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

Summary record of the twelfth (12th) meeting of re-constituted expert appraisal committee held during 21-23rd October, 2019 for environmental appraisal of Industry-I sector projects constituted under the provisions of Environmental Impact Assessment (EIA) notification, 2006.

The twelfth meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Industry-1 Sector as per the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-1 Sector Projects was held during 21-23rd October, 2019 in the Ministry of Environment, Forest, and Climate Change. The list of participants is annexed.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim. The minutes of 11h meeting held during 24-25th September, 2019 were confirmed by the EAC as already uploaded on PARIVESH.

23rd October, 2019

12.26 "Expansion of sponge iron plant from 30,000 TPA to 195,000 TPA along with installation of Induction Furnace (95,000 TPA), Rolling Mill (90,000 TPA) and Captive Power Plant of 20 MW (8 MW –WHRB; 12 MW-AFBC) by **M/s Balajiswamy Premium Steel Pvt Ltd.** at Sy.No.249 & 277A, H. Siddapura Road, Halkundi Village, Bellary Taluk and District**, Karnataka** – **Environment Clearance – regarding.**

12.26.1 M/s Balajiswamy Premium Steel Pvt Ltd made application for Environmental Clearance for expansion of existing sponge iron plant to a mini integrated steel plant mentioned in the subject 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.

12.26.2 M/s Balajiswamy Premium Steel Pvt Ltd has been operating sponge iron plant (2x50 TPD) at Halkundi Village, Bellary Taluk & District, Karnataka since 2005.

12.26.3 The Ministry prescribed Terms of Reference (ToRs) to undertake detailed EIA study was prescribed to existing plant (2x50 TPD sponge iron) on 16.03.2010.

12.26.4 Public Hearing for the proposed project was conducted on 29.12.2010.

12.26.5 The proposal was considered in the EAC (Industry) meeting held during 29-31st June 2011. The committee recommended the proposal for Environmental Clearance subject to submission of additional information regarding Compliance to EC conditions and /or the NOC from SPCB, verification of testing laboratory, petrology and chemical analysis of raw material, environmental data generated in last three years, rechecking of bore well water analysis, fluoride analysis, time bound action plan for roads, copy of PH proceedings and a copy of coal linkage.

12.26.6 After receipt of additional information from Project Proponent on 16.07.2011, the proposal was placed before EAC meeting held during 18th-19th March 2014 and the committee recommended the proposal for Environmental Clearance subject to

stipulated conditions which were prescribed in the meeting held on 29-30th June 2011.

12.26.7 In the meanwhile, a moratorium was imposed by the Ministry for the projects in which the raw material sourcing is from Bellary, Chitradurga and Tumkur. The same was lifted by the Ministry on 01.07.2013.

12.26.8 As EIA report was outdated, the Ministry requested Project Proponent to submit one season baseline line data, compliance report and other details. Due to pending information from Project Proponent, the Ministry did not consider the proposal for Environmental Clearance.

12.26.9 As per the letter dated 05.04.2019 from Karnataka State Pollution Control Board, the plant is in operation and having valid Consent to Operate up to 30.06.2022. In view of repetitive request from the Project Proponent and decision taken by the competent Authority, proposal has been placed in the EAC (Industry-1) meeting for detailed examination.

12.26.10 **Observations of the Committee**

i. The Committee noted that the proposal was dealt in the Ministry during the period 2009-2014.

ii. The Public Hearing for the project was conducted on 29.12.2010.

iii. Proposal for grant of Environmental Clearance was kept pending since March, 2014 for want of additional information from the project proponent.

iv. Requisite additional information was submitted only on April, 2019 after considerable lapse of time.

v. As per the Ministry's Office Memorandum no. J-11013/41/2006-IA.II(I) [Part] dated 29/08/2017, the baseline data used for preparation of EIA report and the public consultation should not be more than three years old at the time of submission of proposal for grant of Environmental Clearance. In case these conditions are not met, proponent will have to start the process de-novo after obtaining fresh ToRs as per the provisions laid down in the EIA Notification, 2006.

vi. In the instant proposal under consideration, although the EIA report was submitted within the validity period of ToR, the case was pending since March, 2014 for want of additional information from the project proponent which was made available only during April, 2019. As of now, the baseline data used for preparation of EIA report and the public consultation is already more than three years old.

vii. The Committee also of the view that the environmental settings of the project site under consideration could also have been significantly changed now due to various developmental activities in that area during the last ten years. Hence, fresh assessment of the environmental impact is very much essential in order to take holistic view on the instant proposal under consideration.

