

MINUTES OF 41st RECONSTITUTED EXPERT APPRAISAL COMMITTEE
(INDUSTRY - 1) HELD ON 1st – 2nd June, 2015

VENUE: Indus, Ground Floor, Jal Wing, Indira Paryavaran Bhawan, Jor Bagh, Lodi Road, New Delhi-110003.

- 41.1** Opening Remarks of the Chairman
- 41.2** Confirmation of the Minutes of the 39th Reconstituted Expert Appraisal Committee (Industry) held during– **20th May, 2015**

MONDAY, 1st JUNE 2015

TIME: 1st June, 2015 – 10:30 AM

41.3 ENVIRONMENTAL CLEARANCE (EC)

- 41.3.1** Proposed Mill Development Plan II (MDP II) to increase production of paper, ECF Bleached wood and Bagasse pulp and Captive co-generation power at Tiruchengudu, Namakkal, Tamil Nadu by **M/s Seshasayee Paper and boards Ltd - [J-11011/194/2013-IA.II(I)]**

M/s Seshasayee Paper and boards Ltd –PP and their EIA-EMP consultant (M/s Chola MS) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 11th Meeting of Reconstituted Expert Appraisal Committee held during 26th August to 27th August, 2013 for the preparation of EIA-EMP report. The ToR was awarded by MoEF vide F. No.J-11011/194/2013-IA II(I) dated 15.10.2013 for the preparation of EIA-EMP report. PP submitted the final EIA EMP report vide online application dated 16/04/2015. The proposed project activity is listed at S.No. 5(i) in Pulp & paper industry under Category ‘A’ of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

2. The salient features of proposed project as per the final EIA – EMP report submitted by project authority vide letter referred in above para 1 are as under:

M/s Seshasayee Paper and boards Ltd was accorded Environmental Clearance (EC) for Expansion cum Modernization during 1996 vide (MoEF Ref: J-11011/56/95-IA-II [I] dated 21.05.1996, involving Modernisation and expansion of the integrated pulp and paper from 60,000 tpa to 1,20,000 tpa and Captive co-generation Plant of 40 MW at Odapalli Village, Tiruchengode Taluk, Namakkal Dist, Tamilnadu. The PP now proposes for upgradation of existing paper machines capacity from 120,000 tpa to 165,000 tpa of finished paper, upgradation of existing ECF bleached wood pulp line capacity from 115,500 BD tpa to 145,000 BD tpa, upgradation of existing ECF bagasse pulp line capacity - 35,000 BD tpa (No change in capacity). Increase in Captive Co-generation capacity from 40 MW to 55 MW, installation of a PCC Plant using CO₂ in the flue gas from Lime Kiln and upgradation of Waste Water Treatment Plant (WWTP) to take care of the additional waste water load. No additional land is required for the

project, as the proposed expansion is within the existing plant. The cost of the project is Rs 300 Crores and the Amount allocated for Environmental Projection/Management is Rs 34 Crores. Following table shows the existing and the proposed capacities:

Description	Unit	Existing	Post project	Increase	Proposal
Paper Machines					
Paper production	TPA	1,20,000	1,65,000	45,000	Modernisation / Up gradation
Pulp Mill					
Wood Pulp (bleached)	BD TPA	1,15,500	1,45,000	29,500	Modernisation / Up gradation
Bagasse pulp (bleached)	BD TPA	35,000	35,000	--	No change in capacity
O2 generation	Nm ³ /h	--	400	400	New
PCC plant	TPD	--	100	100	New
Chemical Recovery Plant					
Evaporation plant	TPH of water evaporation	200	250	50	Up gradation/ Augmentation
Recovery Boiler	TPD of black liquor solids	630	950	320	Augmentation and Addition of 2nd ESP
Recausticising plant	TPD of AA	200	200	--	Up gradation
Lime kiln	TPD of lime	200	200	--	No change
Power Plant					
Power Boilers	TPH of steam	117	217	100	Addition of one more coal fired 100 TPH boiler with ESP
Turbo Generators	MW of power	40	55	15	Addition of one 15 MW TG
Wastewater Treatment	m ³ /day	53,000	53,000	--	Up gradation

Following is the details of the raw material required for the project

Input	Units	Existing (Pre-MDP-II)	Post MDP-II	Incremental	Source
Bagasse (Depithed)	BD tpa	57,800	57,800	--	Obtained from Ponni Sugars located adjacent to our mill
Wood	BD tpa	2,27,000	3,17,000	90,000	Additional requirement will be met out from Farm Forestry/ Social forestry in the following areas Trichy, Pudukottai, Karaikudi, Aranthangi, Virudhachalam, Vilupuram, Thirukovilur, Cuddalore etc.

PP mentioned that there will be dedicated Electrostatic Precipitators for control of Particulate Matter (PM) emissions from Power boilers, chemical recovery boilers and lime kiln, covered belt conveyors to transport coal from stock yard to boiler house. The Mill already has Rapid Displacement Heating (RDH) chips cooking system which minimize NCG gas emissions in the digester. As part of the project further NCG control measures will be adopted. SPB has already installed alkali scrubbing system in evaporators for mitigating odour.

Total Fresh water requirement for Existing Operation is 28,000 m³/day and Additional Fresh water for MDP-II 6000 m³/day. Therefore Total Fresh water requirement for post MDP-II is 34,000 m³/day. PP mentioned that they already have Water drawl permission from Cauvery River 68,191 m³/day. PP mentioned that as part of MDP II further water conservation and recycling systems are proposed to be adopted, which will reduce specific water consumption from the current level of 77 m³ /t of paper to 68 m³/t of paper (reduction of around 12%).

SPB has signed MoU with the local farmers to utilize treated wastewater in an area of 2140 Acres. Fly ash generated from the boilers will be stored in silos and sold to Cement industry and also used for making hollow blocks/ compressed bricks. Sludge from the Primary Clarifier of the ETP will be sold to the board manufacturing units

The benefits form the projects will be additional income to the State Exchequer by way of sales tax and Central Government by way of excise duty to the tune of about Rs 22 Crores per annum. Additional direct employment potential to the tune of about 200 persons and creation of indirect employment for about 600 persons. Upliftment of rural economy due to additional plantations and CSR activities benefiting people living in nearby rural areas and farmers

Ambient air quality monitoring has been carried out at 8 locations during 9th December 2013 to 8th March 2014. PM₁₀ concentration ranged from 36.0-98.0 µg/m³, PM₂₅ concentration ranged from 15.0 – 54.5 µg/m³, concentration level of SO₂ ranged from 8.6 – 36.0 µg/m³ and NOx concentration is 7.6 -78.0 µg/m³. The model simulations deal with dispersion of three major

pollutants viz., Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) and Particulate Matter (PM) emitted from the stacks. The maximum incremental ground level concentrations (GLCs) for PM₁₀, SO₂ and NO_x due to proposed units are carried out. The predicted 24 hourly maximum concentrations for PM₁₀, SO₂ and NO_x are found to be 1-2 µg/m³, 10-20 µg/m³ and 1.5-3.0 µg/m³ respectively in proposed scenario.

Public hearing was conducted by TNPCB on 22nd January, 2015 at Lakshmi Thirumanamandapam, No.4, Kumarapalayam, Main Road, Pallipalayam, Namakkal District. The major issues raised are Ayakattur, Odapalli, Pudhupalayam are affected by air pollution, odour nuisance caused by the industry, scarcity of drinking water supply to the villages, river water is polluted due to the mill and also the agricultural lands in the surrounding villages like Odapalli, Pappampalayam, Kokkarayanpattai are affected by using treated effluent of SPB

Based on the presentation made and discussion held, the Committee recommended to defer the project and requested PP to submit the following information for further consideration of the proposal:

- i. Since the treated water is being used in irrigation on the same lands, the committee if of the view that the COD values should be brought down to 150 mg/l in the ETP, this is particularly in view of the fact that all the well water in the area has shown high COD value varying from 50 to 74 mg/l
- ii. Annual report for health status of the workers including audiometric test, respiratory – lung function test, chest x-ray, particularly those involved in the process to be submitted to the Ministry

The report submitted by the PP will be discussed internally and decision shall be taken

41.3.2 Proposed Iron, Steel billets, M.S Bars, Runner Riser, Miss Rolled Bars and Captive Power Plant of **M/s Gallant Metal Ltd.** at village Somakhilai, District Kutch, Gujarat – [F. No - J-11011/52/2013-IA II (I)]

M/s Gallant Metal Ltd. –PP and their EIA-EMP consultant (M/s. Detox Corporation Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 7th Meeting of Reconstituted Expert Appraisal Committee held during 4th – 5th April, 2013 for the preparation of EIA-EMP report. The ToR was awarded by MoEF vide letter No. J-11011/52/2013-IA-II(I) dated 13th June, 2014 for the preparation of EIA-EMP report. PP submitted the final EIA EMP report vide letter No. GML/EC/EIA/2015-16/002 dated 9th April, 2015. The proposed project activity is listed at S.No. 3(a) in Metallurgical industries (ferrous & non ferrous) under Category ‘A’ of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

2. The salient features of proposed project as per the final EIA – EMP report submitted by project authority vide letter referred in above para 1 are as under:

M/s Gallantt metal Ltd has set up an integrated steel plant near Bhachau in Gujarat for manufacture of Sponge iron, Steel billets, M.S Bars, Runner riser, Miss Rolled Bars and captive

power plant. The project is located at Survey no. 175/1, 175/2, 176, 177, 178, 179/1, 179/2, 179/3, 182/1, 182/2, 183/1, 183/2, 184, 185/1, 185/2, 185/3, 185/4, 185/5 Village: Samakhiyali, Taluka: Bhachau Distt: Kutch, Gujarat. Environment clearance of existing project was obtained vide letter no. J-13011/37/2007-IA-II(I) dated on 28th September 2007 from MoEFCC, and consent to operate for existing project was obtained on 8th June 2009 from GPCB. The Existing project activity involves production of sponge iron, Steel billets, TMT, Power plant (AFBC), Power plant (WHRB), Runner and Riser and Miss Rolled Bar. The proposed project site is located within the existing industrial premises. Hence there is no additional land required. The total industrial area acquired by the company is 116 acre. Out of which they have utilized 36 Acres for existing industrial premise & 38.3 Acres for green belt. The proposed structure will be in the existing approved premise. Total Cost of the project is Rs. 75 Crores. The total no. of worker to be employed for the proposed project is 120 (Skilled & Unskilled)

The company now proposes to expand its production capacity within the existing industrial premises. The proposed expansion project is forward and backward integration project to meet the in-house requirement of raw materials as well as the market demand & supply gap. The proposed production capacity for the expansion project is as below:

S. No	Products	Proposed Total Capacity	Equipment details
1	Sponge Iron	49,500 TPA	No additional kiln, Pre heater technology will be installed to enhance capacity
2	TMT	1,58,037 TPA	Direct transfer to rolling mill. No reheating furnace is require.
3	Steel Billets	1,58,400 TPA	2 X 20 TPH
4	Power	8 MW	32 TPH Boiler

Raw Material for the proposed expansion project for Sponge iron plant is Iron ore and Coal; for Billets it is Sponge and Scrap; for the TMT Bars it is MS Billets and for the Power Plant it is coal and coal char.

Sr. No.	Materials	Existing Consumption	Proposed Consumption	Source	Transportation
SPONGE IRON PLANT					
1	Iron ore	2,80,800 TPA	79,200 TPA	Imported	Transported by ships to nearest port and later transported via dumper to site
2	Coal	1,91,700 TPA	49,500 TPA	Imported coal	
BILLETS					
1	Sponge	1,12,500 TPA	1,12,860 TPA	In-house production	---
2	Scrap	90000 TPA	66,660 TPA	Local Market	Transported by Trucks
TMT BARS					

1	MS Billets	1,78,200 TPA	1,63,776 TPA	Inhouse production	----
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Sr. No.	Materials	Existing Consumption	Proposed Consumption	Source	Transportation
POWER PLANT					
1	Coal	137289.6 TPA	50,328 TPA	Imported coal	Transported by ships to nearest port and later transported via dumper to site
2	Coal Char	45230.4 TPA	21564 TPA	Inhouse production	Internal transport by truck

Water will be source from Gujarat Water Infrastructure Limited for the existing as well as proposed facility. No ground water will be utilized for the project activities. The total water consumption for proposed expansion is 300 KL/day. The total waste water generation from the proposed project is 31.5 KL/day

Ambient air quality monitoring has been carried out at 8 locations during March 2013 – May 2013. PM₁₀ concentration ranged from 74 µg/m³ to 98 µg/m³, PM_{2.5} concentration ranged from 44 µg/m³ to 60 µg/m³, concentration level of SO₂ ranged from 5.59 µg/m³ to 10.85 µg/m³ and NO_x concentration is 10.38 µg/m³ to 17.37 µg/m³. The model simulations deal with dispersion of three major pollutants viz., Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) and Particulate Matter (PM) emitted from the stacks. The maximum incremental ground level concentrations (GLCs) for PM₁₀, SO₂ and NO_x due to proposed units are carried out. The predicted 24 hourly maximum concentrations for PM₁₀, SO₂ and NO_x are found to be 4.16µg/m³, 9.18 µg/m³ and 34.15 µg/m³ respectively in proposed scenario.

The major stacks present in the existing plan will be utilized for the proposed expansion project. Only additional one stack will be installed with induction furnace during the commissioning of proposed expansion project. Solid wastes generated from the proposed project activity are Slag, coal char, Total Ash and Accretion Material. The hazardous waste generated for the proposed project is mainly used oil and used ion exchange resins.

Public hearing was conducted for Gallantt Metal Ltd. on 24/2/2015 at Project site of M/s Gallantt Metal Ltd. the major issues raised during the public hearing is employment to the local population.

The RO, Bhopal has conducted the site visit on 17th March, 2015 and report was submitted to the Ministry. It has been observed that many of the conditions are partly complied.

Based on the presentation made and discussion held, the Committee recommended to defer the project and requested PP to submit the following information for further consideration of the proposal:

- i. Submit the data for the health record viz audiometric test, respiratory – lung function test, chest x-ray and agronomic data at the time of joining and the latest data.

- ii. Level of heat, dust and noise of the work environment should be submitted
- iii. Justification should be submitted on the compliance report submitted by RO, Bhopal, that, why many of the conditions of the EC are only partly complied.

41.3.3 Expansion of Ferro Alloys Plant by installation of 1 X 9 MVA Submerged Electric Arc furnace in Phase-I and 6 X 9 MVA Submerged Electric Arc furnace in Phase-II at village Ghutgoria, Distt. Bnakura, West Bengal by **M/s Cosmic Ferro Alloys Limited** – [F. No - J-11011/356/2012-IA II (I)]

The Committee recommended to defer the project and requested PP to present the case based on ToR point wise presentation. The proposal shall be considered in the next EAC meeting scheduled to be held on 2nd – 3rd July, 2015.

41.3.4 Increasing production capacity (from 70 TPD to 150 TPD by using 100 TPD agro pulp and 50 TPD recycled waste paper) of **M/s Rama Shyma Papers Ltd.**, Barielly, U.P. - [F. No - J-11011/51/2012-IA II (I)]

Consideration of the proposal was deferred as the PP did not attend the meeting. The proposal would be considered as and when requested for by the PP.

41.3.5 Proposed 0.1MTPA Tunnel Kiln DRI, 4x8T IF, 0.05 MTPA TMT Bar and 3x4500 Nm³/h Producer Gas Plant of **M/s Kashvi Power & Steel Pvt. Ltd.**, at village Badapokhari, Tehsil Tangi, Dist. Cuttack, Odisha – [J-11011/125/2012-IA-II (I)]

M/s Kashvi Power & Steel Pvt. Ltd –PP and their EIA-EMP consultant (M/s Visiontek Consultancy Services Pvt. Ltd Bhubaneswar) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 35th Meeting of Reconstituted Expert Appraisal Committee held during 26th – 27th April, 2012 for the preparation of EIA-EMP report. The ToR was awarded by MoEF vide letter No. F. No.J-11011/125/2012-IA-II(I) dated 22.05.2012 for the preparation of EIA-EMP report. The period of validity of ToR was extended vide letter dated 12.02.2015 for a period of 1 year. PP submitted the final EIA EMP report vide letter dated 22/05/2015. The proposed project activity is listed at S.No. 3(a) in Metallurgical industries (ferrous & non ferrous) under Category ‘A’ of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

2. The salient features of proposed project as per the final EIA – EMP report submitted by project authority vide letter referred in above para 1 are as under:

M/s. Kashvi Power & Steel Pvt. Ltd. has proposed 0.1 MTPA Tunnel Kiln DRI, 4 X 8 T IF, 0.05 MTPA TMT BAR and 3 X 4500 Nm³/Hr PGP. The proposed project site is having Latitude & Longitude 20° 36’10” N and 85° 58’41” E respectively. Nearest village is Badapokhari at 1 Km, Nearest town is Cuttack which is 17.0Km away. Nearest National Highway is NH5 which is 7.5 km from the site. No National Park/wild life sanctuary is located within 10 km radius of the project site. Total proposed project area is of 16.00 acres. Total cost of the project is Rs. 74.43 Crore. Rs. 4.16 Crore and Rs.0.832 Crore will be earmarked towards capital cost and recurring cost for environmental pollution control measures. A budget of Rs. 3.75 Crore has been

envisaged for CSR activities. The proposed project will provide direct & indirect employment opportunities to the local people of the area. Further, the project will also improve the socio-economic conditions of the people living in the vicinity of the project. Green belt of 5.28 Acre (33 %) will be developed. Following are the details of the proposed plant:

Sl. No.	Proposed Units	Proposed Capacity	Quantity in MTPA	Saleable Quantity in TPA
1	Tunnel Kiln (3Nos.) for production of DRI	3 X 100 TPD	0.1 MTPA	In- House
2	Producer Gas Plant	3x4500 Nm ³ Hr	--	In- House
3	M.S Ingot Plant	4x8T IF	0.1 MTPA	0.05 MTPA Billet
4	TMT Bar Plant	(8 mm to 32 mm dia.)	0.05 MTPA	0.05 MTPA TMT Bar

Iron Ore fines, Coal, Lime Stone and Bentonite are the major raw materials used in the plant process. The unit's saleable product Billets, MS Ingots, TMT Bar. Following table shows the details of raw material required:

Raw Materials	Amount in TPA	Source	Mode of Transportation
DRI (Through Tunnel Kiln)			
Iron ore fines	1,50,000	OMC / Nearby mines from Keonjhar	By Rail / Road Covered and no overloading
Bituminous coal	1,20,000	Coal Fields in India through open market	
Limestone	7500	Nearby Mines in Sundergarh District of Orissa	By Road Covered and no overloading
M.S Ingot Plant			
DRI	100000	In House	-
Scrap	25100	In House/Local Market	
Ferro Alloys	2000	From Market	By Road Covered and no overloading
Pet Coke	1500	From Market	
TMT Bar Plant			
MS Ingot	51600	In House	--
Coal/FO	5500	Coal fields in India	By Rail/Road

Gaseous emission will be controlled by installing air pollution control equipments. Dust suppression will be done by water sprinkling to control fugitive emissions due to transportation activities. Exhaust gas from Tunnel Kiln will be recycled to use heat & gas leaving at less than

100 degree will pass through the Bag filter and to atmosphere through stack. Air pollution from raw material processing unit will be controlled by pulse jet bag filters. Water sprinkling will be done along the haul roads to control dust arising from vehicular movement.

