit is located at village Benipur; P.O.: Saltor, P.S.: Neturia, Dist: Purulia, West Bengal. Its geographical co-ordinates are Latitude 23°39'30.80"N & Longitude 86°47'25.71"E with above mean sea level (AMSL) 128 m (420 ft).
- 15.14.5 The proposed expansion project will be installed on the available land within the existing plant premises and some adjoining lands of total area 10.01 hectares (24.74 acres). Around 19 acres of land has already been acquired by the project proponent and the rest shall be acquired. No forest land involved. Of the total area 3.3 ha (33%) land will be used for green belt development.
- 15.14.6 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.
- 15.14.7 Total project cost is approx. Rs. 125 Crores. The estimated manpower requirement will be about 400 persons.
- 15.14.8 The targeted production capacity of the proposed expansion project is 1,32,000 TPA Sponge Iron, 2,24,300 TPA Billets, 1,92,000 TPA Structural Steels (Angles, Channels, Joist, TMT Bars, Wire Rod, Strips & Pipes etc.) and 13 MW Power. The raw material transportation will be done through Rail and road linkages. The proposed capacity for different products for existing and proposed units have been presented in **Table-1.0**.
- 15.14.9 Total power requirement of the proposed expansion project will be about 24 MW which will be sourced from 13 MW capacity proposed Captive Power Plant and from DVC supply.
- 15.14.10 Proposed raw materials and fuel requirement for major products of the project are as follows.

SL. NO.	RAW MATERIALS	ANNUAL REQUIREMENT (IN TPA)	SOURCE
SPONGE IRON PLANT (1x400 TPD):			
1.	Pellet/ Iron Ore Fines	1,80,000	LOCAL MARKET / ORISSA
2.	Coal	1,20,000	IMPORTED

3.	Dolomite	3,600	LOCAL MARKET
INDUCTION FURNACE (3x15 T):			
1.	Sponge Iron	1,35,000	IN HOUSE
2.	Scraps	31,500	LOCAL MARKET
3.	Pig Iron	22,500	LOCAL MARKET
4.	Ferro Alloys	1160	LOCAL MARKET
CAPTIVE POWER PLANT (4.0 MW BASED ON AFBC BOILER):			
1.	Coal	25,000	IMPORTED
2.	Dolchar	30,000	IN HOUSE

- 15.14.11 Water to the tune of 354 m³/day will be needed for the proposed expansion project and the plant shall be designed as a zero liquid discharge plant. Domestic wastewater will be treated in septic tank - soak pit system and industrial waste water generated will be treated in wastewater treatment facility and reused completely.
- 15.14.12 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 15.14.13 Name of the consultant: Envirotech East Pvt. Ltd. [Sr. No. 55, List of Accredited Consultant Organizations (Alphabetically) Rev. 82, Dec. 05, 2019].

Observations of the Committee

- 15.14.14 The Committee noted that small furnaces of 3 T and 6 T has been proposed. PP was advised to phase them out and replace the same with one large capacity of 10T/15T induction furnace. In response to this, PP submitted a letter during the meeting stating that the configuration of the induction furnace would be 2x10 T & 4 x15 T in place of 1x3 T, 1x6T & 4x15 T to manufacture 2,60,500 TPA of billets. Revised configuration is given below.

Name of the Units	Units As per NOC from WBPCB	Units as per EC dated 27-08-2010)**	Units under Operation	Proposed units	Total Units
Sponge Iron Plant	-	4x100 TPD (1,20,000 TPA Sponge Iron)	-	1x400 TPD DRI Kiln (1,32,000 TPA Sponge Iron)	1x400 TPD DRI Kiln (1,32,000 TPA Sponge Iron)
Induction Furnaces with matching LRF & CCM	1x3 T + 1x6 T (28,800 TPA Billets) (As per NOC from WBPCB vide Memo No. 498-WPBA / NOC(816)/ 05 dated 3-5-2010 and Sl. No. NO31961 dated 9/11/2003)	2x15 T (1,20,000 TPA Billets)	1x3 T + 1x6 T + 1x15 T (28,800 TPA + 49,500 TPA = 78,300 TPA Billets)	3x15 T (1,48,500 TPA Liquid Steel) (1,46,000 TPA Billets)	2x10 T & 4x15 T (2,60,500 TPA Billets)
Rolling Mill	-	-	-	1,92,000 TPA Structural Steels (Angles,Channels,	1,92,000 TPA Structural Steels (Angles,Channe

Name of the Units	Units As per NOC from WBPCB	Units as per EC dated 27-08-2010)**	Units under Operation	Proposed units	Total Units
				Joist, TMT Bars, Wire Rod, Strips & Pipes etc.) with 1x15 TPH Reheating Furnace	Is, Joist, TMT Bars, Wire Rod, Strips & Pipes etc.) with 1x15 TPH Reheating Furnace
Captive Power Plant	-	12 MW CPP (8 MW WHRB + 4 MW AFBC)	-	20 MW CPP (10 MW WHRB + 10 MW AFBC)	20 MW CPP (10 MW WHRB + 10 MW AFBC)

Recommendations of the Committee

15.14.15 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 abstraction is permitted.
- ii. No producer gas plant shall be installed.
- iii. No dumping of waste is permitted.
- iv. No coal firing in the reheating furnace.
- v. Action Plan for maximum rainwater harvesting should be proposed
- vi. Particulate matter emission shall be less than 30mg/Nm³.
- vii. Industrial vacuum cleaner shall be provided.
- viii. Configuration of the induction furnace would be 2x10 T & 4 x15 T to manufacture 2,60,500 TPA of billets

17th January, 2020

- 15.15 Expansion from 2x100 TPD DRI Kiln to 5x100 TPD DRI Kiln, 20 MW CPP, 2x9 MVA SAF, 1x250 TPD I/O sinter plant & 1x40 TPH I/O washery by **M/s. Maithan Steel and Power Limited** located at PO- Bonra, PS- Neturia, **Purulia District, West Bengal** [Online proposal No. IA/WB/IND/70780/2017; MoEF&CC File No. J-11011/554/2017-IA.II(I)] - **Environmental Clearance – regarding**

Project Proponent informed the Ministry vide letter dated 13/01/2020 that due to unavoidable circumstances, they are unable to attend the meeting. They requested the Ministry to consider the proposal in the next EAC meeting. Therefore, consideration of the proposal was deferred.