Recommendations of the Committee

12.26.11 In view of the foregoing and after detailed deliberations, the Committee recommended that project proponent to make fresh application for Terms of Reference as per the provisions laid down in the EIA Notification, 2006. The Committee requested the Ministry to communicate its views to the project proponent.

12.27 "Expansion of sponge iron plant from 100 TPD to 200 TPD along with installation of Induction Furnace (95,000 TPA) and Captive Power Plant of 10 MW (4 MW – WHRB; 6 MW-AFBC) by **M/s Bellary Ispat Pvt Ltd.** located at Halkundi Village, **Bellary Taluk and District, Karnataka** – **Environment Clearance – regarding.**

12.27.1 M/s Bellary Ispat Pvt Ltd made application for Environmental Clearance for expansion of existing sponge iron plant to a mini integrated steel plant mentioned in the subject 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.

12.27.2 M/s Bellary Ispat Pvt Ltd has been operating sponge iron plant (2x50 TPD) at Halkundi Village, Bellary Taluk & District, Karnataka since 2005. The Ministry, has placed the proposal in the EAC (Industry-1) meeting with the approval of competent authority for detailed examination.

12.27.3 M/s Bellary Ispat Pvt Ltd has been operating sponge iron plant (2x50 TPD) at Halkundi Village, Bellary Taluk & District, Karnataka since 2005.

12.27.4 The Ministry prescribed Terms of Reference (ToRs) to undertake detailed EIA study was prescribed to existing plant (2x50 TPD sponge iron) on 16.03.2010.

12.27.5 Public Hearing for the proposed project was conducted on 29.12.2010.

12.27.6 The proposal was considered in the EAC (Industry) meeting held during 26-27th August 2011. After detailed deliberations, the Committee recommended the project for environmental clearance subject to submission of revised lay out plan showing the 20m wide green belt all around the plant area and stipulation of specific conditions along with other environmental conditions.

12.27.7 The proposal was reconsidered in the EAC meeting and the committee recommended the proposal for environmental clearance subject to conditions as stipulated in its meeting held during 26-27th August 2011.

12.27.8 The Ministry sought information regarding status of Environmental Clearance obtained for existing unit and its compliance, reasons for not taking EC under provisions of EIA Notification, 1994/2006.

12.27.9 In the meanwhile, a moratorium was imposed by the Ministry for the projects in which the raw material sourcing is from Bellary, Chitradurga and Tumkur on 05.10.2011. The same was lifted by the Ministry on 01.07.2013.

12.27.10 As per the letter dated 05.04.2019 from Karnataka State Pollution Control Board, the plant is in operation and having valid Consent to Operate up to 30.06.2022. In view of repetitive request from the Project Proponent and decision taken by the competent Authority, proposal has been placed in the EAC (Industry-1) meeting for detailed examination.

12.27.11 **Observations of the Committee**

i. The Committee noted that the proposal was dealt in the Ministry during the period 2009-2014.

ii. The Public Hearing for the project was conducted on 29.12.2010.

iii. Proposal for grant of Environmental Clearance was kept pending since March, 2014 for want of additional information from the project proponent.

iv. Requisite additional information was submitted only on April, 2019 after considerable lapse of time.

v. As per the Ministry's Office Memorandum no. J-11013/41/2006-IA.II(I) [Part] dated 29/08/2017, the baseline data used for preparation of EIA report and the public consultation should not be more than three years old at the time of submission of proposal for grant of Environmental Clearance. In case these conditions are not met, proponent will have to start the process de-novo after obtaining fresh ToRs as per the provisions laid down in the EIA Notification, 2006.

vi. In the instant proposal under consideration, although the EIA report was submitted within the validity period of ToR, the case was pending since March, 2014 for want of additional information from the project proponent which was made available only during April, 2019. As of now, the baseline data used for preparation of EIA report and the public consultation is already more than three years old.

vii. The Committee also of the view that the environmental settings of the project site under consideration could also have been significantly changed now due to various developmental activities in that area during the last ten years. Hence, fresh assessment of the environmental impact is very much essential in order to take holistic view on the instant proposal under consideration.

