

**Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)**

SUMMARY RECORD OF THE THIRD (3rd) MEETING OF EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF INDUSTRY-I SECTOR PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The third meeting of the Expert Appraisal Committee (EAC) for Industry-I Sector in terms of the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-I Sector Projects was held on 28th – 29th January, 2016 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.

Confirmation of the minutes of the 2nd Meeting

The minutes of the 2nd meeting as circulated were confirmed subject to following modifications:

Item No. 2.7.3

Proposed Expansion of Integrated Cement Project - Clinker (6.0 to 9.5 MTPA), Cement (8 to 12 MTPA), CTPP (80 to 140 MW) & WHRB (18 to 30 MW) by M/s Wonder Cement Limited located at Villages Sangaria, Borakheri, Peerkhera & Rasulpura, Tehsil Nimbahera, District Chittorgarh (Rajasthan) [F.No J-11011/298/2012-IA.II(I)]

- (i) At page No. 31, under Specific Condition xvii, ‘MPPCB’ should be read as ‘RPCB’
- (ii) At page No. 31, Specific Condition xxi and xxiv are same, therefore the specific condition xxiv be deleted.

Any other Item

The Member Secretary informed the Committee that the Ministry has decided to rate the quality of EIA and EMP reports henceforth on a scale of 1 to 10. Therefore, the Committee has been requested to grade the EIA and EMP reports. In the meantime, the EIA and EMP reports have to be rated based on the content, quality and originality of the report. The generic structure of environmental impact assessment document is provided in the Appendix-III of the EIA Notification, 2006. Parameters for assessing the quality of EIA and EMP reports would be provided by the Ministry in due course.

The deliberations on further agenda proceeded as follows;

3.3 ENVIRONMENTAL CLEARANCE (EC)

3.3.1 Expansion of Pellet Plant from 1.2 MTPA to 2.2 MTPA within the existing 1.75 MTPA integrated steel plant situated at Village : Naharpali, Tehsil : Kharsia, Distt :

Raigarh, Chhattisgarh by M/s Monnet Ispat & Energy Ltd. [F. No. J-11011/196/2007-IA II (I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s Min Mec R&D Laboratory, New Delhi) gave a detailed presentation on the salient features of the project. The proposal for expansion of pellet plant of M/s Monnet Ispat & Energy Ltd. within the existing integrated steel plant was submitted in the Ministry vide letter dated 09.06.2015 for grant of Environment Clearance under clause 7(ii) of EIA Notification, 2006. The project was earlier accorded environment clearance by the Ministry vide letter No. J-11011/196/2007-IA.II(I) dated 26.12.2007 for the integrated steel plant.

The proposal is for expansion of Pellet Plant from the existing 1.2 MTPA to 2.2 MTPA within the existing 1.75 MTPA integrated steel plant, located at Village Naharpali, Tehsil Kharsia, Distt Raigarh, Chhattisgarh. The total project area is 227.84 ha and the proponent has informed that the proposed expansion would not require any additional land and infrastructure development. No forestland is involved in the project. The entire land has been acquired for the project. The topography of the area is flat and reported to lie between 21°58'27"N to 21°59'30" N Latitude and 83°13'31"E to 83°14'55" E Longitude, in Survey of India Topo Sheet No. 64 O/1, at an elevation of 260 m AMSL. Three Reserve Forest (RF) areas namely, the Rabo RF, the Basnajhar RF and Burha Pahar RF are located in the buffer zone at a distance of 0.92 Km, NE, 6.07 km, SW and 6.64 Km, W, respectively. Two Protected Forests namely, Kenmura PF and Bendojhariya PF are located in the buffer zone at a distance of 2.64 km., SW and 5.11 Km, SW respectively. No river passes through the existing plant area. Rain water drainage has been laid out in the existing plant. 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 configuration of the steel plant is as under:

S.N.	Unit	Capacity (MTPA)	Units presently under operation
1	Sponge Iron Unit	0.70	0.50
2	Blast Furnace	1.00	0.70
3	Ferro Alloy Plant (Submerged Arc Furnace)	0.075	-
4	(Steel Plant) Electric Furnace	1.74	1.20
5	Rolling mill & Pellet	1.20	1.20
6	Power plant (7x120 TPH AFBC+4x35 TPH WHRB)	240 MW	170 MW
7	Palletisation Plant	1.20	1.20
8	Sinter Plant (2 x 0.75 TPA)	1.50	0.75
9	Coal Beneficiation Plant	1.00	1.00
10	DG sets (1x3.8 MVA & 3x1500 KVA)	1x3.8 MVA & 3x1500 KVA	2x1500 KVA

The present proposal is regarding enhancement of production of Pellet from 1.2 million tonnes per annum (million TPA) to 2.2million TPA. The targeted production capacity of the

pellet plant is 2.2 million TPA. The iron ore fines for the plant would be purchased from open market. The iron ore fines transportation will be done through rail & conveyor. The proponent had initially applied for expansion by adding one wet grinding ball mill and one filter press to the existing facility; however, while submitting the reply to Ministry vide letter 07.12.2015 it has been mentioned that one balling disc for producing more green balls will also be added in addition to wet grinding ball mill and filter press.

The total water requirement of the project is estimated as 183 m³/day, out of which 106 m³/day of fresh water requirement will be obtained from the existing source and the remaining requirement of 77 m³/day will be met from the CPP cooling tower blow down. The total power requirement of the project is estimated as 13 MW, which will be obtained from the Captive power plant.

Ambient air quality monitoring has been carried out at 7 locations during 1st to 30th October 2015 and the data submitted indicated that PM₁₀ ranges from 36.3 µg/m³ to 83.4 µg/m³, PM_{2.5} ranges from 20.8 to 47.4 µg/m³, SO₂ ranges from 6.9 to 18.1 µg/m³ and NO_x ranges from 8.0 to 27.4 µg/m³. The environmental monitoring has been carried by Min Mec R&D Laboratory, New Delhi which is MOEFCC recognized & NABL accredited Consultant. Due to replacement of fuel oil by coke breeze and blast furnace gas as fuel, the sulphur dioxide emission will reduce.

The Public hearing of the integrated steel plant, of which the existing pellet plant is a part, was held on 04.08.2007 for production of 1.2 million TPA of pellets. The existing project had been granted clearance on 26.12.2007. Since the committee agreed to consider the proposal under section 7(ii) of EIA Notification, 2006, therefore, PH was exempted for the project.

The capital cost of the project is Rs. 99 Crores and the capital and recurring cost for environmental protection measures is a part of the existing integrated steel plant. The proponent has mentioned that there is no court case to the project or related activity.

The project was earlier appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its meeting held on 2-3 July, 2015 and desired the submission of the following information:

- i. Analysis of data for emission of all the stacks for the past 1 year.
- ii. Ambient air quality monitoring for one month and submit the information to the Ministry.
- iii. Detailed note on production of pellet to the capacity of 2.2 MTPA.
- iv. Additional pollution load due to increase in production of pellet.