- 15.16 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** located at Village Balyana, Post Barotiwala, Tehsil Baddi, **District Solan, Himachal Pradesh** [Online proposal No. IA/HP/IND/87362/2017; MoEF&CC File No. J-11011/350/2017-IA.II(I)] - **Reconsideration for grant of Environmental Clearance – regarding**

Project Proponent informed the Ministry vide letter dated 16/01/2020 that due to unavoidable circumstances, they are unable to attend the meeting. They requested the Ministry to consider the proposal in the next EAC meeting. Therefore, consideration of the proposal was deferred.

- 15.17 Proposed expansion & modernization of the Blast Furnace & Ductile Iron Pipe Plant for the ultimate production of 4.25 LTPA Liquid Metal/Pig, 5.58 LTPA Sinter, 4.0 LTPA DI Pipes, 0.288 LTPA DI Accessories, 0.9 LTPA liquid hot metal along with 5.0 MW capacity Power based on Blast Furnace Gas (Boiler), 4000 Sm³/hr, Oxygen, 2200 Sm³/hr Nitrogen within the existing premises by **M/s. Electrosteel Casting Limited** located at 30. B.T. Road, Khardha, **Dist North 24 Parganas, West Bengal** - [Online Proposal No. IA/WB/IND/130437/2019; MoEF&CC File No. J-11011/416/2019- IAI(I)] – **Reconsideration for grant of Terms of Reference based on site visit report – regarding**

- 15.17.1 M/s. Electrosteel Casting Limited has made an online application vide proposal no. IA/WB/IND/130437/2019 dated 9/12/2019 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.

- 15.17.2 The aforesaid proposal was considered in the 13th meeting of the Reconstituted Expert Appraisal Committee meeting held during 23-24th December, 2019 and the relevant portion of the minutes of the meeting is given below:

Proceedings of the 13th meeting of the REAC held on 23-24th December, 2019

M/s Electrosteel Castings Limited proposes expansion & modernization of the Blast Furnace & Ductile Iron Pipe Plant for the ultimate production of 4.25 LTPA Liquid Metal/Pig, 5.58 LTPA Sinter, 4.0 LTPA DI Pipes, 0.288 LTPA DI Accessories, 0.9

LTPA liquid hot metal along with 5.0 MW capacity Power based on Blast Furnace Gas (Boiler), 4000 Nm³/hr Oxygen, 2200 Nm³/hr Nitrogen on the available vacant area within the existing plant premises of total area 14.57 hectares (36 acres) of land.

The details of the existing and proposed expansion is furnished as below.

Sl. No.	Unit	Existing Capacity	Additional Capacity	Proposed Final Capacity
1	Liquid Metal / Pig (Blast furnace)	2.84 LTPA (215Cu.m.)	1.41 LTPA	4.25 LTPA (290Cu.m)
2	Sinter Plant	3.6 LTPA. (30 Sq. m)	1.98 LTPA (18 Sq. m)	5.58 LTPA
3	DI Pipes	2.73 LTPA	1.27 LTPA	4.0 LTPA
4	DI Accessories	0.238 LTPA	0.05 LTPA	0.288 LTPA
5	Iron Melting	0.3 LTPA (1 X 4.5 TPH)	0.6 LTPA (2 X 4.5 TPH)	0.9 LTPA (3 X 4.5 TPH)
6	Captive Power Plant Blast Furnace Gas based. (Boiler)	3.25 MW (20TPH Boiler)	1.75 MW (10TPH Boiler)	5.0 MW
7	Oxygen Plant	Nil	4000 Nm ³ /hr.	4000 Nm ³ /hr.
8	Nitrogen Plant	Nil	2200 Nm ³ /hr.	2200 Nm ³ /hr.

The details of the statutory permissions obtained for the existing unit is furnished as below:

Sl. no.	Unit	Existing Capacity	Year of Establishment	Statutory Permissions
1	Liquid Metal/Pig (Blast furnace)*	2.84 LTPA (215Cu.m.)	May'2000	1. CTE: 361-50/WPB-Nov/164/99. 2. Valid CTO: 1366/10/12/WPB/BR/J(XX)/96 dated 23.11.16 valid upto 31.12.21.(C087382)
2	Sinter Plant*	3.6 LTPA. (30 Sq. m)	April'2006	1. CTE: 02-2N 308/2005. 2. Valid CTO: 1366/10/12/WPB/BR/J(XX)/96 dated 23.11.16 valid upto 31.12.21. .(C087382)
3	DI Pipes*	2.73 LTPA	May'2001	1. CTE: 430-50/WPB-NOC/162/99. 2. Valid CTO: 1770/Ka_co_r/14/0315 dated 01.11.18 valid upto 31.10.23. (C083562)

Sl. no.	Unit	Existing Capacity	Year of Establishment	Statutory Permissions
4	DI Accessories*	0.238 LTPA	May'2001	1. CTE: 431/2N-2267/2001 2. Valid CTO: 1770/Ka_co_r/14/0315 dated 01.11.18 valid upto 31.10.23. (C083562)
5	Iron Melting**	0.3 LTPA (1 X 4.5 TPH)	August'2008	1. EC: EN/1598/T-II-I/022/2008 28.07.08. 2. CTE: 281-2N-25/2008 (E) dt 11.08.08 3. CTO: 1049/kr_co_s/09/0066 dated 24.5.2019 valid up to 31.07.24.(C083596)
6	Captive Power Plant Blast Furnace Gas based. (Boiler)*	3.25 MW (20TPH Boiler)	Same as Sl. No.1	
*	The Existing units were established before 14th Sept'2006 after getting consent to establish from WBPCB as per prevailing norms.			
**	The Unit was established in the Year 2008 after getting Environmental clearance from SEIAA, West Bengal & subsequent consent to establish from WBPCB. Capacity of Induction furnace is 4.5 TPH (< 5 TPH).			

The proposed unit is located at 30, B. T. Road, P.O: Sukhchar, Khardah, Dist. North 24 Parganas, West Bengal. Its geographical co-ordinates are 22°42'03" to 22°42'50" N latitude and 88°22'28" to 88°22'46" E longitude with above mean sea level (AMSL) 15 m.