Recommendations of the Committee

12.27.12 In view of the foregoing and after detailed deliberations, the Committee recommended that project proponent to make fresh application for Terms of Reference as per the provisions laid down in the EIA Notification, 2006. The Committee requested the Ministry to communicate its views to the project proponent.

12.28 Sponge Iron Plant (2 x 350 TPD) 2 x 8 MW WHRB Induction Furnace (2 x 40T & 1 x 30T) Rolling Mill Dolachar/Coal based 16MW (AFBC), Sponge Iron 300000 TPA, M.S. Billets 600000 TPA, Rolled Products 500000 TPA, Power 32MW by **M/s. J.R. Metal Chennai Limited** at Survey Nos. 91 to 95 & 97 to 103, Amirthamangalam, Gummidipoondi, **Dist. Tiruvallur, Tamil Nadu** [Proposal No. IA/TN/IND/73464/2018; MoEFCC File No. IA-J11011/107/2018-IA-II(I)] - **Re-consideration for ToR based on ADS reply - regarding.**

12.28.1 M/s. J.R. Metal Chennai Limited has made online application vide proposal no. IA/TN/IND/73464/2018 dated 13/03/2018 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" EIA Notification; 2006.The proposal of expansion is submitted and appraised at Central level.

12.28.2 The aforesaid proposal was considered in the 30th meeting of the Expert Appraisal Committee meeting held during 9-10th April, 2018 and the relevant portion of the minutes of the meeting is given as below:

Details submitted by the project proponent

M/s. J. R. Metal Chennai Limited proposed to install a new manufacturing unit for Primary / Secondary Steel Plant consisting of Sponge Iron Plant consisting of WHRB / AFBC, and Electric Induction Furnace with a Steel Rolling Mill to produce M.S. Rolled Products.

The proposed unit will be located at S.Nos. 91 to 95 & 97 to 103 Amirthamangalam Village, Gummidipoondi Taluk, Thiruvallur Dt. Tamil Nadu.

The land area acquired for the proposed plant is 17.33 Ha. No forestland is involved. The entire land has been acquired for the project. Of the total area 4.05 ha (23.4%) land will be used for green belt development. The entire land is unclassified as per DTCP and is a dry rain fed agricultural.

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.

Total project cost is approx. Rs. 350 Crore. Proposed employment generation from proposed project will be 200 direct employment and much indirect employment.

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

Products	**Production Details (TPA)**		
	PHASE – I	**PHASE - II**	**PHASE – III**
Sponge Iron (2 x 350 T)	1,50,000	1,50,000	--
Intermediate Product – M.S. Billets Induction Furnace with Billet Caster	--	4,50,000 (40T x 2)	1,50,000 (30T x 1)
Re-Rolled Steel Products (M.S. Rounds, Flats, Angles, etc.,) 1 No x 40 T Reheating Furnace	--	5,00,000	--
Power Plant – AFBC (65 TPH)	--	16 MW	--
Waste Heat Recovery Boiler (WHRB)	8 MW	8MW	--

The electricity load of 20 MW will be procured from TNEB, Company has also proposed to install 625 KVA & 750 KVA DG Set. The proposed plant will have

WHRB to generate 16 MW of Power, and also a 16 MW AFBC. The generated electricity power will be used captively.

Annual requirement of raw materials on the basis of achievable production is as follows:

FOR SPONGE IRON PLANT

Sl. No.	Raw Material	Quantity (TPA)
1.	Iron-Ore	5,40,000
2.	Coal	2,70,000
3.	Dolomite/Limestone/ Quartz	14,900

FOR INDUCTION FURNACE / (BILLET)

Sl. No.	Raw Material	Quantity (TPA)
1.	Sponge Iron	2,15,000
2.	Melting Scrap	4,32,000
3.	Ramming Mars	1,200
4.	Refractories	620

FOR RE-ROLLING MILL

The Billet produced by the Steel Melt Shop will be the Raw Material for Re-Rolling Mill.