The Project Proponent has submitted the above information vide letter No. MIEL/HO/BD/CG-16 dated 7th December, 2015 and based on the information the proposal was reconsidered by the Committee and desired additional information on the following to further consider the project under clause 7 (ii) of EIA Notification, 2006:

- (i) As there is an increase of about 80% in the production over the rated capacity of pellet plant, the Regional Office of the Ministry should inspect the project site and verify that no additional equipments are being installed to increase the rated production capacity of pellet plant from 1.2 MTPA to 2.2 MTPA.

- (ii) Since the earlier Environment Clearance was accorded for integrated steel plant on 26.12.2007, the Committee has desired that the cumulative impact of various facilities within the integrated steel plant vis-a-vis the proposed capacity enhancement of pellet plant should be assessed and a report submitted by the project proponent.
- (iii) The project proponent should provide specific information along with facts about the incremental pollution load due to the proposed expansion which should be duly certified by the State Pollution Control Board.

3.3.2 Proposed 4.0 MTPA Iron Ore Beneficiation Plant at Bacheli Complex, District South Bastar, Dantewada and 150 Km slurry pipeline system from Bacheli to Nagarnar, District Bastar, Chhattisgarh of M/s National Mineral Development Corporation (NMDC) [J-11015/45/2014-IA.II(M)]

The proposal of M/s. NMDC Limited is for installation of Iron Ore Beneficiation plant to produce 4.0 MTPA Iron Ore concentrate in slurry form at Bacheli, Tehsil Dantewada, District South Bastar Dantewada, Chhattisgarh and for laying 150 Km Slurry Pipeline System from Bacheli to Nagarnar, near Jagdalpur, District Bastar, Chhattisgarh was initially received in the Ministry on 24.1.2014 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Non Coal Mining) during its 18th meeting held on 21.3.2014 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed TORs to the project on 5.5.2014.

Based on the TORs prescribed to the project, the project proponent submitted an online application dated 16.10.2015 (Proposal No: IA/CG/MIN/22530/2013) for Environmental Clearance to the Ministry. The proposal was considered in the 1st meeting of the re-constituted EAC (Non Coal Mining) held on 22.12.2015, wherein the committee noted that “The proposal does not involve the mining component therefore; the committee was of the view that the proposal shall be referred to the Industry-I sector for further consideration of the proposal as per EIA Notification 2006 as it is a standalone beneficiation plant project”.

The project of M/s. NMDC Limited located in Village Bacheli, Tehsil Dantewada, District South Bastar Dantewada is for setting up of a new Iron Ore Beneficiation Plant for production of 4 million tones per annum of Iron ore concentrate in slurry form at Bacheli, District. South Bastar Dantewada and 150-Km long Slurry Pipeline System of 22” dia for transportation of iron ore concentrate in slurry form from Bacheli to Nagarnar, near Jagdalpur, District Bastar, Chhattisgarh. The iron ore concentrate in slurry form after filtration shall be used as raw material for making Pellets at proposed Pellet plant at Nagarnar near Jagdalpur, District Bastar, Chhattisgarh.

The total land required for the Iron Ore Beneficiation Plant is 33 ha, which is forest land. Stage-1 Forest Clearance under Forest (Conservation) Act, 1980 obtained for diversion of 33.00 ha forest land from MoEFCC, RO, Nagpur *vide* letter No. FC-II/CH-17/2015-NGP/431 dated 2.1.2015. The slurry pipeline shall be laid beside the road to maximum extent feasible and it will be detoured major towns such as Dantewada, Geedam and Jagdalpur. The pipeline will be laid completely underground at a depth of 1.5 m from the ground level. The corridor for ROU/ROW

is 30m width and 59 villages come under slurry pipeline corridor. The topography of the Iron Ore Beneficiation Plant area is slightly undulating and falls in SOI topo-sheet number E44J2 at an elevation of 576m AMSL and corner co-ordinates of the plant boundary are 18°41'14.23" N, 81°14'36.32" E, 18°41'31.90" N, 81°14'31.22" E, 18°41'41.07" N, 81°14'41.16" E, 18°41'37.50" N, 81°14'50.99" E, 18°41'24.77" N, 81°14'55.22" E, 18°41'15.71" N, 81°14'40.76" E. The co-ordinates of slurry pipeline at end point i.e Nagarnar are 19°04'56.02" N, 82°11'20.59" E and falls in SOI topo-sheet number E44E4 and elevation varies between 329.25m to 774.797m AMSL.

It has been reported that no person resides in the core zone of the project hence no displacement of persons and R&R is involved. GoI published Gazette Notification under Petroleum and Mineral (Acquisition of land users) Act 1962 on 23.8.12 to lay the slurry pipeline. The online Forest Clearance application under Forest (Conservation) Act, 1980 for diversion of 109.254 ha forest land falling within slurry pipeline corridor is submitted to the Ministry. Small seasonal nalla is flowing in the beneficiation plant area, which will be diverted. There are 3 rivers, 5 canals & 61 nalla /drain crossings in the course of Slurry Pipeline. No modification / diversion proposed. The rivers would be crossed using HDD methods, which would install the pipeline well below the active river bed (below scour depth). As a result, direct disturbance to the river bed, fish, aquatic animals and plants, and river banks would be avoided.

There is no Protected Area viz Wild Life Sanctuaries National Parks etc. within 10km of the beneficiation plant area. The proposed slurry pipeline passes through Dantewada and Bastar forest divisions. In Bastar District, about 10km length of pipeline is falling within the Eco-Sensitive Zone of 10km zone (8.2 Km approx. Away) from the boundary of Kanger National Park. The application has been submitted to the Chief Conservator Forests (Wildlife), Jagdalpur on 9.5.15 for obtaining necessary approval. The CCF (WL), Jagdalpur has recommended and forwarded the application to CWLW, Chhatisgadh for further necessary action. The authenticated list of flora and fauna provided through the study reporting presence of no schedule-I fauna in the Core area. However Sloth bear (mammal), Land monitor (lizard) and Indian python (snake) were reported in the buffer zone. Wildlife Conservation Plan for entire Dantewada Forest Division has been prepared and got approval of CWLW, Raipur on 7.12.13 for total financial outlay of Rs.15.50 Cr.

The targeted production capacity of the Iron Ore Beneficiation Plant is 4 million TPA. The ore for the plant would be procured / obtained from existing iron ore mining project, Deposit-5 of NMDC Limited (3.740 MTPA Iron ore fines) and the required slimes (1.00 MTPA) from the existing tailing pond-1 at Bacheli through conveyors. The finished product i.e iron ore concentrate in slurry form shall be transported through pipeline from Bacheli to Nagarnar.

The ground water table reported to be 4.71-m below the land surface during the post-monsoon season and 6.76-m below the land surface during the pre-monsoon season. The makeup water requirement will be around 656 m³/day and water source will be River Sabari near Tiria at Nagarnar. A separate pipeline will be laid in slurry pipeline trench from Nagarnar to Bacheli for supplying water from Nagarnar to Beneficiation plant at Bacheli. The power requirement of the project is estimated as 34.55 MVA, which will be obtained from CSPDCL Grid substation. Besides, 2 DG sets of 1000 KVA each (one for ore beneficiation plant and one for slurry pipe line system) will be considered as stand by.