The proposed expansion project will be installed on the available vacant area within the existing plant premises consisting of total 14.57 hectares (36 acres) of land. The entire land has been acquired for the project. No forest land involved. Of the total area, 4.81 ha (33%) land will be used for green belt development.

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

Total project cost is approx. Rs. 330 Crores. The estimated manpower requirement will be about 300 persons.

Sl. No	Unit	Material	Existing Qty.	Proposed Qty.	Unit	Source	Mode of Transportation
		Raw materials					
1	LMW	Quartzite	381	579	MT/mth	Local Mkt	Road/Rail
2		Mn Ore	37	56	MT/mth	Local Mkt	Road/Rail

3		Iron ore (lump & fines) / Mill Scale	39198	59614	MT/mth	Local Mkt	Road/Rail
4		Dolomite	2014	3063	MT/mth	Local Mkt	Road/Rail
5		Coke Fines (Sinter)	2191	3332	MT/mth	Local Mkt	Road
6		Coal/Coke (MBF)	15535	23626	MT/mth	Local Mkt	Road
7		Burnt Lime + LimeStone	4124	6272	MT/mth	Local Mkt	Road
8	DIW	Zn wire	190	292	MT/mth	Local Mkt	Road
9		Sponge Iron	3146	4840	MT/mth	Local Mkt	Road/Rail
10		Pure mg	32	49	MT/mth	Local Mkt	Road
11		Pig Iron	18	28	MT/mth	Local Mkt	Road
12		MS Scrap	545	838	MT/mth	Local Mkt	Road
13		Liquid Metal	22591	34755	MT/mth	Local Mkt	Road
14		Ferro Silicon	476	732	MT/mth	Local Mkt	Road
15		Ferro Manganese	6	9	MT/mth	Local Mkt	Road
16		EPS	5	8	MT/mth	Local Mkt	Road
17		Cement	2621	4032	MT/mth	Local Mkt	Road
18	Iron Melting	Sponge Iron	2706	8118	MT/mth	Local Mkt	Road
19		Scrap	300	900	MT/mth	Local Mkt	Road
20		Pig Iron	32	96	MT/mth	Local Mkt	Road

The company proposes for expansion & modernization of the Blast Furnace & Ductile Iron Pipe Plant for the ultimate production of 4.25 LTPA Liquid Metal/Pig, 5.58 LTPA Sinter, 4.0 LTPA DI Pipes, 0.288 LTPA DI Accessories, 0.9 LTPA liquid hot metal along with 5.0 MW capacity Power based on Blast Furnace Gas (Boiler), 4000 Sm³/hr Oxygen, 2200 Sm³/hr Nitrogen. The raw material transportation will be done through Rail and road linkages.

Existing power requirement is about 20 MW. Additional 10 MW shall be required for the expansion project and will be sourced from Captive Power Plant and CESC Supply.

The details of the existing and proposed raw materials, requirement for the project are as follows:

Water to the tune of 700 KLD will be needed for the proposed expansion project. Domestic waste water will be treated in Sewage Treatment Plant (STP) and industrial waste water generated will be treated in water treatment facility and reused completely.

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: Envirotech East Pvt. Ltd. [Sr. No. 55, List of Accredited Consultant Organizations (Alphabetically) Rev. 82, Dec. 05, 2019].

Observations of the Committee held on 23-24th December, 2019

The Committee noted that the proposed plant layout is congested and located within the thickly populated residential area. The process envisaged in the expansion proposal is likely to generate foul/odour in the vicinity.

Recommendations of the Committee held on 23-24th December, 2019

Therefore, the committee after detailed deliberations, decided to conduct site visit to verify the ground situation by a sub-committee.

15.17.3 The site visit was undertaken by the Sub-Committee on 6/01/2020.

15.17.4 The report of Sub-Committee was placed before the EAC (Industry-1) in its 15th meeting held on 17/01/2020. The Committee discussed the report in detail and noted the following:

I. M/s. ECL was established during 1955 as a steel foundry at Ward No. 20, 30 B.T. Road, Khardha, Dist North 24 Parganas, West Bengal.

II. The total existing land is 38.3 acres. The land use pattern of the existing site is:

Sl. No	Description	Land break up (Acres)	Percentage (%)
i.	Green Belt	6.49	16.90
ii.	Road	6.89	17.90
iii.	Office/Plant/Raw material/others	22.69	59.20
Additional adjacent land			
iv.	Green Belt	0.44	1.20
v.	Road, Railway siding & open land	1.79	4.80
	Total	38.30	100

III. M/s. ECL is proposing to enhance the production capacities of various units within the existing plant premises.

IV. The unit is surrounded by the following companies.

- North Side: Surrounded by ESAB India Ltd & Hindustan Heavy Chemicals.
- South Side: Surrounded by Texmaco Limited.
- West Side: Calcutta Silk Factory & Jaiswal factory.
- East Side: Electrosteel Private Railway Siding.

V. As per the gazette notification no. 583/KMDA/Sectt/VIII-45/95 (Pt) published on 6/02/2018 by Kolkata Metropolitan Development Authority (KMDA) pertaining to Land use and Development Control Plan (LUDCP) for Khardah

Municipality, the plant site of ECL located at Municipality Ward No.20 is declared as Industrial Zone (I-2).

- VI. The human settlement around the project site is given below:
- North Side: 150 m Adarsha Pally.
 - South Side: 430 m Sidheswari Para.
 - West Side: 390 m Kulinpara.
 - East Side: 140 m Santinagar.
 - Hooghly river is approx. 1KM at west side of site.
- VII. There is no bitumen coating for DI pipes which causes the odour problem.
- VIII. The Sub-Committee recommended the expansion proposal of M/s. ECL for grant of ToR with the following specific ToRs:
- i. Cumulative impact assessment along with integrated risk management study shall be carried out.
 - ii. Project proponent should explore the possibility of additional land acquisition for developing green belt covering 33% of the plot area. Further, time bound action plan for green belt development shall be submitted.
 - iii. Plan to achieve zero liquid discharge shall be submitted.
 - iv. Action plan to procure pellets for using in the Blast furnace and forego the proposed expansion of sinter plant.
 - v. Project proponent shall submit plan to augment the capacity of existing ETP to meet the requirement of treatment of additional process wastewater.
 - vi. Project proponent to comply with the following requirements with respect to the operation the existing unit:
 - Mechanise the sludge handling in the ETP by installing filter press.
 - Install tertiary treatment in ETP to achieve Zero Liquid discharge.
 - Install compact STP and recycle the treated domestic wastewater for process/green belt.
 - Install digital pressure drop indicator in the zinc dust filter area with alarm system in event of sudden pressures drop across the bag house.
 - Provision for run off control and water spraying system in raw material storage yard shall be provided.
 - Green belt developed in the existing unit needs further improvement by planting suitable local species with 15-20 m width and density of 1000 trees per acres all along periphery of the plant and inside the railway siding.
 - Project proponent shall install Continuous Emission Monitoring System (CEMS) for the existing process stacks and Continuous Ambient Air Quality Monitoring Station (CAAQMS) to monitor the stack emission and AAQ level.