Sl. No.	Raw Material	Quantity
1.	Coal	23,000 TPA
2.	Furnace Oil	4 KL/day

FOR POWER PLANT

Sl. No.	Raw Material	Upon Expansion
1.	Imported Coal	384 TPD

Water Consumption for the proposed project will be 325 KLD and waste water generation will be 194 KLD Domestic waste water will be treated in STP. and industrial waste water generated will be taken to 2- consecutive Cooling Ponds, and then to Guard Pond after neutralization. Further the treated water from Guard Pond taken to RO Plant for further treatment and then about 148 KLD will be recycled for make-up water. From RO Reject about 30 KLD used for green belt and about 7 KLD will be used for coal dust suppression and ash dyke. Hence, 177 KLD of Fresh Water will be required for process after recycling of waste water. The domestic sewage will be treated in Sewage Treatment Plant and about 9 KLD discharged on land within the plant premises for green belt development.

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 (9-10th April, 2018)
The committee observed that the proposal is for setting up of green filed project and no alternative site analysis was provided, monitoring locations was not shown, not project specific ToRs were proposed.

Recommendations of the committee (9-10th April, 2018)**:**
After detailed deliberations the committee sought the following additional information for further consideration of the proposal.

i. Alternative site analysis shall be carried and included in the pre-feasibility report

ii. No phasing of the proposal shall be made.

iii. Proposed Monitoring locations in respect of Ambient air, surface water, ground water, soil, noise, flora & fauna, socio-economic etc., shall be included in the pre-feasibility report.

iv. The PP shall submit proposed site-specific ToRs.

v. The PP shall make the presentation before EAC along with Accredited EIA Consultant.

12.28.3 The proposal cited above delisted by the Ministry on 13/09/2018 as the proponent has not submitted the aforesaid additional information.

12.28.4 The project proponent vide their e-mail dated 5/09/2019 requested to relist their proposal and also submitted the aforesaid additional information to the Ministry. The reply given by the project proponent is summarized as below:

S.No.	ADS sought	Response of PP
i.	Alternative site analysis shall be carried and included in the pre-feasibility report	PP submitted that following two alternate sites have been considered for the project: • Sunnambukklam village • Uranambedu It was informed that aforesaid sites are suitable for the project as the site located at Sunnambukklam village is near to Pulicat lake and the site located at Uranambeduis located close to Buckingham canal,Bay of Bengal. In view of the above, project proponent has chosen the site earlier proposed i.e., Survey nos. 91 to 95 &97 to 103, located at Amirthamanagalam village, Gummidpoondi Taluk, Thiruvallur District, Tamil Nadu. Total land area is 48.2 acres. The site co-ordinates are given as below:

S.No.	ADS sought	Response of PP
		13°23'34.083"N 80°2'36.896"E, 13°23'43.21"N 80°2'34.741"E, 13°23'46.157"N 80°2'35.064"E, 13°23'46.013"N 80°2'41.424"E, 13°23'46.983"N 80°2'41.568"E, 13°23'46.875"N 80°2'43.185"E, 13°23'50.756"N 80°2'43.221"E, 13°23'50.72"N 80°2'44.335"E, 13°23'56.937"N 80°2'46.275"E, 13°23'54.385"N 80°2'52.707"E, 13°23'49.427"N 80°2'52.024"E, 13°23'44.468"N 80°2'53.821"E, 13°23'34.586"N 80°2'52.635"E, 13°23'33.185"N 80°2'49.078"E, 13°23'34.155"N 80° 2'42.107"E.
ii.	No phasing of the proposal shall be made	PP submitted that phasing of the proposal is essential to obtain the phase wise CTO from TNPCB as the TNPCB does not issue consent for the entire project in one go.
iii.	Proposed Monitoring locations in respect of Ambient air, surface water, ground water, soil, noise, flora & fauna, socio-economic etc., shall be included in the pre-feasibility report.	Proposed monitoring locations in respect of Ambient air, surface water, ground water, soil, noise, flora & fauna, have been marked on the study area map and furnished in the pre-feasibility report.
iv.	The PP shall submit proposed site-specificToRs.	PP has submitted the site-specific ToRs.
v.	The PP shall make the presentation before EAC along with Accredited EIA Consultant.	The proposal was presented by M/s. Chennai Testing Laboratory Private Limited[S.No. 27, List of Accredited Consultant Organizations (Alphabetically) Rev. 81, October, 2019].