Total water requirement for the proposed project is of 192m³/Day will be sourced from ground water. The water requirement is only for cooling purpose and there would no discharge to the outside area. Domestic discharge from canteens and toilets shall be channelled through proper sewage channels and treated in STP, treated water shall be used for greenbelt development. Domestic wastewater will be treated in septic tank and discharged to soak pit. Zero discharge norms will be maintained in the proposed plant. The power requirement is 17 MVA will be sourced from OPTCL/ CESCO.

Ambient air quality monitoring has been carried out at 8 locations during March 2013 – May 2013. PM₁₀ concentration ranged from 24.4-72.1 µg/m³, PM₂₅ concentration ranged from 15.2-21.2 µg/m³, concentration level of SO₂ ranged from <4 – 15.76 µg/m³ and NO_x concentration is <9 – 23.85 µg/m³. The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 3.903 µg/m³ with respect to the PM₁₀, 2.856 µg/m³ with respect to the SO₂ 1.587 µg/m³ with respect to the NO_x.

Solid waste i.e. ash from PGP of 12500 TPA will be sold to brick manufacturers. Char from tunnel kiln of total quantity 17500 TPA will be recycled and re used in process. Sludge from ETP, STP & RWTP Will be used as manure for Green Belt Development.

Public Hearing was conducted on 6.12.2014 at 11.00 AM at Gandiabadha Primary School, Around 200 persons had attended the public hearing meeting . the major issues raised during the Ph are Water Requirement for the project, Water Pollution control, Air pollution control, Drawl of ground water

The Committee after detailed deliberation recommended the project for environmental clearance subject to stipulation of the following specific conditions and any other mitigative measures and conditions for environmental protection:

- i. On-line ambient air quality monitoring and 24x7 stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), and bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ by installing energy efficient technology.
- ii. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points, coal handling plant and coke sorting plant. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.
- iii. 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.

- iv. Coal and coke fines shall be recycled and reused in the process. The breeze coke and dust from the air pollution control system shall be reused in sinter plant. The waste oil shall be properly disposed of as per the Hazardous Waste (Management, Handling, Handling and Transboundary Movement) Rules, 2008.
- v. Hot gases from the DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in Waste Heat Recovery Boiler (WHRB). The gas then shall be cleaned in ESP before dispersion out into the atmosphere through ID fan and stack. ESP shall be installed to control the particulate emissions from the WHRB.
- vi. Efforts shall further be made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement.
- vii. Risk and Disaster Management Plan along with the mitigation measures 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.
- viii. Multi stage scrubber, cyclone and bag filters etc. to control particulate emissions within the prescribed limits from coke oven shall be provided. Carbon mono-oxide (CO) shall also be monitored along with other parameters and standards notified under Environment (Protection) Act shall be followed. The reports shall be submitted to the Ministry's Regional Office at the Chennai, CPCB and SPCB.
- ix. All the effluent shall be treated and used for dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Domestic wastewater will be treated in the Sewage Treatment Plant.
- x. Green belt to a width of 10-15 meters shall be developed all along the periphery of the site in 33 % of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xi. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program shall be ensured accordingly in a time bound manner.
- xii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 6.12.2014 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Bhubaneswar.

- xiii. 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 health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

41.4 FURTHER CONSIDERATION

- 41.4.1 Proposed capacity expansion of kraft paper from 60 TPD to 110 TPD of **M/s Sidharth Paper Ltd.** at village Hariawala & Basai, Tehsil Kashipur, district Udham Singh Nagar, Uttarakhand (EC) (J- 11011/14/2013-1 A.II(I)

The aforesaid proposal was earlier considered by the Expert Appraisal Committee (EAC) in its 25th meeting held during 13th -14th October, 2014 along with the proposals of M/s Naini Tissues Ltd. and M/s Siddeshwari Paper Udyog Ltd. and consideration of all the 3 proposals were deferred for submission of additional information. The proposals of M/s Naini Tissues Ltd. and M/s Siddeshwari Paper Udyog Ltd. were considered in the 31st EAC meeting held on 8th – 9th January, 2015 for grant of Environmental Clearance, however the proposal of M/s Sidharth Paper Ltd. was not taken up. PP vide letter dated 3rd December, 2014 submitted the requisite documents as desired by the Committee. The proposals were again deferred for want of further additional information.

During the 37th EAC meeting when the proposals of M/s Naini Tissues Ltd. and M/s Siddeshwari Paper Udyog Ltd. were considered, it was decided that M/s Sidharth Paper Ltd shall also submit the similar information which the other counter parts are submitting since all the 3 projects are located adjacent to each other and the discharge points are also same.

PP vide letter dated 29th January, 2015 submitted the report conducted by Central Pulp & Paper Research Institute, Saharanpur. The Committee after detailed deliberation found the report to be in order and recommended the project for environmental clearance subject to stipulation of the following specific conditions and any other mitigative measures and conditions for environmental protection:

- i. The project proponent should install 24x7 air and water monitoring devices to monitor air emission and effluent discharge and submit report to Ministry and its Regional Office.
- ii. The Industry should strictly comply the Charter issued by CPCB for paper and pulp industry located in Ganga basin.
- iii. Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Government shall be ensured and regular reports submitted to the Ministry and its Regional Office.
- iv. The project authority shall install multi cyclones, wet scrubbers to the boilers to achieve the particulate emission below 50 mg/Nm³. The emissions from chemical recovery section shall be controlled through primary and secondary venturi scrubbers.

- v. In case of treatment process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- vi. The industry shall ensure the compliance of the standards for discharge of the treated effluent from the unit as stipulated under the EPA rules or SPCB whichever is more stringent. The company shall make efforts to limit the water consumption upto 75 m³/tonne of product. Adequate steps including use of modern RO/UF based technologies shall be used to increase recycling and reduce water consumption.
- vii. Ground water quality study in and around the project area shall be conducted and report submitted to Ministry's Regional Office, SPCB and CPCB.
- viii. The company shall submit the comprehensive water management plan along with monitoring plan for the ground water quality and the level, within three months from date of issue of this letter.
- ix. The project authority shall dispose of hazardous waste as per the provision of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
- x. The company shall develop green belt in 33% of the total land as per the CPCB guidelines to mitigate the effect of fugitive emissions.
- xi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xii. The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
- xiii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the pulp and paper sector shall be strictly implemented.
- xiv. All the commitments made to the public during the Public Hearing/Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office.
- xv. 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 health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- xvi. At least 5% of the total cost of the project shall be earmarked towards Enterprise Social Commitment (ESC) based on locals' needs and the activity-wise details and village-wise details along with time-schedule for implementation shall be prepared in consultation with village panchayats and district administration and submitted to the Ministry's Regional Office. Implementation of such programme shall be ensured accordingly in a time-bound manner.

41.4.2 Proposed expansion of existing steel plant from 1.0 MTPA to 3.5 MTPA Integrated Steel Plant of **M/s Mideast Integrated Steels Ltd.** at Kalinganagar Industrial Complex, Tehsil – Danagadi, District Jajpur, Odisha (EC) – [J-11011/376/2011-IA-II(I)]

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 21st meeting held during 30th July 2014 to 1st August 2014. As per the minutes of the meeting, the Committee sought following additional information for further consideration of the proposal:

- i. Iron ore linkage document and the status of environmental clearances of the iron ore mines;
- ii. Coal linkage documents;
- iii. Technical details of the coke oven plant effluent and coal tar utilization plan;
- iv. Exit velocity of the stack to be rechecked;
- v. AAQ modelling shall be redone and the report shall be submitted;
- vi. Water consumption and the wastewater management plan as per the CREP guidelines shall be submitted;
- vii. Surface water/ ground water quality shall be monitored for one month period and the report shall be submitted;
- viii. Action plan for the storage and the disposal of SMS slag;
- ix. Rehabilitation colony details;
- x. Action plan for five years to address the issues raised during Public Hearing;
- xi. Socio-economic survey shall be carried out through an reputed institute and the report shall be submitted;
- xii. Occupational health and safety management plan;
- xiii. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and village wise action plan with financial and physical breakup/details shall be prepared over a period of ten years and shall be submitted;
- xiv. Risk assessment and disaster management plan; and status of employment to the land losers.

PP vide letter dated 23rd May, 2015 submitted the requisite documents. Based on the information submitted, the proposal was considered by the expert Committee. The Committee after detailed deliberation found the report is in order and recommended the project for environmental clearance subject to stipulation of the following specific conditions and any other mitigative measures and conditions for environmental protection:

- i. The ETP for Blast furnace effluent should be designed to meet Cyanide standard as notified by the MoEFCC.
- ii. No effluent shall be discharged outside the plant premises and ‘zero’ discharge shall be adopted.
- iii. The ETP for coke oven by-product should be designed to meet EPA notified standard especially the cyanide and phenol
- iv. Coke oven plant should meet visible emission standard notified by MoEFCC

- v. Recommendation of ESC report as prepared by Xavier Institute of Management, Bhubaneswar to be adhered to.