15.17.5 The EAC agreed upon with the recommendations of Sub-Committee. The Committee also heard the views of ECL through a power point presentation.

Observations of the Committee

- 15.17.6 The Committee noted that site proposed for expansion is declared as Industrial Zone and it is surrounded by companies and captive railway siding of ECL. There is no issue related to odour as bitumen coating is not being practiced.

Recommendations of the Committee

- 15.17.7 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. Cumulative impact assessment along with integrated risk management study shall be carried out.
- ii. Project proponent should explore the possibility of additional land acquisition for developing green belt covering 33% of the plot area. Further, time bound action plan for green belt development shall be submitted.
- iii. Plan to achieve zero liquid discharge shall be submitted.
- iv. Action plan to procure pellets for using in the Blast furnace for proposed expansion. There will be no expansion of sinter plant considering the pollution potential and space constraints for green belt development.
- v. Project proponent shall submit plan to augment the capacity of existing ETP to meet the requirement of treatment of additional process wastewater.
- vi. Project proponent shall comply with the following requirements in respect to the operation of the existing unit:
 - Mechanise the sludge handling in the ETP by installing filter press.
 - Install tertiary treatment in ETP to achieve Zero Liquid discharge.
 - Install compact STP and recycle the treated domestic wastewater for process/green belt.
 - Install digital pressure drop indicator in the zinc dust filter area with alarm system in event of sudden pressures drop across the bag house.
 - Provision for run off control and water spraying system in raw material storage yard shall be provided.
 - Green belt developed in the existing unit needs further improvement by planting suitable local species with 15-20 m width and density of 1000 trees per acres all along periphery of the plant and inside the railway siding.
 - Project proponent shall install Continuous Emission Monitoring System (CEMS) for the existing process stacks and Continuous Ambient Air Quality Monitoring Station (CAAQMS) to monitor the stack emission and AAQ level.

- 15.18 Sponge Iron 350000 TPA; Mild Steel Billet 359000 TPA and/or Rerolled Steel Products through Hot through Hot Charging 263865 TPA; Rerolled Steel Product through Reheating Furnace 84365 TPA; Ferro Alloys 27902 TPA or Pig Iron 55804 TPA Captive Power 38 MW (22 MW through WHRB and 16 MW through AFBC) Fly Ash Brick 150000 TPA by **M/s. VSRA Steels Private Limited** located at Champa village, Tilda tehsil, in the district of **Raipur, Chhattisgarh** - [Online

Proposal No. IA/CG/IND/134174/2020; MoEF&CC File No. J-11011/9/2020-
IAII(D)] – **Prescribing of Terms of Reference – regarding [**

- 15.18.1 M/s. VSRA Steels Private Limited has made an online application vide proposal no. IA/CG/IND/134174/2020 dated 7/01/2020 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

- 15.18.2 M/s. VSRA Steels Private Limited proposed the implementation of Greenfield facilities in phase wise manner for production of Sponge Iron (350000 TPA) through coal based DRI Kilns; Mild Steel Billets- through Induction Furnace and LRF (359000 TPA), and/or Rerolled Steel Products through Hot Charging (263865 TPA); Rerolled Steel Product through Reheating Furnace (84365 TPA); Ferro Alloys (27902 TPA)or Pig Iron (55804TPA)through Submerged Arc Furnace, Captive Power 38 MW (22 MW through WHRB and 16 MW through AFBC) Fly Ash Brick (Brick Making Plant) 150000 TPA.
- 15.18.3 The proposed unit will be located at Village: Champa, Tehsil: Tilda, District: Raipur State: Chhattisgarh.
- 15.18.4 The land area required for the proposed plant is 20.69 Ha. out of which 6.91 Ha. (33.40%)will be developed as green belt. No forest land is involved. Out of the total land area i.e. 20.69 Ha. 4.14 Ha. land will be built up, Road and Paved area will be 2.07Ha., Green belt area will be 6.91 Ha. And remaining open area inclusive of Pond and water harvesting structure will be7.57 Ha.
- 15.18.5 No national park/wildlife sanctuary/biosphere reserve/tiger reserve. Bilari Ghughua Reserved Forest is situated at9.1 Km (WNW) from the project site. The area also does not report to form corridor for Schedule-I fauna.
- 15.18.6 Total project cost is approx. Rs. 29942 lakhs out of which 1.5% (442 lakhs) will be spent as CER expenses; the CER fund will be spent along with implementation in phased manner. Direct employments 1000out of which administrative staff is 80 and 920 are production staff.
- 15.18.7 The targeted production capacity of Sponge Iron is 350000TPA, MS Billet is 359000TPA,and/or Steel Rerolled products such as wires rods, etc. is 263865 TPA and rerolled structural steel products is 84365 TPA; Ferro- Alloys is 27902 TPA or Pig Iron is 55804 TPA, Fly Ash products such as Fly Ash Bricks is 150000 TPA along with captive power generation plant comprising of Waste Heat Recovery Boiler (WHRB) of capacity 22 MW and Atmospheric Fluidized Bed Combustion (AFBC) of capacity 16 MW. The raw materials like Iron ore, coal, limestone/dolomite, refractory materials, aluminum, manganese ore, quartz, etc. will be done through covered trucks from local

markets or mines, as per requirement. The details of facilities to be implemented are as below:

S.No.	Product (Facility)	First Phase		Second Phase		Final	
		Facility	Capacity (TPA)	Facility	Capacity (TPA)	Facility	Capacity (TPA)
1	Sponge Iron (Sponge Iron)	100 TPD x3 DRI Kiln	105000	350 TPD x2 DRI Kiln	245000	100 TPD x3 and 350 TPD x2 DRI Kiln	350000
2	Mild Steel Billet (SMS)	20 ton x2 Induction Furnace, 3 TPH Cupola, LRF and CCM	107700	20 ton x4 Induction Furnace, 3 TPH Cupola, LRF and CCM	251300	20 ton x6 Induction Furnace, 3 TPH x2 Cupola, LRF and CCM	359000
3	Long Rolled Steel (Rolling Mill)	Hot charge based Rolling Mill	105546	Hot charge based Rolling Mill	158319	Hot charge based Rolling Mill	263865
				Reheating Furnace based Rolling Mill	84365	Reheating Furnace based Rolling Mill	84365
4	Ferro Alloy (Ferro Alloy) Or Pig Iron (Ferro Alloy)	3.75 MVA x 2 Submerged Arc Furnace	13951	3.75 MVA x 2 Submerged Arc Furnace	13951	3.75 MVA x 4 Submerged Arc Furnace	27902
			27902		27902		55804
5	Captive Power (Power Plant)	WHRB	6 MW	WHRB	16 MW	WHRB	22 MW
		AFBC	8 MW	AFBC	8 MW	AFBC	16 MW

S.No.	Product (Facility)	First Phase		Second Phase		Final	
		Facility	Capacity (TPA)	Facility	Capacity (TPA)	Facility	Capacity (TPA)
6	Fly Ash Bricks (Brick Making)	Brick making plant	75000	Brick making plant	75000	Brick making plant	150000

- 15.18.8 Total power requirement will be 51 MW out of which 38 MW will be met through captive power plant and remaining 13 MW will be sourced from State Grid through CSPDCL. In addition to this, two numbers of 3300 KVA diesel generators will also be installed as emergency power backup.
- 15.18.9 The total raw material requirement for Sponge Iron Plant will be 1017250 TPA, SMS Unit (Induction Furnace and Rerolling Mill) will be 468911 TPA, Ferro Alloys Plant 78833 TPA and Captive Power Plant will be 149267 TPA. Raw material requirement will be fulfilled by nearby mines and open markets within 100 Km radius. Fuel consumption will be mainly source from local sources.
- 15.18.10 The estimated water requirement for proposed plant will be 1049 KLD. Thus, yearly water requirement will be 367,150 KLA (considering 350 day working basis). To optimize ground water resource, the company has planned to fulfill water requirement for 189 days out of 350 days through a combination of rain water collection reservoir and tanks that are fed through rain water collection system coupled with 12 rain water harvesting structures. The water requirement for plant operation for remaining 161 days will require ground water source. Application is being submitted to CGWA to issue of NOC to abstract ground water vide application no. 21-4/3204/CT/IND/2019 dtd. 24/12/2019. The project site is located in an area classified as 'Safe Zone' as per the guidelines of CGWB. Further, the company will also take efforts to minimize ground water pressure and thus possibilities will explore to draw water from nearby 'Manpur Reservoir' as surface water source created by the government of Chhattisgarh.
- 15.18.11 Estimated water requirement will be 1049 KLD, out of which 68 KLD will be used for domestic purposes. It is proposed to meet this water requirement through combination of 120000 KL capacity rain water collection reservoir to meet water requirement of 97 day. During the rainy season, about 75 days, it is proposed to source the water from rain water collection tank of 25000 KL, remaining 158 days water will be sourced from ground water. A reservoir constructed by government for irrigation facilities namely "Manpur Reservoir" in the EES direction of proposed site. It will also be explored for possibilities to draw water from the said reservoir with due permission to further reduce the ground water requirement.
- 15.18.12 Major water requirement for proposed integrated steel plant will be used for cooling purposes except CPP. Therefore, all cooling systems will be designed in a closed loop system thereby greatly reducing water loss. All other effluents will be treated in an effluent/sewage treatment plant, or go through settling tanks and oil skimmers. Treated

water will be reused for dust suppression, open loop cooling, slag quenching as well as in brick making.

- 15.18.13 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 15.18.14 The proponent submitted that for the proposed site for the project, ToR was granted by the Ministry vide letter no. J-11011/237/2019-IA.II(I) dated 21/8/2019 in the name of M/s. Gravity Sponge Private Limited. The instant proposal is envisaged at the same site and with new company name and different unit configuration.
- 15.18.15 Name of the consultant: Anacon Laboratories Pvt. Ltd., Nagpur [S.No. 10, List of Accredited Consultant Organizations (Alphabetically) Rev. 82, Dec. 05, 2019]

Observations of the Committee

- 15.18.16 The Committee noted that for the proposed site for the project, ToR has already been granted by the Ministry vide letter no. J-11011/237/2019-IA.II(I) dated 21/8/2019 in the name of M/s. Gravity Sponge Private Limited. The instant proposal is envisaged in the same site with new company name and different unit configuration. However, online withdrawal of the ToR dated 21/08/19 has not been submitted on PARIVESH. Besides, following shortcomings have been observed:
- i. Engineering layout has not been submitted.
 - ii. Configuration envisaged for furnaces is of lower capacity, energy intensive and highly polluting potential.