Observations of the Committee:

12.28.5The committee observed that the additional information furnished by the project proponent is adequate except the installation of air cooled condenser in place of water cooling arrangement.

Recommendations of the Committee

12.28.6 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. Provision of air-cooled condenser shall be made by the project proponent to

conserve water.

ii. Scheme for rain water harvesting shall be carried out to the extent of 200% of annual water consumption.

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

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

12.29 Clinker Production from 1.485 MTPA to 3.65 MTPA; Cement production from 1.65 MTPA to 5.50 MTPA and installation of 50 MW Coal based Power Plant by **M/s. India Cements Limited** at Yerraguntla Mandal Chilamkur Village, **Kadapa, Andhra Pradesh** [Proposal No. IA/AP/IND/120928/2019; MoEF&CC File No. IA-J11011/126/2011-IA-II(I)] – - **ToR validity extension - regarding.**

12.29.1 M/s. India Cements Limited has made an online application vide proposal No. IA/AP/IND/120928/2019 on 9th October 2019 in prescribed Form – 5, and other documents for seeking extension of validity of ToR which was granted for undertaking detailed EIA study for expansion of Integrated Cement Plant mentioned in the subject above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category "A" due to the applicability of general condition of the EIA Notification, 2006 and the proposal is appraised at Central level.

12.29.2 Initial TOR was granted for increase of Clinker Production from 1.485 MTPA to 3.485 MTPA and Cement Production from 1.65 MTPA to 5.00 MTPA (By installation of New Line within the existing complex at Chilamkur village, Yerraguntla Mandal, YSR Kadapa District, Andhra Pradesh vide MoEFCC TOR letter No. J-11011/126/2011-IA, II (1) dt 18.01.2017.

12.29.3 Further Amendment of TOR was obtained for increase in clinker from 1.485 to 5.15 MTPA and cement from 1.65 to 7.00 MTPA along with installation of 50 MW coal based captive power plant within the existing cement plant complex of 234.76 Ha. vide reference Amended TOR issued by MoEF&CC vide TOR amendment letter No. J-11011/126/2011-IA, II (1) dt 01.02.2019

12.29.4 Due to some logistic problems and the economics involved, ICL has applied for amendment in amended TOR for the revised production capacity i.e, increase in clinker production capacity from 1.485 to 3.65 MTPA and Cement from 1.65 to 5.50 MTPA retaining Coal based Captive Power Plant capacity at 50 MW

12.29.5 An application was submitted for amendment of TOR vide proposal No. IA/AP/IND/105923/2019 dated 20.05.2019. Amendment to the ToR was recommended in the EAC meeting held on 31.05.2019. TOR amendment letter is yet to be received.

CAPACITY OF THE PROPOSAL FOR EXPANSION

Cement Plant	Present Capacity		TOR/ Amended TOR issued (Capacity after expansion)		TOR Amendment appraised by EAC (Capacity after expansion)	
			18.01.2017/ 01.02.2019			
	Clinker	Cement	Clinker	Cement	Clinker	Cement
	(MTPA)		(MTPA)		(MTPA)	
Unit –I	1.485	1.65	1.65	2.00	1.65 (Upgradation of Unit-I)	2.00
Unit –II	-	-	3.50	5.00	2.00 (New Unit-II)	3.50
Total	1.485	1.65	5.15	7.00	3.65	5.50
Coal based Captive Power Plant	Nil		50 MW (Installation of new coal based captive power plant)		50 MW Installation of new coal based captive power plant)	

12.29.6 As per the Original TOR granted on 18.01.2017. The validity of the TOR expires on 19.01.2020. Therefore, present proposal is for extension of Validity of TOR upto 18.01.2021for the following capacity which was approved by MOEFCC vide original TOR and TOR amendments thereof.