Ambient air quality monitoring has been carried out at 12 locations during 1/3/2014 to 31/5/2014 and the data submitted indicated that PM₁₀ ranges from 45.3µg/m³ to 75.8µg/m³, SO₂ ranges from 7.0 to 17.74 µg/m³ and NO_x ranges from 15.0 to 29.1 µg/m³. The results of the modeling study indicate that the maximum increase of GLC for the proposed project due to DG sets is 1.15364 µg/m³ with respect to the PM₁₀ and 3.80122 µg/m³ with respect to the NO_x.

It has been envisaged that suitable compensation for affected crop land owners shall be paid while laying slurry pipeline corridor.

It has been reported that a total of 0.74 million tons per annum of waste (lean tailings) will be generated due to beneficiation plant, which will be impounded in existing tailing dam-1 and 2. Intermediate dykes will be constructed within tailing dams for storage of lean tailings so as to avoid direct contact with the slimes already present in tailing dams. It has been envisaged that an area of 10.75 ha of the plant premises will be developed as green belt to attenuate the noise levels and trap the dust generated due to the project development activities.

Two public consultations were held on 29.4.2015 at Dantewada for South Bastar Dantewada District and on 4.7.2015 at village Tokapal for Bastar District for setting up of 4.0 MTPA Iron Ore Beneficiation Plant at Bacheli along with slurry pipeline from Bacheli to Nagarnar under the EIA notification 2006. The issues raised during public hearing *inter-alia* include land use rights, compensation for affected crop land and owners, development works in the affected village, etc.

The capital cost of the project is Rs 1595 Crores and the capital cost for environmental protection measures is proposed as Rs.370 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs.20 Lakhs. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held, the Committee unanimously decided to recommend the project for environment clearance subject to stipulation of the following specific conditions and any other mitigation measures, as prescribed by the Ministry for environment protection:

- i. The project proponent shall install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- ii. Prior clearance from the Standing Committee of the National Board for Wildlife shall be obtained due to the location of the project in the Eco sensitive zone of the Kanger National Park, before starting any activity relating to the project at site. All the conditions stipulated by the Standing Committee of the National Board for Wildlife shall be effectively implemented in the project. It shall be noted that this clearance does not necessarily implies that wildlife clearance shall be granted to the project and it should be noted that your proposal for wildlife clearance shall be considered by the competent authorities on its merit. The investment made in the project, if any, based on environment clearance granted to the project, in anticipation of the clearance from wildlife point of view shall be entirely at the cost and risk of the project proponent and Ministry of Environment and Forests shall not be responsible in this regard in any manner.

- iii. The environmental clearance is subject to the grant of forestry clearance.
- iv. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be adhered to.
- v. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- vi. Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.
- vii. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.
- viii. The Pipeline shall be laid around 1 to 1.5m below ground level.
- ix. The pipeline project shall not disturb any natural stream coming across the alignment of the pipeline. The rivers and major streams shall be crossed using HDD methods, which shall install the pipeline below the active river/stream bed (below scour depth). The minor streams shall also be protected. Direct disturbance to the river bed, fish, aquatic animals and plants and river banks shall have to be avoided.
- x. Small seasonal nallas flowing in the beneficiation plant area shall be systematically diverted.
- xi. Lean tailings generated in the process shall be impounded in existing tailing dams. Intermediate dykes shall be constructed within tailing dam for storage of lean Tailings so as to avoid direct contact with slimes already present in tailing dams. Clear water shall be allowed to discharge into down stream nallas through decanting system provided in tailing dams.
- xii. At the terminus of the pipeline at Nagarnar, the ore slurry shall be filtered. The recovered filtered water shall be used for industrial purposes in the plants. For transportation of 4 MTPA iron ore concentrate, shut down-restart mode shall be adopted for reduction in water & power requirement as compared to normal operation in batch mode.
- xiii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act whichever are more stringent.

- xiv. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and quarterly reports regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.
- xv. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For this purpose, the schedule of health examination of the workers should be drawn and followed scrupulously.
- xvi. A time bound action plan shall be submitted to reduce solid waste generation due to the project related activity, its proper utilization and disposal.
- xvii. A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xviii. Green belt shall be developed by planting native and broad leaved tree species in consultation with local DFO, local community and as per CPCB guidelines.
- xix. The Company shall submit, within three months, their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xx. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xxi. The project proponent shall provide for LED lights in their offices and residential areas.
- xxii. At least 2.5 % of the total cost of the project shall be earmarked for the Enterprise Social Commitment (ESC) based on issues raised during public consultation, local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxiii. The proponent shall prepare a detailed CSR Plan for the next 5 years including annual plans for each year for the existing-cum-expansion project, including village-wise, sector-wise (Health, Education, Sanitation, Skill Development and Infrastructure activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% of annual profits as provided for under Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the

annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to the Regional Office of the Ministry. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

- xxiv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical and health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

3.3.3 Cement manufacturing unit of M/s Mehboob Cement Industries Pvt Ltd at village Wuyan Bala, Tehsil – Pampore, Dist – Pulwama, Srinagar, Jammu & Kashmir [J-11011/247/2015-IA.II(I)]

Consideration of the proposal was deferred by the committee as it agreed to the project-proponent's request for deferment of the discussions. The proposal may be considered in the next EAC meeting.

3.4 FURTHER CONSIDERATION

3.4.1 Proposed Ferro Alloy Plant (5x11 MVA) to manufacture 1,18,000 TPA Fe- Mn and Manganese Ore Sinter Plant (2x500 TPD) to manufacture 3,30,000 TPA Mn- Sinter along with Captive Power Plant (2x30 MW – CFBC based) at Mouza: Ghutgaria, Barjora, District Bankura, West Bengal by M/s Brahm Energy Pvt. Ltd. –[J-11011/304/2013-IA-II (I)]

The proposal was earlier considered during the 41st meeting of Expert Appraisal Committee held on 1st – 2nd June, 2015 when the Committee had desired additional information on the following for further consideration of the proposal:

- i. A site visit should be conducted by the RO, Bhubaneswar and submit the EC compliance report to the Ministry.
- ii. Provision of Green belt should be provided all around the periphery of the project site and the layout plan should be resubmitted.
- iii. Data presented in the EIA report for air monitoring should be rechecked BY collecting one month data and submitted to the Ministry
- iv. Video clipping of the public hearing should be sent by the WBPCB to the Ministry
- v. Report on existing environmental status of M/s Dimension steel should be submitted by WBPCB w.r.t air pollution.

The Proponent vide letter No. 249-7/WPBD-Cont(4828)/11 dated 13th October, 2015 submitted the information based on which the project was considered by the Committee. The Committee has gone through the compliance report submitted by the Regional Office, Bhubaneshwar and was not satisfied with the response submitted by the project proponent and desired time-bound commitment for compliance of the conditions. The green belt development plan has also not satisfactory. The Committee has also noted that the project proponent has not done proper home work to present the case.

Based on the presentation made and discussions held, the Committee had desired following information from the project proponent for reconsideration of the project.