Recommendations of the Committee

- 15.18.17 In view of the foregoing and after detailed deliberations, the Committee recommended to return the proposal in present form.
- 15.19 Expansion in production capacity of Integrated Cement Project - Clinker (2.2 to 7.0 MTPA), Cement (3.3 to 7.5 MTPA), CPP (30 to 60 MW), WHRS (5 to 36 MW) and D.G. Set (6 to 12 MW) by **M/s. UltraTech Cement Limited** located at Villages: Tunkara & Balara, Tehsil: Jaitaran, **District: Pali, Rajasthan** - [Online Proposal No. IA/RJ/IND/111896/2019; MoEF&CC File No. J-11011/569/2011- IA.II(I)] – **Reconsideration for grant of Terms of Reference – regarding**
- 15.19.1 M/s. UltraTech Cement Limited proposes Expansion in production capacity of Integrated Cement Project - Clinker (2.2 to 7.0 MTPA), Cement (3.3 to 7.5 MTPA), CPP (30 to 60 MW), WHRS (5 to 36 MW) and D.G. Set (6 to 12 MW) at Villages: Tunkara & Balara, Tehsil: Jaitaran, District: Pali (Rajasthan). 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 20th July, 2019 vide Online Application No. IA/RJ/IND/111896/2019.
- 15.19.2 The existing project was accorded Environment Clearance vide letter No. J-11011/569/2011-IA-II (I) dated 27th Feb., 2015 for Integrated Cement Project - Clinker (2.2 MTPA), Cement (3.3 MTPA), CPP (30 MW), WHRS (5 MW) and D.G. Set (6 MW) at Villages: Tunkara & Balara, Tehsil: Jaitaran, District: Pali (Rajasthan). The company

could not able to implement the existing granted capacity of Integrated Cement Plant due to unfavorable market scenario; and now, installation of the project with granted capacity would not be feasible to meet the current cement demand.

- 15.19.3 The proposed unit will be located at Villages: Tunkara & Balara, Tehsil: Jaitaran, District: Pali (Rajasthan).
- 15.19.4 The land area acquired for the proposed plant is 156.10 ha; Existing Land use of the project area is private agricultural and conversion in to the industrial land is under process. No forest land is involved. The entire land has been acquired for the project. Out of the total project area, 51.52 ha (33%) will be used for greenbelt development.
- 15.19.5 No National Park / Wildlife Sanctuary / Biosphere Reserve/ Tiger Reserve/ Elephant Reserve, 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.
- 15.19.6 Total project cost is approx. 2200 Crores rupees (Phase-I Rs.1200 Cr. & Phase-II Rs. 1000 Cr.)Proposed employment generation from proposed project will be 800 direct employments and 2000indirect employments.
- 15.19.7 The targeted production capacity of Integrated Cement Project: Clinker (7.0 MTPA), Cement (7.5 MTPA), CPP (60 MW), WHRS (36 MW) and D.G. Set (12 MW). The Limestone for the plant would be sourced from Captive limestone Mineby covered conveyor belt; Laterite/Iron Ore / Red Ochre will be sourced from Chittorgarh & Bhilwara District of Rajasthan by road; Gypsum from Nagaur &Bikaner (Rajasthan) by road. The proposed capacity for different products for new site area is as below:

Particular	Unit	Existing Granted Capacity (as per EC dated 27 th Feb., 2015)	Additional Proposed Capacity		Total Capacity
			Line -1	Line- 2	
Clinker	MTPA	2.2	1.3	3.5	7.0 (3.5 x 2)
Cement	MTPA	3.3	0.45	3.75	7.5(3.75 x 2)
CPP	MW	30	Nil	30	60 (30 x 2)
WHRS	MW	5	13	18	36 (18 x 2)
D.G. Set	MW	6	Nil	6	12 (6 x 2)

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

- 15.19.8 The electricity load of 85 MW will be sourced from proposed Captive Power Plant, WHRS& Grid (JVNL).Company has also proposed to install 12 MW of DG Set.
- 15.19.9 Proposed Raw materials required for the project are Limestone; which will be sourced from Captive Mine. Laterite/Iron Ore / Red Ochre will be sourced from Chittorgarh & Bhilwara District of Rajasthan; Gypsum from Nagaur & Bikaner (Rajasthan); fly ash will be sourced from Captive Power Plant (CPP) & Govt. Thermal Power Plant at Kota & Suratgarh in Rajasthan. Fuel for Cement Plant will be Indian & Imported Coal and Indian & Imported Petcock, sourced from South Africa, Indonesia, SECL, IOCL refinery at

Panipat, Reliance refinery at Jamnagar and Nearby Market. HSD for D.G Set will be sourced from Nearby Market.

15.19.10 Water Consumption for the proposed project will be 3800 KLD; which will be sourced from *Ground Water & Mine Sump Water* and no waste water will be discharged from the cement plant. Domestic wastewater treated in STP and the treated water will be utilized for greenbelt development/ plantation. Waste water generated from CPP will be used for dust suppression after proper neutralization.

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

The project was considered in 09th meeting of Re-constituted EAC (Industry-I) held during 30th July, 2019 for ToR approval. Thereafter, some additional details were sought by Member Secretary to obtain confirmation from CPCB regarding location of the plant site with respect to CEPI area”.

In the continuation of the same, ADS reply has been submitted on 07th Jan., 2020 for further consideration and now, the said project has been scheduled to be considered in 15th Meeting of the Reconstituted Expert Appraisal Committee (Industry - 1) to be held during 17th January, 2020 at New Delhi for reconsideration for the ToR approval.

15.19.12 **Name of Consultant** - J.M. EnviroNet Pvt. Ltd., S. No. in QCI List - “93” (as updated on 05th Dec., 2019).

Observations of the Committee

15.19.13 The Committee noted that site proposed for the project is about 90 km away from the boundary of CEPI area as informed.

Recommendations of the Committee

15.19.14 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. Cumulative impact assessment shall be carried out.
- ii. Project proponent shall comply with the new emission and discharge norms.
- iii. Green belt shall be developed in 40% of the total project land.

15.20 Expansion of Kraft Paper Plant from 100 TPD to 200 TPD; Agro/Mixed Hard Wood/Waste Paper Pulp/Ready Pulp from 100 TPD to 200 TPD; Co-generation Power Plant 2.5 MW by **M/s K R Pulp and Papers Limited (Unit-I)** located at Village Rampura, Tehsil Sadar (Shahjahanpur), District Shahjahanpur, **Uttar Pradesh** [Online Proposal No. IA/UP/IND/107930/2018, File No. J-11011/289/2018-IAII(I)] – **Review of conditions for Environmental Clearance - regarding.**

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

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

After deliberations, the Committee recommended the proposal for grant of Environmental Clearance under the provisions of the EIA Notification, 2006 subject to following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum no. 22-34/2018-IA.III dated 9/8/2018.

- i. 50% reuse and recycling of treated water in phased manner in five years by up-gradation, modification and optimization in the existing treatment facilities. Consequently, the company shall reduce the water consumption from 4135 m³/day to 2450 m³/day within 5 years.
- ii. After expansion of the project, 100% groundwater recharge against the ground water abstraction shall be carried out in the study area. Rainwater harvesting shall be taken up in nearby areas.