CAPACITY OF THE PROPOSAL FOR EXPANSION

Cement Plant	Present Capacity		Request for TOR validity extension for TOR Amendment appraised by EAC (Capacity after expansion)	
	Clinker	Cement	Clinker	Cement
	(MTPA)		(MTPA)	
Unit –I	1.485	1.65	1.65 (Upgradation of Unit-I)	2.00
Unit –II	-	-	2.00 (New Unit-II)	3.50
Total	1.485	1.65	3.65	5.50
Coal based Captive Power Plant	Nil		50 MW (Installation of new coal based captive power plant)	

Observations and Recommendations of the committee

12.29.7 After detailed deliberations, the committee recommended the proposal for extension of validity of ToR for a period of one year, i.e., up to 18.01.2021.

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

Project proponent vide e-mail dated 22/10/2019 expressed their inability to participate in the meeting due to labor issues in their factory and requested to consider the proposal in the next EAC meeting. After deliberations, the Committee decided to consider the proposal in the next EAC meeting.

12.31 Expansion of Aluminium Smelter Plant from 0.26 MTPA to 0.72 MTPA and Captive Power Plant from 650 MW to 1650 MW by **M/s. Aditya Aluminium (A Division of M/s Hindalco Industries Limited)** at Village Lapanga, Rengali, C.D. Block, **District Sambalpur in Odisha** [Online Proposal No. IA/OR/IND/115361/2019, File No. J-11011/136/2009-IA. II(I)] **– Extension of validity of Environmental Clearance – regarding.**

12.31.1 **M/s. Aditya Aluminium (A Division of M/s Hindalco Industries Limited)**has made online application vide proposal no. IA/OR/IND/115361/2019dated 19/10/2019 along with updated Form 6 and sought for validity extension of the environmental clearance accorded by the Ministry vide letter no. J-11011/136/2009-IA-II(I) dated 29/11/2012.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

12.31.2 M/s. Aditya Aluminium (A Division of M/s Hindalco Industries Limited) has been granted Environmental Clearance by the Ministry for expansion of Aluminium Smelter Plant from 0.26 MTPA to 0.72 MTPA and Captive Power Plant from 650 MW to 1650 MW at Village Lapanga, Rengali, C.D. Block, District Sambalpur in Orissa vid letter no. J-11011/136/2009- IA-II(I) dated 29/11/2012.Subsequently amendment to the EC was granted vide letter dated 14/06/2013 and 14/08/2018.

12.31.3 The implementation status of the EC is furnished as below:

S.No.	Product	Phase I (Operational)	Phase II (To be implemented)
i.	Aluminium Smelter	0.36 MTPA	0.36 MTPA
ii.	Captive Power Plant	900 MW (6 x 150 MW)	750 MW (5 x 150 MW)

12.31.4 At present, the Phase-I facility of 0.36 MTPA Aluminium Smelter and 900 MW Captive Power Plant is installed and commissioned and the plant is in full-scale operation. The metal produced from the plant is of high purity and more than 90% is exported to companies like Boeing, Mitsubishi, Hyundai & others. Other common facilities like railway siding & raw material handling system, water intake and

storage facilities, road and other infrastructure facilities, ash handling & disposal system etc., have also established.

12.31.5 The phase II facility of 0.36 MTPA Aluminium smelter and captive power plant of 750 MW (5x150 MW) along with its ancillary facilities could not be implemented within the validity period due to market fluctuations and decline in LME Pricefor Aluminium in last five years. The CTO for the Phase-I facilities is valid till 31.03.2013 for Aluminium Smelter & 31.03.2020 for CPP Units.

12.31.6 The phase-II facility [0.36 MTPA Aluminium smelter and captive power plant of 750 MW (5x150 MW) along with its ancillary facilities]will be executed remaining period of 3 years and will be implemented within the stipulated time period, i.e., 28thNovember 2022.

Observations of the Committee

12.31.7 The Committee noted that project proponent was unable to implement Phase II facility due to market fluctuations and decline in London Metal Exchange (LME) price for Aluminium in last five years. The committee also noted that a CBI investigation is in progress regarding the company. In this regard, PP informed that the said CBI investigation is related to the Talabira II and III coal Blocks. The Project Proponent further informed that the coal for the existing operations is being/ will be taken from coal mines namely Gare Palma IV/4 and IV/5 and Mahanadi Coal Fields Limited where no investigation is pending or going on.