41.5 ANY OTHER ITEM

41.5.1 Integrated Steel Plant (Sinter plant: 18,50,000 TPA, blast furnace: 10,05,000 TPA, DRI plant: 6,50,000, SMS:10,00,000 TPA, Rolling Mill:7,25,000 TPA, CPP:75 MW, Supporting utilities like RMH yard, Oxygen Plant, DM Plant, Lab, HVAC, Air compressor, DG sets, etc ha) of **M/s Jindal Saw Ltd.**, near village Pur, tehsil and district Bhilwara, Rajasthan [J-11011/293/2014-IA-II(I)] – Amendment in ToR

The ToR for the above proposal was accorded by the Ministry vide letter No. J-11011/293/2014-IA-II(I) dated 17th November, 2014.

PP has requested for modification in the ToR as per the following table:

	Name of Unit	Size, Production capacity, Products (as per TOR dated 17-11-2014)	Amendment Requested
1	Sinter Plant	170 sqm (18,50,000 TPA Sinter)	DELETED
2	Blast Furnace	925 cu.m (10,05,000 TPA Hot Metal)	1200 m ³ (10,65,000 TPA Metal)
3	DRI Plant	4x500 TPD (6,50,000 TPA Sponge Iron)	No Change
4	Basic Oxygen Furnace (BOF)	100 tons (10,00,000 TPA Liquid Steel)	No Change
5	Steel Refining	LRF + VDU/ OD (100 tons matching capacity with BOF)	No Change
6	Continuous Casting Machine	9/16, 5-strand combi-caster (10,00,000 TPA Steel Rounds and Billets)	No Change
7	Rolling Mill	7,25,000 TPA Rebar / TMT	No Change
8	Captive Power Plant	75 MW (Through recovery of waste heat and gases)	No Change
9	Supporting Facilities	RMH Yard, DM Plant, Oxygen Plant, Laboratory, etc	No Change
10	Pellet Plant	-	15,00,000 TPA Pellets

PP mentioned that during detail designing of sinter plant difficulty observed in agglomeration process due to ultra fines nature of concentrate providing lack of nucleus formation during sintering, very low permeability of sinter bed making air flow difficult and high levels of fines getting sucked in the down draught air. PP mentioned that these difficulties makes sintering as not a viable production process. Therefore it is proposed to modify iron making process by Pellet

+ BF route in place of Sinter + BF route, which is common process used worldwide for magnetite fines.

PP also requested to allow use of baseline data studies conducted after obtaining original TOR dated 17.11.2014.

The Committee recommended the amendment in ToR along with permission to use baseline data studies conducted after obtaining original TOR dated 17.11.2014.

41.5.2 Proposed Integrated Steel Plant (0.4 MTPA) with 43MW CPP of **M/s Rashi Steel and Power Ltd**, at vill. Paraghat and Beltukri, Tehsil Masturi, Dist. Bilsapur, Chhattisgarh (Amendment in EC) (J-11011/46/2010-IA.II(I), Bilaspur, Chhattisgarh (EC) Considered in Aug 2014 meeting)

M/s Rashi Steel and Power Limited (Formerly M/s Rashi Strips Private Limited) has proposed to set up a Integrated Steel Plant (0.4 MTPA Capacity) with 43 MW Captive Power Plant at Villages Paraghat and Beltukri, Tehsil Masturi, District Bilaspur in Chhattisgarh. The Environmental Clearance to set up the proposed Project was granted by Ministry vide Letter No. J-11011/466/2010-IA-II (I), Dated 10th September, 2013.

The matter was earlier considered in the 22nd EAC meeting held on 28th – 29th August, 2014. PP had sought waiver of Specific condition No. 1 in the EC dated 10.09.2013 which states that “No construction activity at the project site shall be initiated till the complete land of 199 acres is acquired”. However, the Committee after deliberations did not agree to the proposed amendment for deletion of Specific Condition No.1.

Ministry vide Office Memorandum (F. No. 22-76/2014-IA-III), Dated 7th October, 2014 mentioned that “EC granted for a project or activity is site specific. While full acquisition of land may not be a pre-requisite for the consideration of the case for EC, there should be some credible document to show the status of land acquisition.”

PP with reference to the above mentioned OM dated 7th October 2014 once again requested to amend the Specific Condition No. 1 & allow PP to start project activities on acquired land i.e. 77 Acres.

PP mentioned that they are in acquisition of 77 acres of land and the remaining 122 acres is in advance stage of acquisition with the state Government. PP has proposed to implement the project in phase wise manner in which it is proposed to implement the Beneficiation Plant (1x1.9 MTPA), Rotary Hearth Furnace-DRI (0.4 MTPA) and Coal Washery (1x0.35 MTPA) in the first phase in the already acquired 77 acres of land and the remaining component in the second phase as described in the following table:

Description of Main Plant		
Total land requirement = 165 Acres		
Phase I		
Beneficiation Plant (1x1.9 MTPA)	Land Procured =	77 Acres
Rotary Hearth Furnace-DRI (0.4 MTPA)		

Coal Washery (1x0.35 MTPA)		
Phase II		
Captive Power Plant (43MW)	Balance under land acquisition=	88 Acres
Pellet Plant (1.324 MTPA)		
SAF(0.243 MTPA) Pig iron		
Ductile Spun Pipe Plant (0.3 MTPA)		

The Committee after detailed deliberation requested PP to submit the layout map of the 77 acres which is acquired by them along with the facilities proposed on it.

41.5.3 Capacity Expansion of Crude Steel (3MTPA to 5MTPA) of **M/s Bhushan Power & Steel Ltd.** at P.O. Lapanga, village Thelkoloi, Tehsil Rengali, Dist. Sambalpur, Odisha – [F. No. J-11011/40/2009-IA II (I)]

Bhushan Power & Steel Limited had obtained ToR for expansion of crude steel production capacity of its existing plant at Sambalpur District of Odisha from 3.0 MTPA to 5.0 MTPA along with CPP from 560 MW to 710 MW vide MoEFCC letter no. J-11011/40/2009-IA II (I) dated 30th March, 2015.

PP mentioned that during Detailed Feasibility Study it was found by them that by fine-tuning the capacities & configuration of the facilities proposed for expansion to 5.0 MTPA, it is possible to achieve a production capacity of 5.5 MTPA. Bhushan Power & Steel Limited now intends to increase the crude steel production capacity of its existing plant at Sambalpur District of Odisha from 3.0 MTPA to 5.5 MTPA along with CPP from 560 MW to 710 MW.

It was also observed that the water requirement per ton of crude steel produced could be reduced by increasing the production capacity to 5.5 MTPA.

Following table shows the revised configuration:

Sl. No.	Facilities	EC Granted at 3.0 MTPA	Facilities proposed at 5.0 MTPA Expansion (ToR granted)	Revised Plant Configuration at 5.5 MTPA
1	Coal Washery	1 x 1.0 MTPA 1 x 3.5 MTPA	1 x 1.0 MTPA 1 x 3.5 MTPA	1 x 1.0 MTPA 1 x 3.5 MTPA
2	Beneficiation Plant	1 x 1200 TPH	1 x 1200 TPH	1 x 1200 TPH
3	Pellet Plant	3.5 MTPA	3.5 MTPA	4.0 MTPA
4	DRI Kiln	14 x 500 TPD	14 x 500 TPD	14 x 500 TPD
5	Coke Oven	2 x 0.45 MTPA (Non recovery type)	2 x 0.45 MTPA (Non recovery type)	2 x 0.45 MTPA (Non recovery type)
		1 x 1.0 MTPA (Recovery Type)	1 x 1.2 MTPA (Recovery Type) 8 ovens (0.2 MTPA)	1 x 1.2 MTPA (Recovery Type)

			(Modification of 1.0 MTPA Recovery type coke oven by addition of 8 ovens)	
6	Sinter Plant	1 x 105 m ² 1 x 204 m ²	1 x 105 sqm 1 x 450 sqm	1 x 105 sqm 1 x 450 sqm
7	Blast Furnace	1 x 1008 cum 1 x 2015 cum	1 x 1008 cum 2 x 2015 cum	1 x 1008 cum 2 x 2015 cum
8	EAF	6 x 100 ton	6 x 100 ton	6 x 100 ton
9	LF	6 x 100 ton	6 x 100 ton	6 x 100 ton 2 x 250 ton*
10	IF	4 x 15 ton	4 x 15 ton	-
11	Alloy Smelter	4 x 16 MVA	4 x 16 MVA	4 x 16 MVA
12	BOF	-	1 x 250 ton	2 x 250 ton*
13	VD/AOD	2 x 100 ton	2 x 100 ton 1 x 250 ton	2 x 100 ton 2 x 250 ton*
14	RH	-	1 x 250 ton	2 x 250 ton*
15	HMDP	-	1 x 250 ton	2 x 250 ton*
16	Lime Plant	3 x 300 TPD 1 x 600 TPD	3 x 300 TPD 2 x 600 TPD	3 x 300 TPD 2 x 600 TPD
17	Dolo Plant	1 x 300 TPD 1 x 100 TPD	1 x 300 TPD 1 x 100 TPD 1 x 600 TPD	1 x 300 TPD 1 x 100 TPD 1 x 600 TPD
18	Oxygen Plant	1 x 400 TPD 1 x 660 TPD	1 x 400 TPD 1 x 660 TPD 1 x 1250 TPD	1 x 400 TPD 1 x 660 TPD 1 x 1250 TPD
19	Billet Caster	(1 x 2) + (2 x 4) + (1 x 5) Strand	(1 x 2) + (2 x 4) + (1 x 5) + (1 x 6) Strand	(1 x 2) + (2 x 4) + (1 x 5) Strand
20	Bloom Caster	1 x 2 Strand	1 x 2 Strand	2 x 2 Strand
21	Thin Slab Caster	2 x 1 Strand	3 x 1 Strand	3 x 1 Strand
22	CSP/ESP	1.8 MTPA	3.3 MTPA	4.0 MTPA
23	Cold Rolling Mill	1.0 MTPA	2.5 MTPA	2.5 MTPA
24	Pipe and Tube Mill	0.2 MTPA	0.5 MTPA	0.8 MTPA
25	Galvanising/ Galvalume Line	0.5 MTPA	0.75 MTPA	1.3 MTPA
26	Colour Coating Unit	0.45 MTPA	0.71 MTPA	0.7 MTPA

27	Wet Flux Galvanising Line	-	0.1 MTPA	-
28	Forging shop	-	0.1 MTPA	-
29	Wire and Rod Mill	0.45 MTPA	0.45 MTPA	0.45 MTPA
30	Heavy Bar and Rod Mill	0.55 MTPA	0.55 MTPA	0.55 MTPA
31	Captive Power Plant	560 MW	710 MW	710 MW
32	Cement Plant	1.0 MTPA	1.0 MTPA	1.0 MTPA

The Committee recommended the amendment in ToR as suggested by the PP

41.6 CASE FOR TERMS OF REFERENCE (TOR)

41.6.1 Proposed project by **ASR Steels & Power Private Limited**, located at Village: Morghar Desalpar Taluka, Bhachau, Dist: Kutch, Gujarat. – [F.No - J-11011/135/2015-IA-II(I)]

The PP along with their EIA-EMP consultant gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Terms of References for the preparation of EIA-EMP 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.