- (i) Commitment from the project proponent for the non-complied conditions of the environment clearance for compliance in time bound manner.
- (ii) Commitment from the proponent with time line for restart of the old plant which is presently shut down.
- (iii) Requirement of the coal, its linkages and mode of transportation should be clearly provided.
- (iv) The green belt development plan should be revised and improved. The cost for development of green belt should also be revisited and submitted with the revised plan.
- (v) The bio-diversity study has provided in the EIA EMP report should be rechecked and revised if required.
- (vi) Revisit the cost component of the project.

3.4.2 Expansion from 3,45,000 TPA of Pig Iron Production to 5,00,000 TPA Hot Metal production and 10 MW waste heat recovery power plant of M/s Tata Metaliks Limited at Gokulpur Village, PO Samraipur, Tehsil Kharagpur, District Pashchim Medinipur, West Bengal.[F. No. J-11011/377/2013-IA II (D)]

The proposal was earlier considered in the 43rd meeting of the Expert Appraisal Committee held on 2nd – 3rd July, 2015 and first meeting of reconstituted EAC held on 18th to 20th November, 2015. After detailed deliberations, the committee was of the opinion that the Regional Office of MoEFCC should be requested to verify the compliance status submitted by the project proponent by inspecting the site and provide comments to the Ministry. The matter would be further considered once the comments of Regional Office are received by the Ministry. The Project Proponent vide letter dated 8th January, 2016 requested to consider their case as the site visit was conducted on 24th July, 2015. It was further informed by the PP that the Regional Office informed them that they do not have any other comments to offer on the compliance status.

The Committee is of the opinion that since the site visit was recommended in the meeting, the Regional Office should conduct a site visit and the report of compliance should be submitted to the Ministry for further consideration of the proposal by the Committee. Committee advised Ministry to send a communication in this regard to the regional office.

3.5 ANY OTHER ITEM

3.5.1 Increase in capacity of liquid steel production from 6.3 MTPA to 7.3 MTPA by revamping and augmentation of existing facilities for the EC granted for ‘Expansion of Hot Metal (Steel Plant) from 4.0 to 6.5 million tonne per annum at Vishakapatnam, AP by M/s Rashtriya Ispat Nigam Limited – [F.No – J-11011/196/2005-IA-II(I)]

The proposal for revamping and augmentation of existing facilities for increase in capacity of liquid steel production from 6.3 MTPA to 7.3 MTPA was placed in the agenda of

33rd meeting of EAC held on 10th – 11th February, 2015, however, the PP did not attend the meeting.

It has been noted that the environment clearance for the project of expansion of hot metal (Steel Plant) from 4.0 to 6.5 million tonne per annum at Vishakapatnam, AP by M/s Rashtriya Ispat Nigam Limited was granted by the Ministry *vide* its letter No.J-11011/196/2005-IA-II(I) dated 11.08.2005. The Committee noted that the present proposal for expansion of liquid steel production from 6.3 MTPA to 7.3 MTPA cannot be considered as a case of amendment of EC, as the production is increasing from 6.3 MTPA to 7.3 MTPA. This enhancement in capacity will also enhance the capacities of the following other production facilities:

- i. Coke Ovens and By-products Recovery Plant (COBP) - from 2.78 to 3.1 MTPA
- ii. Sinter Plant - from 8.95 to 10.53 MTPA
- iii. Blast Furnace - from 6.5 to 7.5 MTPA
- iv. LD Shop - from 6.3 to 7.3 MTPA
- v. Saleable Steel - from 5.72 to 6.57 MTPA

Sl. No.	Plant Facilities	Total capacity, EC obtained for	Units Commissioned	Units yet to commission
1	Coal Washery	0.9 MTPA	-	0.9 MTPA
2	Coke Oven(Non recovery with Dry Quenching)	0.2 MTPA	-	0.2 MTPA
3	Pellet Plant	0.6 MTPA	0.6 MTPA	-
4	Sinter Plant	2 X 35 m ²	-	2 X 35 m ²
5	Oxygen Plant	1 X120 TPD	1 X 400 m ³ /hr	-
6	Lime Plant	1200 TPD	-	1200 TPD
7	DRI unit	2X 100 TPD (existing) 2 X 350 TPD 1 X 100 TPD	2 X 100 TPD 3 X 300 TPD (capacity same & NOC obtained from WBPCB)	-
8	MBF	2 X 380 m ³	-	2 X 380 m ³
9	Induction Furnace (IF)	-	3 X 25 T	-
10	EAF+AOD+CCM	1 X 50 T 1 X 50 T 1 X 40 T	1 X 45 T	1 X 50 T 1 X 40 T
11	SAF (Ferro Alloy Plant)	4 X 9 MVA 2 X 9 MVA	2 X 9 MVA	4 X 9 MVA
12	Rolling Mill	0.3 MTPA 0.3 MTPA 0.25 MTPA	0.3 MTPA 0.25 MTPA	0.3 MTPA
13	CPP (WHRB)	34 MW	18 MW 4 MW	12 MW
14	CPP (CFBC/AFBC)	2 X 62.5 MW	37 MW	90 MW

As far as consideration of proposal under clause 7(ii) of EIA Notification, 2006 is concerned, the Committee noted that, although the increase in the production capacity is 15.8%, however, the proposal still cannot be considered under the clause 7(ii) of the EIA Notification, 2006, as the earlier clearance was accorded prior to 2006 Notification.

Based on the presentation made and discussions held, the Committee recommended to reject the proposal in its present form and advised the proponent to apply afresh for the ToRs.

3.5.2 Integrated Steel Plant (0.85 MTPA) along with Captive Power Plant (160 MW) at ADDA Industrial Estate, Village Mondalpur, Jamuria, District Burdwan, West Bengal by M/s Super Smelter Ltd. regarding Extension of validity of Environment Clearance [F. No J-11011/86/2008-IA.II (I)]

Environmental Clearance for the project was granted by the Ministry vide letter No. J-11011/86/2008-IA II (I) dated 1st August, 2008. Project Proponent *vide* online application No. IA/WB/IND/30645/2008 dated 03.09.2015 applied for extension of validity of EC for further period of 3 years. It has been noted that some units have already been commissioned, however some units are yet to be commissioned. Following table present the existing status of the project:

As explained by PP, the delay caused in the implementation of the project is due to the financial & market conditions. Project Proponent could not complete the total configuration, which was approved in the above Environmental Clearance. After recovery of Steel Market, Project Proponent has again approached financial agencies for financing the project for which they have agreed.

The Committee noted that Environmental Clearance for the project was granted by the Ministry on 1st August, 2008, however, Project Proponent made online application on 03.09.2015, i.e. after 33 days of expiry of 7 years period.

The Committee recommended the project for the extension of validity of environment clearance No. J-11011/86/2008-IA II (I) dated 1st August, 2008 for further period of 3 years subject to its approval for the delay caused in applying for the extension of validity of EC from the competent authority according to amendment Notification dated 29th April, 2015.