Recommendations of the Committee

12.31.8 In view of above and after detailed deliberations, the Committee recommended to extend the validity of the Environmental Clearance for a period of three years beyond 28/11/2019, i.e., from 29/11/2019 to 28/11/2022 subject to following conditions:

i. M/s. Aditya Aluminium (A division of M/s Hindalco Industries Limited) shall abide by all orders and judicial pronouncements, made from time to time, passed by any judicial or executive authority (including CBI) so far as they pertain to the present proposal directly or indirectly.

ii. All other terms and conditions stipulated in the environmental clearance accorded vide letter no. J-11011/136/2009- IA-II(I) dated 29/11/2012, 14/06/2013 and 14/08/2018 shall remain unchanged.

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

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

12.32.2 The aforesaid proposal was earlier considered in the 11th meeting of the Expert Appraisal Committee meeting held during 24-25th September, 2019 and the relevant portion of the minutes of the meeting is given as below:

Details submitted by the project proponent

The Proposal of M/s Satia Industries Limited located in Village: Rupana, District: Sri Muktsar Sahib, State: Punjab was initially received in the Ministry on 28th December 2018 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 4**th** meeting held on 20th February 2019 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project vide Lr. No. IA-J-11011/196/2014-IA.II(I) dated 16th April 2019.

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

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

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

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

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

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

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

S. No.	Type	Source	Quantity, TPD			Disposal
			Existing	Proposed	Total	

1.	ETP Sludge	ETP	10.00	7.00	**17.00**	Disposed to local cardboard manufacturers.
2.	Lime Sludge	Causticizing	173.00	54.35	**227.35**	Calcination in Cement Plants
3.	Fly Ash	Boiler House	63.75	51.25	**115.00**	For brick manufacturing & filling of the low lying areas

The targeted production capacity of the writing & printing paper is 600 TPD and Power generation through CPP is 44 MW. The Raw material for the plant would be procured from local area. The raw material transportation will be done through Road.

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

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

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

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

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

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

Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.04 to 7.94; Total Hardness: 112 to 1200 mg/l; Chlorides: 40 to 875 mg/l; Fluoride: 0.4 to 0.7 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 3 locations. pH: 7.23 to 7.75 ; DO: 4.9 to 5.1 mg/l ; BOD: <4 to 6 mg/l; COD from 10 to 16 mg/l.

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

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

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

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

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

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

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

Greenbelt will be developed in 6.0826 Ha which is about 33% of the total

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

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

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

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

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

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

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

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

Recommendations of the Committee

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

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ANNEXURE –1

GENERIC TERMS OF REFERENCE (ToR) IN RESPECT OF INDUSTRY SECTOR

1. Executive Summary
2. Introduction
   - i. Details of the EIA Consultant including NABET accreditation
   - ii. Information about the project proponent
   - iii. Importance and benefits of the project

3. Project Description
   - i. Cost of project and time of completion.
   - ii. Products with capacities for the proposed project.
   - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
   - iv. List of raw materials required and their source along with mode of transportation.
   - v. Other chemicals and materials required with quantities and storage capacities
   - vi. Details of Emission, effluents, hazardous waste generation and their management.
   - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
   - viii. The project proponent shall furnish the requisite documents from the competent authority in support of drawl of ground water and surface water and supply of electricity.
   - ix. Process description along with major equipment and machineries, process flow sheet (Quantitative) from raw material to products to be provided
   - x. Hazard identification and details of proposed safety systems.
   - xi. Expansion/modernization proposals:
     - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment, Forest and Climate Change as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB/PCC shall be attached with the EIA-EMP report.
     - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. Site Details
   - i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

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

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

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

6. **Environmental Status**

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

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

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

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

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

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

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

viii. Soil Characteristic as per CPCB guidelines.

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

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

xi. Socio-economic status of the study area.