15.20.2 After uploading the minutes on the portal on 6th November 2019. The Project Proponent requested the Ministry vide letter dated 18th November 2019 to amend the conditions which were recommended by EAC. The details are as given below:

Conditions recommended by EAC, MoEFCC during 12th meeting of the REAC (Ind-I) held during 21-23rd October, 2019	Company's request for change in conditions	Remarks
50% reuse and recycling of treated water in phased manner in five years by upgradation, modification and optimization in the existing treatment facilities. Consequently, the company shall reduce the water consumption from 4135 m ³ /day to 2450 m ³ /day within 5 years.	The company has reduced fresh water consumption 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 fresh water requirement will be 4050 KLD (20.25 KL/tonne of paper). Hence, overall reduction in fresh water requirement i.e. 4.05 KL per ton of paper.
After expansion of the project, 100% groundwater recharge against the ground water abstraction shall be carried out in the study area. Rainwater harvesting shall be taken up in nearby areas.	The company assures to follow the terms & conditions of ground water recharge against the ground water abstraction in the study area as per CGWA NOC and follow norms from time to time.	CGWA issued NOC (vide letter no. CGWA/NOC/IND/ORIG/2019/5380 and valid from 22.05.2019 to 21.5.2021) with the condition that permissible quantity for abstraction is 1364550 KLD groundwater per annum and quantum of ground water recharge to be undertaken is 750570 KLD per annum and it includes rainwater harvesting and recharge.

Observations of the Committee

- 15.20.3 The Committee discussed the conditions with the project proponent. It was presented by the PP that they took the condition no. (ii) to mean that they would be required to purchase land for rain water harvesting. The Committee clarified the following:
- i. Rain water recharging may be done at any place preferably in the vicinity of the plant. In case of non-feasibility in the study area, it may be carried out anywhere in the District [or] in the State.
 - ii. For rain water harvesting, PP may also opt for (i) roof top rain water harvesting even in urban areas, (ii) development of check dams on natural drainage in association with concerned agencies, (iii) participating in the State run projects pertaining to rainwater recharge schemes and provide financial and technical support.
 - iii. With respect to 50% reuse and recycling of treated water in phased manner, it was clarified by the Committee that the compliance has to be achieved in a phased manner within a period of five years.
- 15.20.4 The Committee re-iterated its recommendations made during the meeting held on 21-23rd October, 2019 and, with the above technical clarifications, the PP agreed to abide by the aforesaid conditions as recommended earlier by the EAC. Further, all effluent discharges, will have to be in accordance with Notification issued by Ministry of Water Resources, River Development and Ganga Rejuvenation vide S.O.(E) 3187 dated 7th October 2016.

Recommendations of the Committee

- 15.20.5 In view of above, the Committee recommended the Ministry to inform the aforesaid clarifications to the project proponent. Further, the committee also reiterated to stipulate that all effluent discharges, will have to be in accordance with Notification issued by Ministry of Water Resources, River Development and Ganga Rejuvenation vide S.O.(E) 3187 dated 7th October 2016.
- 15.21 Proposed Expansion of Writing & Printing Paper Plant (200 to 400 TPD) and Co-generation Power Plant (12 MW to 30 MW) by **M/s K R Pulp and Papers Limited (Unit-II)** located at Village Rampura, Tehsil Sadar (Shahjahanpur), **District Shahjahanpur, Uttar Pradesh** - [Online Proposal No.IA/UP/IND/2366/2008, File No. J-11011/1132/2007-IAII(I)] - **Re-consideration for Environment Clearance based on ADS reply - regarding.**
- 15.21.1 The aforesaid proposal was earlier considered in the meetings of the Expert Appraisal Committee held during 21-23rd October 2019 and the relevant portion of the minutes of the meeting is given as below:

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

After detailed deliberations, the Committee recommended the proposal for grant of Environmental Clearance under the provisions of the EIA Notification, 2006 subject to following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum no. 22-34/2018-IA.III dated 9/8/2018.

- i. 50% reuse and recycling of treated water in phased manner in five years by up-gradation, modification and optimization in the existing treatment facilities.

Consequently, the company shall reduce the water consumption from 15,890 m³/day to 8,390 m³/day within 5 years.

- ii. After expansion of the project, 100% ground water recharge against the ground water abstraction shall be carried out in the study area. Rainwater harvesting shall be taken up in nearby areas.

15.21.2 After uploading the minutes on the portal on 6th November 2019. The Project Proponent requested the Ministry vide letter dated 18th November 2019 to modify the recommendations of the EAC. The details are as given below:

Conditions recommended by EAC, MoEFCC during 12th meeting of the REAC (Ind-I) held during 21-23rd October, 2019	Company's request for change in conditions	Remarks
50% reuse and recycling of treated water in phased manner in five years by upgradation, modification and optimization in the existing treatment facilities. Consequently, the company shall reduce the water consumption from 15,890 m ³ /day to 8,390 m ³ /day within 5 years.	The company has reduced fresh water consumption 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 fresh water requirement was 16560 KLPD i.e. 82.8 m ³ /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 m ³ /ton of paper. Now, the company is proposing expansion from 200 to 400 KLPD and total fresh water requirement per ton of paper is 15890 KLPD (39.7 m ³ /ton) from existing 49.7 m ³ /ton of paper. Hence, overall reduction in fresh water requirement i.e. 10 KL per ton of paper after expansion.
After expansion of the project, 100% ground water recharge against the ground water abstraction shall be carried out in the study area. Rainwater harvesting shall be taken up in nearby areas.	The company assures to follow the terms & conditions of ground water recharge against the ground water abstraction in the study area as per CGWA NOC and follow norms from time to time.	CGWA issued NOC (vide letter no. CGWA/NOC/IND/REN/2/2019/5562 and validity is from 22/05/2018 to 20/05/2023) with the condition that permissible quantity for abstraction is 4968000 KLD groundwater per annum and quantum of ground water recharge to be undertaken is 2607196 KLD per annum and it includes rainwater harvesting and recharge.