ASR Steels & Power Pvt. Ltd. proposes to install a new project of integrated steel plant, rolling mill products and captive power plant at Survey no. 469/P-3,471,472,473,474/P-1, 474/P-2,474/P-3 & 155/P-1(Old) Village Morghar-Desalpar, Taluka: Bhachau, District Kutch, Gujarat. The nearest villages are Morghar (~ 2.85 Km) and Bhudarmora (~ 3.20 Km). The nearest railway station is Bhachau Railway Station (~ 14.30Km). Total land acquired by the project is 44.22 Acres. The total cost of the project is 250 Crores. There is no national park, sanctuary or forest land in surrounding 10 Km radius. The project doesn't fall under CRZ boundaries.

The proposed products with its production capacity is as mentioned below

S. No	Products	Production Capacities
1	Sponge Iron	18000 MT/month
2	Billets/Ingots	24000 MT/month
3	Rolled Products	24000 MT/month
4	Power Plant <ul style="list-style-type: none"> • AFBC • WHRB 	25 MW <ul style="list-style-type: none"> • 12 MW • 13 MW

Following are the units to be installed:

S. No	Equipment	Total nos. to be installed
1	Rotary Kiln	1 no. * 250 TPD 1 no. * 350 TPD
2	Induction furnace	2 nos. * 30 T
3	Rolling Mill	2 nos.
4	AFBC Boiler	1 no. * 12 MW
5	WHRB Boiler	1 no. * 5.5 MW 1 no. * 7.5 MW

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. P.H. shall be conducted by the Gujarat Pollution Control Board.

41.6.2 New Project of Ferro Alloys & Integrated Steel Plant at A-24 & Other , MIDC Tadali, Chandrapur, Maharashtra by **M/s Grace Industry Limited** [J-11011/134/2015-IA-II(I)]

M/s. Grace Industries Limited (GIL) incorporated in August 2003 has Sponge Iron Plant at Plot No. A-23, MIDC, Tadali Industrial Area, Village - Tadali, Taluka & Dist. -Chandrapur. Now, GIL has planned a new project of Ferro Alloys Plant, Integrated Steel Plant comprising Mini Blast Furnace , Direct Reduced Iron Plant , Beneficiation of Iron Ore and Pelletization Plant, Steel Melt Shop (IF, EAF, LRF , AOD, VOD , Continuous Caster etc) , Rolling Mill, Producer gas Plant and WHRB Captive Power Plant at MIDC Tadali, Chandrapur, Maharashtra. Proposed project cost is estimated to be Rs. 1200 Crores.

It is observed by the Committee that Moratorium has been imposed by MoEFCC vide OM dated 13.01.2010 and the Moratorium is still in force. PP mentioned that a case has been filed in Honorable , Bombay High Court, Nagpur Bench vide petition no.366 of 2014 for justice and permission to start CPP and various proposed expansion. Hon'ble Bombay High Court, Nagpur Bench in its verdict dated 28th Jan 2015 directed State Government & MoEF New Delhi to give permission to start the project. However, no evidence was available with the PP.

The Committee in view of the Moratorium imposed on the area deferred the consideration of the project till the Moratorium is lifted or any evidence of Court Order produced by the PP.

41.6.3 Greenfield cement project by name and style **M/s Sai Krishna (India) Cements Pvt. Ltd** with a capacity of 2.0 MTPA Ceemnt production along with 30 MW coal based Captive Power Plant in Turakapalem Village of Machavaram Mandal, Guntur District, Andhra Pradesh – [J-11011/137/2015-IA-II(I)]

PP vide email dated 1st June, 2015 requested for deferment for the consideration of the Proposal. The proposal shall be considered once the request is received from the PP

41.7 ENVIRONMENTAL CLEARANCE (EC)

41.7.1 Proposed Clinker Grinding Unit (2 x 0.75 MTPA) along with D.G. set (2 x 5 MW) and Autoclaved Aerated Concrete Block (1000 m³ /day) at Chakla (Bhedyadang) Industrial area, Tehsil Kishanganj, Dist. Kishanganj, Bihar by M/s JK Lakshmi Cement Ltd. [J-11011/399/2012-IA II (I)]

M/s JK Lakshmi Cement Ltd.–PP and their EIA-EMP consultant (M/s JM EnviroNet Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 6th Meeting of Reconstituted Expert Appraisal Committee held during 07th March, 2013 for the preparation of EIA-EMP report. The ToR was awarded by MoEF vide F. No. J-11011/399/2012-IA -II (I) dated 25th April, 2013 for the preparation of EIA-EMP report. PP submitted the final EIA EMP report vide letter dated 3rd April, 2015. The proposed project activity is listed at S.No. 3(b) Cement Industry under Category ‘A’ of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

M/s. JK Lakshmi Cement Ltd. (JKLCL) is proposing a 1.5 MTPA Clinker Grinding unit along with 10 MW D.G. Set & (1000 m³/day) Autoclaved Aerated Concrete Block) at Chakla (Bhedyadang) Industrial Area, Tehsil & District Kishanganj (Bihar). The total land required for the proposed project is 14.02 ha (34.64 acres); which falls in Chakla (Bhedyadang) Industrial Area. Greenbelt will be developed in 4.63 ha (33% of the total project area). No forest land is involved. No National Park, Wildlife Sanctuary, Biosphere Reserve, Reserved Forest etc. exists within 10 km radius of the proposed project site. Out of the total project area (i.e. 14.02 ha / 34.64 acres), about 4.63 ha (11.43 acres i.e. 33% of the total project area) will be developed under green belt / plantation in order to reduce dust & noise pollution levels & to increase aesthetic beauty of the area. A total of Rs. 1165 lakhs will be spent for CSR activities. Total cost of the project is Rs. 300 Crores. Capital cost for Environmental Protection Measures is Rs. 34 Crores and Recurring Cost is Rs. 98 lacs/annum.

The capacity of proposed project activity has been tabulated below:

S. No.	Unit	Proposed Capacity
1.	Clinker Grinding Unit	1.5 MTPA (2 x 0.75 MTPA)
2.	D.G Set	10MW (2 x 5 MW)
3.	Autoclaved Aerated Concrete (AAC) Block	1000 m ³ /day

Raw materials required for the proposed grinding unit are Clinker which will be procured from JKLCL Durg Plant, Gypsum from Bhutan/ Bikaner (Rajasthan) and Fly ash from Kalgaon (Bihar) / Farakha (WB). Raw materials required for the manufacturing of AAC Block are Flyash which will be procured from Kalgaon (Bihar) / Farakha (WB), Cement from the captive grinding unit, Gypsum from Bhutan/ Bikaner (Rajasthan) and Quick Lime & Aluminium powder will be procured from open market.

The clinker grinding is based on dry process technology with closed circuit and cement will be packed through electronic rotary packers and will be loaded in the trucks with the help of truck loading machine. The AAC blocks will be manufactured through Mechanical Process by using cement (15%), burnt lime (10%), fly ash (65%), gypsum (10%) and aluminum powder (in small quantity).

The total water requirement for the proposed project is 1000 KLD (including Clinker Grinding Unit, D.G. Set & AAC Manufacturing Unit) which will be sourced from Groundwater. Total power requirement for proposed project is 10 MVA which will be sourced from Bihar State Electricity Board & proposed D.G. Set (for emergency back-up).

Baseline study was conducted during Summer Season - March to May, 2013. The concentration for all the 8 AAQM stations for PM₁₀ ranges between 57.3 to 74.9 µg/m³, PM_{2.5} ranges between 20.3 to 32.4 µg/m³, SO₂ ranges between 6.1 to 11.9 µg/m³ and NO₂ ranges between 14.2 to 22.5 µg/m³. Ambient noise levels measured at 8 locations around the project site varies from 49.70 to 58.11 Leq dB (A) during day time and during night time noise levels ranges from 41.98 to 46.77 Leq dB(A). The ground water analysis shows that pH varies from 7.02 to 7.45, Total hardness varies from 109.20 to 308.80 mg/l, Total dissolved solids vary from 172.00 to 403.00 mg/l.

All major sources of air pollution will be provided with bag filters to maintain particulate matter emissions within permissible limit. No solid waste will be generated in cement manufacturing process. Dust collected from various pollution control equipments will be recycled back into the process. Fly ash will be utilized in manufacturing of PPC grade cement and AAC Blocks.