3.6 CASE FOR TERMS OF REFERENCE (TOR)

3.6.1 Environmental Clearance for installation of furnaces (6 numbers) within both the existing cement mill and roller press circuits of Clinker Grinding unit-I&II located by M/s Shree Cement Limited at SP3 II/A1; RIICO Industrial Area, Khushkhera, Tehsil-Tijara, Distt.-Alwar, Rajasthan [F. No J-11011/249/2015-IA.II (I)]

The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. For this purpose, the project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(b), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

M/s. Shree Cement Ltd. proposes to install furnaces (6 Nos.) within both the existing cement mill and roller press circuits. Due to silt and moisture contents in gypsum and moisture in fly ash, entire circuit gets jam and need frequent cleaning which in turn disturb the housekeeping and frequent changing of dust collector bags. Hence for better environmental management, it is proposed to set-up furnaces (6 nos) to supply the hot air in cement mill and roller press circuit to remove the moisture contents from raw materials which will improve the efficiency of the bag filters, reduce the fugitive emission, improve housekeeping and ensure smooth operation of cement mill.

The proposed unit will be at SP3 II/A1; RIICO Industrial Area, Khushkhera, Tehsil-Tijara, District Alwar, Rajasthan. Existing Plant Area is 10.45 ha and no additional land is required for the installation of furnaces as the same will be installed within the existing plant premises. Out of the total plant area, 3.54 ha (i.e. 33%) has been developed under green belt/plantation. Total project cost is approx Rs. 30 lacs. No additional manpower will be required.

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

Name of Unit	No. of Units	Capacity of each unit	Production Capacity
Furnaces	6	50m ³ /min Hot Air	300m ³ /min Hot Air

The electricity load of 66 kw will be procured from Rajasthan Vidyut Vitaran Nigam Limited (RVVNL). Proposed fuel requirement for project will be 15 TPD (Coal and petcoke) and lime will be 4 TPD. Requirement would be fulfill from local market. Fuel consumption will be mainly Coal and petcoke. No additional water will be required

After detailed deliberations, the Committee prescribed following specific TORs for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2:**

- i. Public hearing for the project is exempted for the project as the project is located within the Notified Industrial Area.
- ii. The Project Proponent would furnish a copy of notification indicating the location of their project within the notified industrial area.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

3.6.2 Proposed Expansion (120,000 TPA to 320,000 TPA) (Phase 1 – 40000 TPA & Phase 2 – 160000 TPA) of Asbestos Cement Sheet Plant by M/s Visaka Industries Limited at Kannawan Village, Bacchranwan Gram Panchayat, Maharajganj Tehsil, Raebareli District, U.P. State.

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons for his absence by the applicant.

29th January, 2016/Friday (Narmada)

3.7 ENVIRONMENTAL CLEARANCE (EC)

3.7.1 Cement Plant Unit-II (2.5 MTPA) with Clinker Production Capacity (2.5 MTPA) of M/s Sree Jayajothi Cements Ltd. (Subsidiary of My Home Industries) at village Yanakandla, Mandal Banaganapalle, Dist. Kurnool, A.P. [F.N. J-11011/225/2014-IA.II(I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (B.S. Envi – Tech Pvt. Ltd.) gave a detailed presentation on the salient features of the project. The proposal was initially received in the Ministry on 19.05.2014 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC (I)] during its meeting held on 30.07.2014 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry had prescribed TORs to the project on 22.10.2014. Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 12.01.2016.

The project of M/s Sree Jayajothi Cements Limited located in Yanakandla Village, Banaganapalle Mandal, Kurnool District, Andhra Pradesh is for increasing the Clinker production from 2.2 MTPA to 4.7 MTPA and cement production from 3.2 MTPA to 5.7 MTPA by installation a new Unit i.e Unit - II of 2.5 clinker production capacity with cement production of 2.5 MTPA. The total land required for the project is 67.58 ha, owned by PP. Vacant area of 6 ha will be utilized for Unit-II, which is within the existing cement plant. No additional area will be required for expansion. No R&R is required. No Forest area is involved. The topography of the area is plain. (flat/undulated) and the area is reported to lie between 15°21'38.11" - 15°22'2.47"N Latitude and 78°12'48.13" - 78°13'26.02"E Longitude in Survey of India topo sheet No. 57 I/3, at an elevation of 240 m AMSL. No river passes through the project area. It has been reported that no water body exists around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed. 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.

Dry process of cement manufacture utilising the pre-calciner technology will be adopted. The clinkerisation process along with the technological advances in the area of grinding, homogenization, pre-calciner as well as packing of cement will be incorporated

The limestone requirement for the new unit is 0.505 MTPA and will be met from the existing mine as well as the newly identified mining lease of the proponent i.e., My Home Palkur Limestone Mine. Additional clinker produced from the plant will be dispatched to Grinding Unit of the group.

The ground water table is reported to range between 20-40 m below the land surface

during the post-monsoon season and 10-15 m below the land surface during the pre-monsoon season. The present water consumption of the cement plant including the residential colony is about 1180 m³/day. Water for the plant is sourced from surface water i.e., Srisailem Right Bank Canal. Additional water requirement of the proposed Unit-II is 620 m³/day. PP has obtained permission from the Irrigation & C.A.D (PW – Reforms) Department, Government of Andhra Pradesh for the drawl of 3200 m³/day from SRBC/GNSS canal vide G.O.Ms.No.71 dated 08.08.2013. The power requirement of the project is estimated as 35 MW, which will be obtained from the grid.

Ambient air quality monitoring has been carried out at 8 locations during winter season 2014-15 viz, December 2014, January and February 2015 and the data submitted indicates that PM₁₀ ranges from 53.8 µg/m³ to 62.0 µg/m³, PM_{2.5} ranges from 24.5 to 29.4 µg/m³, SO₂ ranges from 11.7 µg/m³ to 14.8 µg/m³ and NO_x ranges from 12.5 µg/m³ to 15.5 µg/m³. The results of the modelling study indicates that the maximum increase of GLC for the proposed project is 5.54 µg/m³ with respect to PM₁₀, 1.35 µg/m³ with respect to SO₂, 6.64 µg/m³ with respect to NO_x.

The dust collected in the air pollution control equipment in the cement plant is recycled back to the process. Hence no solid waste which requires disposal is generated from the plant. Refractory bricks are one of the solid wastes generated from the kiln section. Due to wear and tear, the proponent will replace the refractory bricks once in a year. These bricks due to high recycling value are being disposed to outside agencies.

The Public hearing of the project was held on 17.12.2015. The issues raised during public hearing *inter alia* include employment opportunities for the local villagers, Control of pollution from the existing plant and also advanced measures in the proposed expansion project, development of surrounding villages under CSR activity, laying of CC roads, underground drainage, providing proper disposal of garbage, development of schools, providing ambulance etc.

The capital cost of the project is Rs. 630.0 Crores and the capital cost for environmental protection measures is proposed as Rs. 45.0 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 2.0 crores. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held, the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- ii. The Standards issued by the Ministry vide G.S.R. No. 612 (E) dated 25th August, 2014 regarding cement plants with respect to particulate matter, SO₂ and NO_x shall be followed.