7. **Impact Assessment and Environment Management Plan**

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

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

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete

scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

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

vi. Measures for fugitive emission control

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

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

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

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

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

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

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

8. **Occupational health**

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

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

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

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

9. **Corporate Environment Policy**
   i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
   ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
   iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
   iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. Corporate Environment Responsibility (CER)
   i. To address the Public Hearing issues, an amount as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 amounting to Rs. .....crores, shall be earmarked by the project proponent, towards Corporate Environment Responsibility (CER). Distinct CER projects shall be carved out based on the local public hearing issues. Project estimate shall be prepared based on PWD schedule of rates for each distinct Item and schedule for time bound action plan shall be prepared. These CER projects as indicated by the project proponent shall be implemented along with the main project. Implementation of such program shall be ensured by constituting a Committee comprising of the project proponent, representatives of village Panchayat& District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office. No free distribution/donations and or free camps shall be included in the above CER budget

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

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

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

<u>The following general points shall be noted:</u>
   i. All documents shall be properly indexed, page numbered.
   ii. Period/date of data collection shall be clearly indicated.
   iii. Authenticated English translation of all material in Regional languages shall be provided.

iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.

v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.

vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report

vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.

viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCl)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCBshall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

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

ADDITIONAL ToRS FOR PELLET PLANT

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

ADDITIONAL ToRs FOR CEMENT INDUSTRY

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

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

i. A note on pulp washing system capable of handling wood pulp shall be included.
ii. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln
iii. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for *Eucalyptus/Casuarina* to produce low kappa (bleachable) grade of pulp.
iv. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
v. A commitment that no extra chlorine basebleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills.Plan for reduction of water consumption.

ADDITIONAL ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

ADDITIONAL ToRs FOR COKE OVEN PLANT

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

ADDITIONAL ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

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

ADDITIONAL ToRs FOR METALLURGICAL INDUSTRY (FERROUS AND NON-FERROUS)

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

Executive Summary

Executive summary of the report in about 8-10 pages incorporating the following:

i. Project name and location (Village, Dist, State, Industrial Estate (if applicable)

ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.

iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)

iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.

v. Measures for mitigating the impact on the environment and mode of discharge or disposal.

vi. Capital cost of the project, estimated time of completion

vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest, eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)

viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population

ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.

x. Likely impact of the project on air, water, land, flora-fauna and nearby population

xi. Emergency preparedness plan in case of natural or in plant emergencies

xii. Issues raised during public hearing (if applicable) and response given

xiii. CSR plan with proposed expenditure.

xiv. Occupational Health Measures

xv. Post project monitoring plan

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LIST OF PARTICIPANTS IN 12th MEETING OF EAC (INDUSTRY-I) HELD ON 21-23 OCTOBER, 2019

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE		
			21/10/2019	22/10/2019	23/10/2019
1	Dr. Chhavi Nath Pandey, IFS(Retired) Email: pandeychhavinath55@gmail.com	**Chairman**			
Members					
2.	, Representative of Central Pulp and Paper Research Institute, Saharanpur. Email: director.cppri@gmail.com	**Member**	ABSENT	ABSENT	ABSENT
3.	, Representative of Indian Meteorological Department, New Delhi.	**Member**	ABSENT	ABSENT	ABSENT
4.	Dr. G. Bhaskar Raju Email: gbraju55@gmail.com	**Member**	ABSENT	ABSENT	ABSENT
5.	Dr. Jagdish Kishwan, IFS (Retd.) Email: jkishwan@gmail.com	**Member**	21.10.2019	22.10.2019	23.10.2019
6.	Dr. G.V. Subramanyam Email: sv.godavarthi@gmail.com	**Member**	21.10.19	22.10.19	23.10.19
7.	Shri. Ashok Upadhyaya Email: ahupadhy@rediffmail.com	**Member**	ABSENT	ABSENT	ABSENT
8.	Shri. R.P. Sharma Email: rpsh3@hotmail.com	**Member**			
9.	Shri. Sanjay Deshmukh Email: docsvd@yahoo.com	**Member**	ABSENT	ABSENT	ABSENT

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE		
			21/10/2019	22/10/2019	23/10/2019
10.	Prof. S.K. Singh Email: sksinghdee@gmail.com **singhsk@email.com**	Member		22/10/19	ABSENT
11.	Dr. R. Gopichandran Email: r.gopichandran@vigyanprasar.gov.in	Member	ABSENT	ABSENT	ABSENT
12.	Shri. Jagannath Rao Avasarala Email: avasaralajagan@gmil.com	Member			
13	Shri. J.S. Kamyotra Email: kamyotra@yahoo.co.in	Member			
14.	Shri. Aravind Kumar Agrawal Director, MoEF&CC Email: dirind-moef@gov.in	Member Secretary			

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