No waste water will be generated from the clinker grinding process. Waste water generated from D.G Set & AAC Block boiler will be totally reused in Grinding Unit/ AAC Block after treatment. Rain Water Harvesting will be practiced within the plant premises. Used oil & grease generated from plant machinery/ Gear boxes and D.G Set as hazardous waste will be disposed to the CPCB authorized recycler

Public Hearing for this Proposed Grinding Unit was conducted on 18th Feb., 2015 under the chairmanship of Shri Birendra Kumar Mishra, ADM, Kishanganj and Shri Nand Kishore (Additional Environmental Engineer) & Shri Ashish Kumar Gupta (Regional Officer) (Representative of Bihar State Pollution Control Board).

Based on the presentation made and discussion held, the Committee recommended the project for environmental clearance subject to stipulation of following specific conditions along with other general environmental conditions, while considering accord of environmental clearance:

- i. The project proponent should install 24x7 air monitoring devices to monitor air emission, as provided by CPCB and submit report to Ministry and its Regional Office. Emission for particulate matter should be restricted to 30 mg/m³.

- ii. The expansion project shall comply with the new MOEF&CC Standards notified vide GSR 612 (E) dated 25.08.2014 with respect to Cement sector.
- iii. All the pollution control devices/equipment in the grinding unit shall be interlocked so that in the event of the pollution control devices/systems not working, the respective unit(s) shut down automatically.
- iv. 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.
- v. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash should be transported in the closed containers only and shall not be overloaded. The company shall have separate truck parking area. Vehicular emissions should be regularly monitored.
- vi. 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 should be adopted.
- vii. Storage of material should be in covered area.
- viii. Rain water harvesting plan shall be prepared and shall supplement the water requirements of the project.
- ix. Regular monitoring of influent and effluent surface, sub-surface and ground water should be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent
- x. Green belt shall be developed in at least 33 % area in and around the cement plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO.
- xi. All the commitments made to the public during the Public Hearing / Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office.
- xii. At least 5 % of the total cost of the project 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 prepared and submitted to the Ministry's Regional Office at Bangalore. The proponent shall prepare a detailed ESC Plan for every next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the

local communities and administration. The ESC 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 ESC 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, Bangalore. The details of the ESC Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

xiii. 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

41.7.2 Proposal for 1. 2 x 6 MVA Sub merged Arc Furnace for Ferro Alloy - Ferro Manganese-23,630 Mt/P.A Or Silico Manganese- 16,150 Mt/P.A or Pig Iron 26,100 Mt/P.A 2. 4 x 15 MT Induction Furnace with Billet – 129900 Mt/P.A 3. Re- Rolling Mill – 89280 Mt/P.A ha. of **M/s Supersmelt Industries Pvt. Ltd.**, at Barjora, Bankura, West Bengal – [J- 1101/678/2008-IA.II(I)]

The EIA report submitted by PP is shown to be prepared by M/s Visiontek Consultancy Services Pvt Ltd, however, at the start of presentation it came to the notice of the committee that the persons making presentation on behalf of the consultant, (M/s Visiontek) were not from Visiontek. He mentioned that he was from another company by name M/s Green Mount. According to them they had some MOU with visiontek, which they could not provide. In any case the consultant who is accredited by QCI cannot have a private arrangement of this type. Since the report seems to have not been prepared by the accredited consultant nor being presented by the representative of accredited consultant, the committee did not proceed with the presentation and consideration of the proposal. The PP had no satisfactory explanation for bringing in a consultant who was not accredited and submitting a report claimed to be prepared by an accredited consultant. The PP confirmed during the meeting that the assignment was awarded to M/s Green Mount with an assumption that they have an MoU with the M/s Visiontek. The committee took a very serious view on this and recommended for rejection of project proposal.

41.7.3 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)]

M/s Brahm Energy Pvt. Ltd. –PP and their EIA-EMP consultant (Envirotech East Pvt. Ltd., Kolkata) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 14th Meeting of Reconstituted Expert Appraisal Committee held during 19-20th December, 2013 for the preparation of EIA-EMP report. The ToR was awarded by MoEF vide F. No. . J-11011/304/2013- IA -II (I) dated 31st January, 2014 for the preparation of EIA-EMP report. PP submitted the final EIA EMP report vide letter dated 18.05.2015. The proposed

project activity is listed at S.No. 3(a) in Metallurgical industries (ferrous & non ferrous) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

M/s. Brahm Energy Pvt. Limited has proposed a green field project at Mouza: Ghutgaria, Barjora, District: Bankura in West Bengal. In the proposed steel plant, Sinter Plant for Manganese Ore, Ferro Alloys Plant along with CFBC based Captive Power Plant of 60 MW capacity will be installed. The geographical coordinates are 23°26'19.06"N and 87°15'15.07"E with mean sea level 281 ft. The proposed project will be installed on a piece of vacant land, measuring around 38 acres. Out of the total project area of 38 acres, the company has earmarked 12.55 acres (5.08 hectares) of land for Green Belt Development. In the Green Belt area about 7600 trees shall be planted (@1500 trees per ha). The land has been allotted by West Bengal Industrial Development Corporation (WBIDC) for installation of the project under consideration. The proposed land is allotted by WBIDC. Hence, no R&R is involved. The total manpower required for the project is 870 persons and total cost of the project is Rs. 434 Crores. Funds to the extent of Rs. 21.7 Crores i.e., 5% of total project cost shall be earmarked for Enterprise Social Commitment (ESC) activities based on a rapid survey carried out to identify the local needs in the study area. The fund shall be utilized over a period of 5 years. The proposed units with rated capacity per annum are presented below:

S.N	UNIT	PROPOSED CAPACITY	PRODUCT
1.	Ferro Alloys Plant (5x11 MVA Submerged Arc Furnaces)	1,18,000 TPA	Ferro-Manganese
2.	Sinter Plant for Manganese Ore (2x500 TPD)	3,30,000 TPA	Manganese Ore Sinter
3.	Captive Power Plant (CFBC based)	2x30 MW	Power

Following table present list of Raw Material and its source.

Sl. No.	Raw Materials	Annual Requirement (in tpa)	Source	Mode of Transport
Sinter plant (2 x 500 tpd)				
1.	Manganese ore	3,96,000	Orissa	Rail + road transport
2.	Coke breeze	48,000	Market	Road transport
Ferro alloy plant (5x11 mva safes)				
1.	Manganese sinter	1,80,000	In house plant	Rail + road transport

2.	Coke breeze	71,000	Market	Road transport
3.	Mill scale	18,500	Market	Road transport
4.	Dolomite	1,500	Market	Road transport
Captive power plant (2x30 mw, cfbc)				
1.	Coal	3,00,000	South africa	Rail + road transport

All the trucks for raw material and finished product transportation shall comply with the applicable environmental norms. It would be ensured that all the vehicles are properly tuned and maintained to keep emissions within the permissible limits. All the trucks, carrying various raw materials/ finished products will be covered with tarpaulin.

The raw water will be sourced from Barjora Gram Panchyat Samity supply. As per an initial estimate, water to the tune of 253 cu.m/hr will be required for the proposed project. The estimated power requirement of the proposed unit is around 72 MW. The power requirement will be met from proposed 60 MW captive power plant and DVC supply.

There will be no discharge of Industrial Effluent (zero discharge plant). Blow down from Cooling Towers will be used for dust suppression and greenery purposes. Domestic wastewater will be treated in Septic tank – Soak pit system.

Ferro Manganese Slag will be supplied to Silico-Manganese producers. Bottom ash will be used for land filling and road construction. Fly ash will be used for Cement and Paver Block manufacturing. Dust as collected in the de-dusting system from Sinter Plant will be reused in the process. Solid waste of domestic / commercial origin that would be generated in the Plant will be disposed off suitably in consultation with the concerned Civic body.

Ambient air quality was monitored at eight (8) locations for the period of 1st March, 2014 to 31st May, 2014 in and around the project site. The levels of PM₁₀ (45-96 ug/m³), PM 2.5 (17-41 ug/m³), SO₂ (5-17 ug/m³) and NO₂ (10-38 ug/m³) are within the prescribed limits. Stack emissions would be constituted of mainly Particulate matters, SO₂ & NO_x. There will be total 4 (four) stacks, out of which two will be attached to Submerged Arc Furnaces, one to Sinter Plant & the other one to Captive Power Plant. AQIP Modelling indicates that GLCs of PM, SO₂ and NO_x will be 2.85 µg/m³, 1.96 µg/m³ & 1.40 µg/m³ respectively. Adequate control measures like installation of Dry Fog Dust Suppression System, Dust Extraction System, Bag Filters, ESP and stacks of adequate height at relevant points.

The Public Hearing for the project was conducted on 28th October, 2014 at Project Site, Mouza Ghutgoria, Barjora, Dist. Bankura in West Bengal. The major issued raised are effective and continuous pollution control system, generation of local employment etc. However, major concern were raised regarding the generation of air pollution from the sister company M/s Dimension Steel & Alloys Pvt. Ltd., operating in the adjacent location to the proposed project site and public demanded immediate modification & rectification of existing pollution control system.

It has been mentioned by the people that villagers are living under unbearable condition due to huge air pollution created by the factories situated in the neighbourhood and stated that they will not welcome any more air polluting industries in their area. People also requested the local administration that if further such industries come up in the locality then all the residents of Ghutgoria village should be rehabilitated to some other location to ensure proper living condition. They stated that that the PP should run M/s Dimension Steel & Alloys Pvt. Ltd. in a pollution free manner consistently for two years to regain the confidence of the local people, the public hearing of M/s Brahm Energy Pvt. Ltd. should only be conducted after the same.