- iii. Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control viz Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill. Low NO_x burners shall be provided to control NO_x emissions. Regular calibration of the instruments must be ensured.
- iv. Efforts shall be made to achieve power consumption of 70 units/tonne for Portland Pozzolona Cement (PPC) and 95 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- v. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- vi. AAQ Modelling shall be carried out based on the specific mitigative measures taken in the existing project and proposed for the expansion project to keep the emissions well below prescribed standards.
- vii. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines/Code of Practice issued by the CPCB in this regard shall be followed.
- viii. Arsenic and Mercury shall be monitored in emissions, ambient air and water.
- ix. The coal yard shall be lined and covered.
- x. The project proponent shall prepare a report on impact of project on surrounding reserve forests within six months and get it approved from the State Forest Department. A copy of the same should be submitted to the Ministry and its Regional Office.
- xi. The project proponent shall take all precautionary measures for conservation and protection of wild fauna spotted in the study area. A Wildlife Conservation Plan specific to this project site shall be prepared in consultation with the State Forest and Wildlife Department. A copy of the Conservation plan shall be submitted to the Ministry and its Regional Office.
- xii. The project proponent will also provide the latest status of the environmental compliances in respect of its existing plant.
- xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of conveyors/rail mode of transport wherever feasible. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.
- xiv. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related

activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.

- xv. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.
- xvi. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office, SPCB and CPCB.
- xvii. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / re-processors only.
- xviii. The kiln shall be provided with a flexible fuel feeding system to enable use of hazardous wastes and other wastes including biomass, etc.
- xix. The proponent shall examine and prepare a plan for utilisation of high calorific wastes such as chemical wastes, distillation residues, refuse derived fuels, etc as alternate fuels based on availability and composition. For this, the proponent shall identify suitable industries with such wastes and enter into an MOU for long-term utilisation of such wastes as per the Environment (Protection) Rules, 1986 and with necessary approvals.
- xx. Efforts shall be made to use the high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly. The PP shall enter into an MOU with units with potential for generating hazardous waste and in accordance with Hazardous Waste Regulations and prior approval of the MPPCB.
- xxi. Green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines. An area admeasuring 5 ha within the plant premises to be used for plantation in addition of 33% existing plantation.
- xxii. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xxiii. The project proponent shall provide for LED lights in their offices and residential areas.
- xxiv. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.

- xxv. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of this program shall be ensured accordingly in a time bound manner.
- xxvi. In addition to the above provision of ESC, the proponent shall prepare a detailed CSR Plan for the next 5 years including annual physical and financial targets for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Skill Development and infrastructure etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xxvii. A Risk Assessment Study and Disaster Preparedness and Management Plan along with the mitigation measures shall be prepared with a focus of Disaster Prevention and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xxviii. To educate the workers, all the work places where dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- xxix. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

3.7.2 Setting up of a new production line of 1MTPA clinker and 1.13 MTPA cement production of M/s Tamil Nadu Cements Corporation Limited (A Tamil Nadu Government Enterprise), at Kairulabad village, Dist. Ariyalur, Tamil Nadu [F. No. J-11011/83/2014-IA-II (I)]

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons for his absence by the applicant.

3.8 FURTHER CONSIDERATION

3.8.1 Proposed Cement Plant of M/s Kanodia Infratech Ltd. Located at Village Kuradi, Tehsil Durgawati, District Kaimur(Bhabhua), Bihar [F.No J-11011/329/2014-IA.II(I)]

The proposal was earlier considered during the 1st meeting of Expert Appraisal Committee held on 18th to 20th November, 2015 when the Committee had desired additional information on various issues. The Proponent vide letter No 'Nil' dated 6.01.2016 submitted the additional information.

Based on the information submitted, presentation made and discussions held, the Committee decided to recommend the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The project proponent shall install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- ii. The Standards issued by the Ministry vide G.S.R. No. 612 (E) dated 25th August, 2014 regarding cement plants with respect to particulate matter, SO₂ and NO_x shall be followed.
- iii. Efforts shall be made to achieve power consumption of 70 units/tonne for Portland Pozzolona Cement (PPC) and 95 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- iv. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- v. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines/Code of Practice issued by the CPCB in this regard shall be followed.
- vi. Pumps and hydrants should be installed in the fire tank for fire fighting.
- vii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by use of conveyors/rail mode of transport wherever feasible. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.
- viii. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.
- ix. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

- x. Green belt shall be developed in 33% of the project area within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, along road sides etc. by planting native and broad leaved species in consultation with local DFO and local communities as per the CPCB guidelines.
- xi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.
- xii. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.
- xiii. The proponent shall prepare a detailed CSR Plan for next 5 years for the existing-cum-expansion project, which should include village-wise, sector-wise (Health, Education, Sanitation, Skill Development etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xiv. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xv. The project proponent shall provide for LED lights in their offices and residential areas.
- xvi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

3.8.2 Proposed Iron Ore Pelletisation Plant (1.2 MTPA), iron Ore Beneficiation Plant (3 MTPA) and producer Gas Plant (2 x 25,000Nm³/hr) of M/s Gulf Ispat Ltd. at village Ghughra, Tehsil Sihora, Dist. Jabalpur, Madhya Pradesh regarding Environmental Clearance –[F.No-J-11011/256/2013-IA.II(I)]

The proposal was earlier considered in the 29th Reconstituted Expert Appraisal Committee (Industry) held on 11th and 12th December 2014 and in the 35th EAC meeting held on 26th – 27th March, 2015 and the Committee recommended the proposal for grant of Environment Clearance.

While processing the proposal for environment clearance, it was noted that the land requirement for the proposed project is 32.696 ha (Private – 30.270 ha and Govt. – 2.426 ha).

Out of the total land, only 4.23 ha of private land has been acquired. The remaining private land of 26.04 ha and Government land of 2.42 ha is yet to be acquired.

According to Ministry's OM dated 7th October, 2014 relating to land acquisition, a copy of preliminary Notification is required with respect to acquisition of Government land and with regard to private land, credible document showing the intent of land owners to sell the land for the project is required.

The PP was informed accordingly by the Ministry. The proponent *vide* letter dated 27.08.2015 submitted the requisite information. The land acquisition details are as under:

S. No.	Particulars	Type of Land		Total	Remarks
		Private Land (ha)	Government Land (ha)		
1.	Required Land	30.27	2.43	32.69 ha	* Acquisition of the remaining 12.25 ha land is under process, of which discussions for purchase of 11.08 ha land is at advance stage.
2.	Land Acquired	20.45	-	20.45 ha	
3.	Land to be Acquired	9.82	2.43	12.25 ha*	

The Committee noted that the proponent has clarified the intent of private and government land availability. The Committee, after detailed deliberations, recommended the proposal for grant of Environmental Clearance with the specific and general conditions as prescribed in the 35th EAC meeting held on 26th – 27th March, 2015.

3.8.3 Proposed Integrated Steel Plant (0.4 MTPA) with 43MW CPP of M/s Rashi Steel and Power Ltd. located at vill. Paraghat and Beltukri, Tehsil Masturi, Dist. Bilsapur, Chhattisgarh (Amendment in EC), Bilaspur, Chhattisgarh [F.No-J-11011/466/2010-IA.II(I)]

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered in a subsequent meeting subject to satisfactory explanation of the reasons for his absence by the applicant.