Observations of the Committee

- 15.21.3 The Committee discussed the conditions with the project proponent. It was presented by the PP that they took the condition no. (ii) to mean that they would be required to purchase land for rain water harvesting. The Committee clarified the following:
- i. Rain water recharging may be done at any place preferably in the vicinity of the plant. In case of non-feasibility in the study area, it may be carried out anywhere in the District [or] in the State.
 - ii. For rain water harvesting, PP may also opt for (i) roof top rain water harvesting even in urban areas, (ii) development of check dams on natural drainage in association with concerned agencies, (iii) participating in the State run projects pertaining to rainwater recharge schemes and provide financial and technical support.
 - iii. With respect to 50% reuse and recycling of treated water in phased manner, it was clarified by the Committee that the compliance has to be achieved in a phased manner within a period of five years.
- 15.21.4 The Committee re-iterated its recommendations made during the meeting held on 21-23rd October, 2019 and, with the above technical clarifications, the PP agreed to abide by the aforesaid conditions as recommended earlier by the EAC. Further, all effluent discharges, will have to be in accordance with Notification issued by Ministry of Water Resources, River Development and Ganga Rejuvenation vide S.O.(E) 3187 dated 7th October 2016.

Recommendations of the Committee

- 15.21.5 In view of above, the Committee recommended the Ministry to inform the aforesaid clarifications to the project proponent. Further, the committee also reiterated to stipulate that all effluent discharges, will have to be in accordance with Notification issued by Ministry of Water Resources, River Development and Ganga Rejuvenation vide S.O.(E) 3187 dated 7th October 2016.

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

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

6. **Environmental Status**

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

- ii. AAQ data (except monsoon) at 8 locations for PM₁₀, PM_{2.5}, SO₂, 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 predominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

7. Impact Assessment and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.

- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. **Occupational health**

- i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre-designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.
- iii. Annual report of health status of workers with special reference to Occupational Health and Safety.
- iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

9. **Corporate Environment Policy**

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
 - iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
 11. Corporate Environment Responsibility (CER)
 - i. To address the Public Hearing issues, an amount as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 amounting to Rs.crores, shall be earmarked by the project proponent, towards Corporate Environment Responsibility (CER). Distinct CER projects shall be carved out based on the local public hearing issues. Project estimate shall be prepared based on PWD schedule of rates for each distinct Item and schedule for time bound action plan shall be prepared. These CER projects as indicated by the project proponent shall be implemented along with the main project. Implementation of such program shall be ensured by constituting a Committee comprising of the project proponent, representatives of village Panchayat & District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office. No free distribution/donations and or free camps shall be included in the above CER budget
 12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
 13. A tabular chart with index for point wise compliance of above ToRs.
 14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material in Regional languages shall be provided.
- iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report

- vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
- viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI)/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 SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

ANNEXURE-2

ADDITIONAL TORs FOR INTEGRATED STEEL PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. PM (PM₁₀ 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 PM₁₀ 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(PM₁₀ 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 PM₁₀ 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)

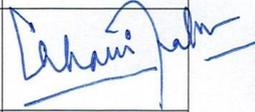
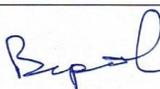
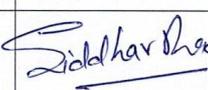
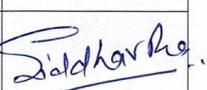
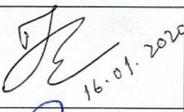
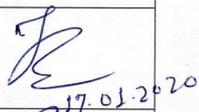
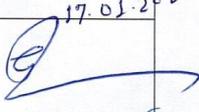
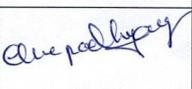
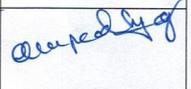
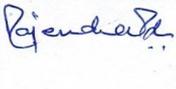
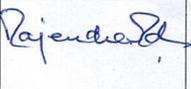
1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Emission from sulphuric acid plant and sulphur muck management.
3. Details on installation of Continuous Emission Monitoring System with 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

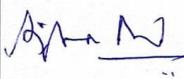
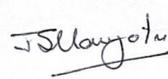
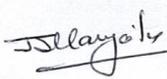
Executive Summary

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 its acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest, eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
- viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
- ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- x. Likely impact of the project on air, water, land, flora-fauna and nearby population
- xi. Emergency preparedness plan in case of natural or in plant emergencies
- xii. Issues raised during public hearing (if applicable) and response given
- xiii. CSR plan with proposed expenditure.
- xiv. Occupational Health Measures
- xv. Post project monitoring plan

LIST OF PARTICIPANTS IN 15th MEETING OF EAC (INDUSTRY-I)
HELD ON 16-17 JANUARY, 2020

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE	
			16/01/2020	17/01/2020
1	Dr. Chhavi Nath Pandey, IFS(Retired) Email: pandeychhavinath55@gmail.com	Chairman		
Members				
2.	Dr. B. P. Thapliyal Representative of Central Pulp and Paper Research Institute, Saharanpur. Email: director.cppri@gmail.com , bipin_thapliyal@yahoo.com	Member	 ABSENT	ABSENT
3.	Dr. Siddhartha Singh, Representative of Indian Meteorological Department, New Delhi. Siddhartha.singh77@gmail.com	Member		
4.	Dr. G. Bhaskar Raju Email: gbraju55@gmail.com	Member	ABSENT	ABSENT
5.	Dr. Jagdish Kishwan, IFS (Retd.) Email: jkishwan@gmail.com	Member		
6.	Dr. G.V. Subramanyam Email: sv.godavarthi@gmail.com	Member		
7.	Shri. Ashok Upadhyay Email: ahupadhy@rediffmail.com	Member		
8.	Shri. R.P. Sharma Email: rpsh3@hotmail.com	Member		

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE	
			16/01/2020	17/01/2020
9.	Dr. Sanjay Deshmukh Email: docsvd@yahoo.com	Member	ABSENT	ABSENT
10.	Prof. S.K. Singh Email: sksinghdee@gmail.com singhsk@email.com	Member	ABSENT	ABSENT
11.	Dr. R. Gopichandran Email: r.gopichandran@vigyanprasar.gov.in	Member	ABSENT	ABSENT
12.	Shri. Jagannath Rao Avasarala Email: avasaralajagan@gmail.com	Member		ABSENT
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		