The Committee took note of the concerns raised during the Public Consultation by the local villagers. After detailed delebration the Committee recommended to defer the proposal and called for the following information/reports 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.

Based on the above reports, the committee will decide whether a site visit can be conducted by a Sub-Committee

41.7.4 Proposed expansion of Asbestos Cement Sheet Plant from 197,000 TPA to 300,000 TPA of **M/s HIL Limited** (previously Hyderabad Industries Ltd), at plot no. 289, IDA Kondapally village, Mandal Ibrahimpatnam, Dist. Krishna, A.P. [F. No. J-11011/194/2014-IA-II (I)]

M/s HIL Limited. –PP and their EIA-EMP consultant (Paryavaran Labs India Ltd, Hyderabad) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 21st Meeting of Reconstituted Expert Appraisal Committee held during 30th July, 2014 for the preparation of EIA-EMP report. The ToR was awarded by MoEF vide F. No. F.No. J-11011/194/2014-IA.II(I) 25th November 2014 for the preparation of EIA-EMP report. PP submitted the final EIA EMP report vide letter dated 25.05.2015. The proposed project activity is listed at S.No. 4(c) in Asbestos milling and asbestos based products under Category ‘A’ of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

Proposed expansion of Asbestos Cement Sheet Plant from 197,000 TPA to 300,000 TPA of M/s HIL Limited (previously Hyderabad Industries Ltd), The expansion Project will be implemented within the HIL premises which is at IDA, Notified Industrial Estate, Kondapally Village, Ibrahimpatnam Mandal in Krishna Dt. of Andhra Pradesh state. The present site is at Kondapally village, 5.8 Kms from Ibrahimpatnam, Vijayawada - Hyderabad - Pune National High way No.9. The land falls under industrial area of Andhra Pradesh Industrial Development Authority,

IDA, Kondapally, Ibrahimpatnam mandal in Survey no. 126, 127, 129 and 130 and in Plot No.289. The company has proposed to go for expansion operations in the existing premises of HIL in 13.89 acres of land. No Additional Land is required. Topographically the project area is covered by hills on western side other sides are plain and flat. Kondapally reserve forest is present in the study area. The site area is about 110 ft above mean sea level. The land around the site is not cultivated. The project area does not fall under the Critically polluted industrial areas / cluster, which are listed in MoEF office memorandum dated 13th January 2010. 5.89 Acres of greenbelt (inclusive of existing 5.0 Acres) will be developed to further mitigate the impacts on Air environment & Noise environment. The estimated project cost of the proposed expansion is Rs 12.5 crores of which Rs 50 lakhs will be incurred towards implementation of Environmental Management Plan and 60 lakhs for CSR Activities. The manpower required for administration, and production purposes will be recruited locally without any difficulty. The manpower requirement for expansion will be around 50. Following table shows the existing and the proposed facility:

Name of product	Existing capacity (TPA)	Expansion Capacity (TPA)	After Expansion (TPA)
Asbestos cement sheets	197,000	103,000	300,000

Following table shows source of raw material:

S. No	Raw Material	Source	Mode of Transportation
1	Asbestos Fibres	Imported (Brazil, Russia)	By Ship upto the Chennai port then by Road (Closed container)

The existing total connected load is 2647 KW with current contract demand of 1500 KW which is under HT limits. Existing power is obtained from APSEB. However, there are two DG Sets of 1010 KVA and 320 KVA are installed as a standby to the APSEB connection. No additional power is required. No Additional Water required for proposed expansion project but the requirement will be adjusted with the existing permitted water capacity. i.e. 484 KLD which will be sufficient for existing and increased capacity of the production.

The raw materials required are Asbestos fibre & other fibres 22.58 TPD (8 to 9%), Binders cement 124.16 TPD (47%) & fly ash materials 76.22 TPD (27%). Pulp 2.82 TPD (1%). Bag filters (with auto cleaning system) are been provided with stacks of adequate height to existing Fibre handling, Cement Feeding & Fly Ash Feeding Sections, the same will be upgraded to handle the proposed expansion capacity. All the internal roads are already been made pucca to reduce the fugitive dust emission due to the vehicular movement. Energy meters have been provided to air pollution control systems to ensure continuous operation of the control systems. Raw material unloading areas have been provided with water sprinklers to suppress the fugitive dust.

During the study period (Oct 2014 to Dec 2014) The highest 98 percentile of PM10 recorded at the villages Ibrahimpatnam & Jupudi (81.5 µg/m³) and Lowest value is 69.5 µg/m³ at the village Kondapally. The highest 98 percentile of PM2.5 recorded at the villages G.Konduru (25.5

$\mu\text{g}/\text{m}^3$) and Lowest value is $23.0 \mu\text{g}/\text{m}^3$ at the village Shanti Nagar & Kavaluru. The highest 98 percentile of SO_2 recorded at the villages G.Konduru ($14.7\mu\text{g}/\text{m}^3$) and Lowest value is $10.5 \mu\text{g}/\text{m}^3$ at the village Jupudi. The highest 98 percentile of NO_x recorded at the villages G.Konduru ($17.0 \mu\text{g}/\text{m}^3$) and Lowest value is $11.4 \mu\text{g}/\text{m}^3$ at the village Jupudi.

All the required personal protective equipment is being given to the workers to prevent them from Mesothelium, Lung cancer and Asbestosis related problems. Nose mask & protective cloths are regularly given to concerned workers working in hazardous area. These clothing's are cleaned with vacuum cleaners in a cabin before & end of the workers duty, Separate bathrooms have been provided for washing of cloths. All the potential occupational hazardous work places are being monitored regularly. The health of employees working in these areas is being monitored once in a year. The same will be continued after expansion also.

No process water will be discharged and zero effluent discharge will be adopted and entire process effluent will be reused / recycled in the manufacturing process. The sanitary wastewater will be treated in a Septic Tank followed by Soak pit. Hence there will not be any adverse impact on water environment due to the proposed expansion project.

The ToR letter issued by the Ministry prescribed for conduct of Public Consultation. However, referring to the OM issued by the Ministry J-11013/36/2014-IA-I dated 10th Dec 2014, PP mentioned that as the project is located within the Industrial Estate which is Notified in 1998, therefore, Public Consultation should be exempted for the project. The Committee agreed on exemption of Public Consultation for the project.

The Committee after detailed deliberation recommended the project for environmental clearance subject to stipulation of the following specific conditions and any other mitigative measures and conditions for environmental protection:

- i. The proponent shall comply with the Hon'ble Supreme Court Direction (year 1995).
- ii. Emission norms for asbestos fibre should be $< 0.2 \text{ fibre}/\text{cc}$.
- iii. Work place asbestos fibre to be monitored and should be $< .1 \text{ fiber}/\text{cc}$.
- iv. Total particulate matter emission should be $< 2 \text{ mg}/\text{Nm}^3$ in stack.
- v. Ambient air quality monitoring should be done specifically for asbestos fibre.
- vi. Medical examination should be carried out by specially designed medical respiratory questioner and the report should be submitted along with the 6 monthly compliance report
- vii. Spirometry test should be conducted every 6 months and x-ray once in year should be carried out and report should be submitted along with the 6 monthly compliance report
- viii. The proponent shall prepare a detailed ESC Plan for every next 5 years for the proposed project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The ESC 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 ESC 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,

Bhopal. The details of the ESC Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

- ix. All waste generated within the plant should be used within the plant
- x. PP should develop in-house facility to monitor asbestos fiber.

41.7.5 Expansion of Cement Plant (from 15,000 TPA to 45,000 TPA) at village Patti Natha Singh, Tehsil Paonta Sahib, District Sirmour, HP by **M/s Ambassador Cement Ltd – [J-11011/569/2010-IA-II(I)]**

M/s Ambassador Cement Ltd. –PP and their EIA-EMP consultant (CPTL Envirotech, Chandigarh) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 17th Meeting of Reconstituted Expert Appraisal Committee held during 13th – 14th December, 2010 for the preparation of EIA-EMP report. The ToR was awarded by MoEF vide F. No. F.No. J-11011/569/2010-IA.II(I) dated 31st December, 2010 for the preparation of EIA-EMP report. PP submitted the final EIA EMP report vide letter dated 11.10.2013. It was decided by the Ministry not to consider the proposal for Environmental Clearance as the EIA report was submitted after the expire of the ToR, i.e. 2 years from the grant of ToR. However, the Ministry vide OM dated 08.10.2014 and 7.11.2014 extended the validity of ToRs from 3 (2+1) years to 4 (3+1) years. PP vide letter dated 29.04.2015 again requested to consider the proposal referring to the OM issued by the Ministry. Therefore, the proposal was considered for the grant of Environmental Clearance and referred to the Committee. The Unit falls in Category B as per schedule to the EIA Notification, 2006; however, being situated within 10 km inter-State boundary of Uttarakhand, Uttar Pradesh and Haryana (Item No. iv of GC), the proposal is considered by the MoEFCC.

M/S Ambassador Cements Limited., proposed to enhance the capacity of existing cement manufacturing unit at Village Patti Natha Singh, Teh. Paonta Sahib, Distt. Sirmaur, Himachal Pradesh. The company proposed to enhance the capacity of existing cement manufacturing unit from 15,000 MTA to 45,000 MTA. The total land available with the proponent is 7877.25 Sqm including the existing plant. The proposed plant will be established in the same premises. PP informed that Jamunwala Reserved Forest (about 2.5 km) Garib Nath & Rampur Beli Reserved Forest (about 1.5 km). Kalesar National Park is within the 10 km radius. Yamuna river is about 2 km from the site and Giri river is about 6 km from the site. The site is at a higher level and above the HFL. Total cost of the project is 2.56 Crores. 5% of the cost of the project shall be spent on welfare projects as CSR. Rs. 13.0 lacs shall be spent on CSR annually for the benefit of the society specially the weaker section.