3.9 ANY OTHER ITEM

3.9.1 Modernisation, balancing and Expansion of paper mill (85000 TPA to 100000 TPA) at Amlai, P.O. Amlai Paper Mills, District Shahdol, Madhya Pradesh by M/s Orient Paper Mills. - Seeking EC Amendment for addition of new tissue paper making machine with the capacity of 90TPD [J-I 1011/1142/2007- IA-II(I)]

The environment clearance for the existing facility was accorded vide letter No. J-11011/1142/2007-IA-II(I) dated 19th March, 2008 for modernisation, balancing and expansion of paper mill from 85,000TPA to 1,00,000TPA capacity at Amlai, P.O. Amlai Paper

Mills-484117, District Shahdol, Madhya Pradesh. Subsequently the environmental clearance is amended vide letter No J-11011/1142/2007-IA.II dated 2nd December 2010.

PP has now proposed to install the following facilities under augmentation program:

Item	Permitted levels as per the consent to operate/ Environmental clearance	Existing Facilities	Proposed Facilities	Remarks
Raw materials				
Total Wood (TPA)	2,30,000	1,90,000	1,90,000	No additional pulp will be generated and hence, no additional wood will be consumed.
In house pulp (TPA)	80,000	75,000	75,000	No additional pulp will be generated and hence, no additional wood will be consumed.
Imported pulp (TPA)	Not Applicable	Not Applicable	32000	Imported fibre will be used for manufacturing additional 90 TPD of soft tissue paper in the proposed tissue paper machine
Products				
Paper (writing, printing & color) (TPA)	1,00,000	60,000	60,000	No change from current scenario.
Tissue Paper (TPA)		25,000	55,000	Proposed to install additional new 90TPD tissue paper machine
Total Production	1,00,000	85,000	115,000	Additional marginal increase in Tissue paper production will have insignificant impact on the overall utilities.

It has been noted by the Committee that the proponent sought amendment in environment clearance for addition of new tissue paper making machine with the capacity of 90TPD, which is an expansion of the facility. Therefore this proposal is an expansion proposal and not a case of amendment in the environment clearance. Committee after detailed deliberation noted that since the capacity increase is very marginal, the proponent can apply afresh under clause 7(ii) of EIA Notification, 2006. The project proponent also has to submit the compliance status of the existing environmental clearance and implementation status of the plant.

3.9.2 Integrated Steel Complex at Sy. No. 158, 159, 160, 163-168 & 171 at Village Madhavaram and Sy. No. 13 - 19 at Village Rassamani, Mandal Mantralayam, District Kurnool, Andhra Pradesh by M/s Maruti Ispat and Energy Pvt Ltd- Extension of Validity of E.C dated 2nd January 2009. [J-11011 / 1149 / 2007 - IA II (I)]

Environmental Clearance for the existing plant was accorded by the Ministry vide letter No J-11011 / 1149 / 2007 – IA II (I) dated 02/01/2009. The proponent *vide* online application No. IA/AP/IND/21237/1910 dated 31st December, 2015 applied for extension of validity of EC. The PP has applied after a period of 5 years, however within a period of 7 years. The implementation status of the plant is provided in the following table:

S.No.	Units	Plant Configuration	Production Capacity	Status of Implementation	
1	Palletization plant (Pellets)	1 x 3,000 TPD	9,00,000 TPA	Not Started	
2	Sintering Plant (Sinter)	1 x 2,000 TPD	6,00,000 TPA	Not Started	
3	Sponge Iron Kilns (Sponge Iron)	6 x 100 TPD	1,80,000 TPA	2 x 100 TPD – is in operation 2 x 100 TPD – Civil work started Remaining 2 x 100 TPD to be implemented	
4	Mini Blast Furnace (Hot Metal / Pig Iron)	1 x 380 m ³	2,40,000 TPA	Not Started	
5	Induction Furnace (Billets from CCM)	2 x 40 TPH	2,40,000 TPA	Not Started	
6	Billets Casting Machine / Continuous Casting Machine	1 x 1,000 TPD	3,00,000 TPA	Not Started	
7	Rolling Mill	1 x 1,000 TPD	3,00,000 TPA	Not Started	
8	Power Generation	Through WHRB	6 x 10 TPH	20 MW	8 MW WHRB – Civil work started
		Through FBC	2 x 100 TPH	2 x 18 MW	Not Started
9	Ladle Furnace	1 x 40 TPH	-----	Not Started	
10	Oxygen plant	---	97,92,000 SM ³ /annum	Not Started	

It has been informed to the committee that after obtaining the Environmental Clearance, part of the facilities have been implemented. However, PP could not go ahead with the implementation of the unimplemented portion of the above referred EC due to severe recession in steel sector and sluggish market conditions and fall in cash flow of the company during the past few years. The PP has requested for extension of validity of EC for further period of 3 years with effect from 02.01.2015. The proponent has provided implementation schedule for remaining unimplemented units.

The committee after detailed deliberation recommended the proposal for extension of validity of EC for further period of 3 years with effect from 02.01.2016.

3.9.3 Integrated Cement Plant (Cement 1.5 MTPA, Clinker 1,0 MTPA), Captive Power Plant (15 MW) and Limestone mine (1.5 MTPA, 130.34 ha) at Village Pedaveedu and Gundiapalli, Mandal Mathampally, District Nalgonda, Andhra Pradesh by M/s Viswamber Cements Ltd. - Extension of Validity of E.C [J-11011/978/2007-IA-II(I)]

Environmental clearance for the project of M/s Vishwambher Cements Ltd was accorded by the Ministry vide letter No. J-11011/978/2007-IA-II(I) dated 12.02.2009. The project proponent *vide* online application No. IA/TG/IND/35521/2009 dated 22.12.2015 applied for extension of validity of Environment Clearance. The proponent has applied for extension of validity of environmental clearance after a period of 5 years however within a period of 7 years.

For implementation status of the project, the proponent mentioned that they are holding a valid lease deed for mining limestone. Land admeasuring 135 acres had been acquired for setting up of cement plant, power plant and housing colony. Leveling and other land related activity has been already done. Boundary fence, pillars setup and roads have been laid. Approvals for utilities like power and water under single window at various stage of sanction. PP has also submitted the implementation schedule of the project for next 3 years.

It was mentioned that the project could not be implemented due to socio economic condition in the state because of demand for bifurcation lead to uncertainty and pessimism. Banks which gave in principle approval couldn't sanction final approval, owing to the above and specifically as the project was coming up in the hub of Telangana. Due to the above mentioned reasons the financial tie up with institutions could not be completed.

Now in view of the submission of the project proponent that the situation has changed considerably and promoters are confident of implementing the project and the proponent has provided implementation schedule for the project, the committee after detailed deliberations recommended the proposal for extension of validity of EC for further period of 3 years with effect from 12.02.2016.

3.9.4 Expansion of Steel Plant (Sponge Iron Plant, M.S. Billet, TMT Bars/Structural Steels, Ferro Alloy Plant) along with Captive Power Plant (48MW) of M/s B.S. Sponge Pvt. Ltd., at village Taraimal, Post Gerwani, Tehsil Gharghoda, Dist. Raigarh, Chhattisgarh - Extension of validity of Environment Clearance [F. No. J-11011/313/2008-IA II (I)]

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered in a subsequent meeting subject to satisfactory explanation of the reasons for his absence by the applicant.

3.10 CASE FOR TERMS OF REFERENCE (TOR)

3.10.1 Expansion of Sponge Iron Plant from 2x 100 TPD DRI Plant, 8,50,000 TP A Beneficiation Plant, 6,00,000 TP A Pellet Plant and 10MW Power Plant to 2x 100

TPD DRI (Process Modification) along with 1,20,000 TPA SMS, and 1,00,000 TPA Rolling Mill at Badtumkela, PS-Lahunipara, Dist- Sundergarh, Odisha by M/s Vikram Private Ltd. [J-11011/533/2010-IA.II(I)]

The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. For this purpose, the project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(a), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

It has been noted by the Committee that the project was accorded environmental clearance by the Ministry vide letter No. J-11011/533/2010-IA.II(I) dated 26th December, 2012. The project is in the preliminary stage of implementation. The PP has now proposed for expansion of the project by enhancing capacities of certain units as per following table:

Sl. No	Facility	Configuration	Capacity	Product	Enduse
Existing					
1	DRI kiln	2x100 TPD	66,000 TPA	Sponge Iron	Use in IF
Expansion cum Modification					
Phase-I					
1	DRI kiln	2x100 TPD	72,000 TPA	Sponge Iron	Use in IF
2	SMS (IF & LRF with CCM)	2 X 12 T IF 1X30 T LRF 2 Strands	1,20,000 TPA	Hot Billet & Cold Billet	Use in IF & for Sale
3	Rolling mill	0.1 MTPA	1,00,000 TPA	TMT Bar	For sale
4	WHRB	2 MW	2 MW	Power	Use in Own plant
5	AFBC	2X4 MW	8 MW	Power	Use in Own plant
Phase-II					
1	Pelletisation	0.25 MTPA	2,50,000 TPA	Pellet	Use in DRI
Phase-III					
1	Beneficiation	0.85 MPTA	8,50,000 TPA	Beneficiated Iron Ore	Use in Pellet plant
2	Pelletisation	0.35 MTPA	3,50,000 TPA	Pellet	Use in DRI

The Committee noted that the above table presented by the proponent was not clear. The existing and the proposed components are not presented properly in the table and also the table is not clear about the implementation status of the existing project. The Committee therefore

deferred consideration of the project and asked the proponent to submit a clear revised proposal indicating present status of implementation of the project along with expansion proposal.

3.10.2 Proposed 300 TPD stand alone cement grinding unit of M/s. Polar Cements Company at Sy No: 429, Kanipedu Village, Katpadi taluk, Vellore District, Tamil Nadu [F.NoJ-11011/250/2015-IA-II(I)]

The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. For this purpose, the project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(b), under category 'B' of the Schedule of EIA Notification, 2006, however, due to proximity of inter-state boundary near the plant the proposal is appraised at the Central level.

M/s. Polar Cements Company proposes to install a new manufacturing unit for standalone cement grinding unit in two Phases. It is proposed to set up the plant for 300 TPD capacity based on In-house technology. The proposed unit will be located at Sy No: 429, Village Kanipedu, Taluka: Katpadi, District Vellore, State Tamil Nadu. The latitude and longitude of the site are 13°0 '51.98" N and 79°10'38.98" E. Nearest Village is Kandipedu which is located at a distance of 1.4 km and Railway station is located at Katpadi at a distance of 6.5 Km. The land area owned by proponent for the project plant is 1.05 ha out of which 0.35 ha land will be used for green belt development. Total project cost is Rs. 135 Lakhs. Proposed employment generation from the project is 22 direct employment and 15 indirect employment.

Manufacturing Capacities

S.No	Name of Product	Manufacturing Capacity (TPD)		
		Phase I	Phase II	Total
1	Cement	100	200	300

Proposed raw material and fuel requirement for project are clinker, gypsum and Flyash. Requirement would be drawn from Suppliers with in 175 km.

Water Consumption for the proposed project will be 5 KLD and waste water generation will be 0.8 KLD from domestic usage. Domestic waste water shall be sent to septic tank followed by soak pit. No industrial waste water generated. The electricity load of 150 HP will be procured from TNEB, Company proposes to install 1 x 125 KVA DG Set to be used during load shutdown. Fuel consumption will be mainly for DG Set.

After detailed deliberations, the Committee prescribed following specific TORs for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2:**

- i. The Public Hearing to be conducted by Tamil Nadu Pollution Control Board.

- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.
- iv. Connecting road details should be earmarked on the layout map.

Next meeting

It was decided that the next meeting of the Expert Appraisal Committee will be held on 25-26 February, 2016.

The meeting ended with a vote of thanks to and from the chair.

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.
- 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, within 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

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. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
 - ix. Hazard identification and details of proposed safety systems.
 - x. Expansion/modernization proposals:
 - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests 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 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. Landuse 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, PM2.5, SO2, NOX, 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 modeling 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 conveyer-cum-rail transport shall be examined.

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

8. Occupational health

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

9. Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
 - iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
 - iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. Enterprise Social Commitment (ESC)
- i. Adequate funds (atleast 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
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 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 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.

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

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 base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.

LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

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 charging, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.

ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

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

INDUCTION/ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE

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

METALLURGICAL INDUSTRY (FERROUS AND NON-FERROUS)

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Emission from sulphuric acid plant and sulphur muck management.
3. Details on installation of Continuous Emission Monitoring System with recording with proper calibration system
4. Details on toxic metals including fluoride emissions
5. Details on stack height.
6. Details on ash disposal and management
7. Complete process flow diagram describing process of lead/zinc/copper/ aluminium, *etc.*
8. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
9. Details on Holding and de-gassing of molten metal from primary and secondary aluminum, 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

**LIST OF PARTICIPANTS OF EAC (I) IN 2nd MEETING OF EAC (INDUSTRY-I) HELD
ON 28th – 30th December, 2015**

S.No	Name and Address	Position	Attendance	Signature
1	Dr.Chhavi Nath Pandey, IFS(Retired)	Chairman	P	
Members				
2.	Dr. R. K. Jain, Director, Central Pulp and Paper Research Institute	Member	P	
3.	Director, Central Leather Research Institute	Member	A	
4.	Dr. Sunil Pashin, Representative of Indian Meteorological Department	Member	P	
5.	Representative of Central Ground Water Board	Member	A	
6.	Dr. G. Bhaskar Raju	Member	P	
7.	Prof. Naresh Chandra Pant	Member	A	
8.	Dr. Jagdish Kishwan, IFS(Retired)	Member	P	
9.	Dr.G.V.Subrahmanyam	Member	P	
10.	Prof. Arun Pandey	Member	P	
11.	Shri Santosh Raghunath Gondhalekar	Member	P	
12.	Shri Ashok Upadhyay	Member	P	
13.	Shri Vijay Prakash Saha	Member	P	
14.	Dr.Satish C.Garkoti, Scientist'F', MoEFCC	Member Secretary	P	
15.	Shri Amardeep Raju, Scientist 'D', MoEFCC			