Following are the list of equipments to be established for the expansion project:

S.No.	Machinery/Equipment	Existing	Proposed
1.	Raw Material storage Shed	1	1
2.	Jaw Crushers for Limestone, Clay & Gypsum	3	3
3.	Motorized Weigh Batcher	1	-
4.	Raw Material Silos	3	2

5.	Raw Meal Grinding Ball Mill	1	1
6.	Blending Silos	2	2
7.	Belt Conveyors for all Sections	4	2
8.	kiln	1	1 (previous one will be replaced)

Following table provide details of raw material and its source:

S.No.	Raw Materials	Quantity (MTD)	Source
a.	For Clinker		
1.	Lime Stone	123	H.P
2.	Coke Breeze	23	Gujarat
3.	Clay	15	Rajasthan
4.	Additives	4	Kala Amb
b.	For Cement		
1.	Clinker	98.5	Own Unit
2.	Gypsum	7	Rajasthan
3.	Fly Ash	45	Panipat T. P, Haryana

Electricity will be sourced from HPSEB. The requirement for the proposed project will be 1200 KW. Apart from this the PP has one DG set of 750 KVA. The total water requirement for the project is 10 KLD.

Ambient air quality was monitored at eight (8) locations for the period of 1st January, 2011 to 31st march, 2011 in and around the project site. The levels of PM10 (51-60 $\mu\text{g}/\text{m}^3$), PM 2.5 (29-34 $\mu\text{g}/\text{m}^3$), SO₂ (2.8-3.2 $\mu\text{g}/\text{m}^3$) and NO₂ (17.5-20 $\mu\text{g}/\text{m}^3$) are within the prescribed limits. For Process related emissions, dust extraction cum bag filter systems shall be provided. For non-process related emissions covered shed, tarpaulin cover, water sprinkler shall be provided.

Public hearing for the project was conducted by Pollution Control Board on 22.3.2012 under the chairmanship of Additional Deputy Commissioner, Sirmour. Issues raised are employment for the local population, plantation around the unit, motor for hand pump in the nearby area, control of pollution etc.

The Committee after detailed deliberation recommended the project for environmental clearance subject to stipulation of the following specific conditions and any other mitigative measures and conditions for environmental protection:

- i. Two Layers of plantation should be provided all along the periphery of the plant
- ii. Particulate matter emission to be restricted to 150 mg/Nm³
- iii. Stack height should be as per CPCB formula $H = 14(q)0.3$ (q = SO₂ Emission load in Kg/Hr)
- iv. Regular Health check-up of the employees should be conducted and report should be submitted to the Ministry along with the 6 monthly compliance report

41.8 ANY OTHER ITEM

- 41.8.1 Expansion of existing 1.8 MMTPA cement plant to 3.6 MMTPA by installation of 1.8 MMTPA cement plant at village Jhalo ka Garha, P.O. Wajwana, Tehsil Garhi, District Banswara, Rajasthan by **M/s Trinetra Cement Ltd** - [F. No. J-11011/400/2012-IA II (I)]

The ToR for the proposal was awarded by the Ministry vide letter No. J-11011/400/2012-IA-II(I) dated 18/04/2013. The PP has requested for extension of validity of ToR for further period of 1 year. It has been informed by the Committee that the Ministry vide OM dated 08.10.2014 and 7.11.2014 extended the validity of ToRs from 3 (2+1) years to 4 (3+1) years. Therefore ToR for the above proposal is valid upto 17th April, 2016.

- 41.8.2 Environmental Clearance for the proposed stand alone clinker grinding unit **M/s Jai Shree Krishna Cement** G-27, RIICO, Sota Nala, Behror, Alwar, Rajashtah – [J-11011/99/2012-IA-II(I)]

Consideration of the proposal was deferred as the PP did not attend the meeting. The proposal would be considered as and when requested for by the PP.

- 41.8.3 Environmental clearance for our Ferro Alloys plant at plot No. 42, 43 & 44, Andhra Pradesh Special Economic Zone(APSEZ), Achutapuram . (Village & Mandal), Vishakhapatnam District, Andhra Pradesh - Request for amendment to EC by Anjaney Alloys Ltd – [F. No. J-11011/220/2009-I A II (I) dated 08.06.2009]

Environmental Clearance for the proposdal was accorded by the Ministry vide letter No. J-11011/220/2009-I A II (I) dated 08.06.2009. following are the details of the facility with production capacity and present status of implementation of the project:

S.No.	Facility	Capacity	Product	Production Capacity	Implementation status
1	Submerged Arc Furnace	4 x 18 MVA	Ferro Manganese (65,000 TPA) Silico Manganese (55,000 TPA) Ferro Silicon (if required)	1,20,000 TPA	In operation
2	Briquetting plant	--	Briquettes	28,000 TPA	Yet to be implemented
3	Sintering plant	--	Sinter	28,000 TPA	In operation

PP has requested for the production of Ferro Manganese(Fe-Mn) / Silico Manganese (Si-Mn) / Ferro Silicon (Fe-Si) to be 1,20,000 TPA. There will be no increase in total production capacity.

After detailed deliberation Committee recommended for the amendment in the EC as requested by the PP.

- 41.8.4 Expansion of Re-rolling Mill (46,000 TPA) and establishment of New Ferro Alloys (8,000 TPA) of **M/s Shri Bajrang Alloys Ltd** at Urla Industrial Area, Village Sarora, Tehsil & District Raipur in Chhattisgarh – [J-11011/43/2012-IA-II(I)]

Consideration of the proposal was deferred as the PP did not attend the meeting. The proposal would be considered as and when requested for by the PP.

41.9 CASE FOR TERMS OF REFERENCE (TOR)

- 41.9.1 Increase of Clinker Production from 1.6 MTPA to 2.60 MTPA (By Installation of New Line) Cement from 0.9 MTPA to 2.0 MTPA by M/s Nagarjuna Cement Plant – [J-11011/576/2008-IA.II(I)-Pt]

Consideration of the proposal was deferred as the PP did not attend the meeting. The proposal would be considered as and when requested for by the PP.

- 41.9.2 Expansion of Clinker Production capacity from 2.97 MTPA to 3.5 MTPA of **Jaypee Himachal Cement Plant** (A Unit of Jaiprakash Associates Ltd.) at Village Baga, Tehsil Arki, Distt. Solan, Himachal Pradesh – [F. No.J-11011/1216/2007-IA-II(I)]

The PP along with their EIA-EMP consultant gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Terms of References for the preparation of EIA-EMP 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.

Jaypee Himachal Cement Plant, a unit of Jaiprakash Associates Limited (JAL) has set up an integrated Cement Plant (HP-I) to produce 2.05 MTPA clinker and 2.54 MTPA cement at village Baga, Tehsil Arki, Solan District, Himachal Pradesh. The Environmental Clearance for the project was issued by the Ministry vide letter Ref. No. J-11011/26/2006-IA II (I) dated 18th May 2006.

Subsequently, the Environmental Clearance was amended for augmentation in Clinker production capacity from 2.05 MTPA to 2.97 MTPA vide letter Ref. No. J-11011/1216/2007-IA (I) dated 24th December, 2013.

PP had earlier applied for the expansion of clinker production from 2.97 MTPA (9000 TPD) to 3.5 MTPA (10500TPD). However, the matter was not considered since the NBWL clearance for the earlier proposal was not obtained.

The matter was considered by the Standing Committee of NBWL in the 31st Meeting held on 12th -13th August 2014 and the Committee recommended the proposal.

Thereafter the PP was requested to apply afresh for expansion of clinker production from 2.97 MTPA (9000 TPD) to 3.5 MTPA (10500TPD).

The expansion project from 2.97 MTPA to 3.5 MTPA Clinker (Proposed 0.53 MTPA Clinker) will be an increase by 17.85% in capacity. The technology used will be calcination by state of art

6 stage Pre-Heater / Pre-Calciner kiln. No additional land required for the project as the expansion is proposed within the existing Cement Plant of area 166.01 Ha. No additional water requirement is envisaged. Existing sanction of 3500 m³/day from two nallas (Treda & Padiyar) near their confluence with Satlaj river (2.5 km from plant site) will be sufficient for enhanced production. JHCP has grid supply to the extent of 30 MW for the operating unit. No increase in connected and contracted power load is envisaged. 956 persons (same as at present)

Material	Existing Qty (MTPA)	Proposed Qty (MTPA)	Total Qty (MTPA)	Source	Mode of Transportation
Limestone	4.50	0.75	5.25	Captive limestone mine #	Closed pan conveyor belt
Laterite/ Iron Ore	0.18	0.22	0.44	Rajasthan Minerals	Road/Rail
Coal	0.52	0.61	1.13	Coal from South Africa & Pet Coke procured from IOCL-Panipat, HPCL-Bhatinda, Bina refineries (M.P)	Road

Existing Captive Limestone Mine, amendment to Environmental Clearance for increase in its capacity from 3.1 MTPA to 5.25 MTPA is under process

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-3:**

- i. P.H. shall be conducted by the Himachal Pradesh Pollution Control Board.

The Committee agreed to the request made by PP to use data collected for mine project.

41.9.3 Installation of new Merchant Mill and new Wheel & Axle Plant with minor increase in capacities at Existing Steel Plant of **M/s SAIL at Durgapur**, Burdwan District of West Bengal – [J-11011/492/2007-IA-II(I)]

The matter was earlier discussed in the 35th meeting of EAC held on 26th – 27th March 2015. The Committee after detailed deliberation advised PP to submit two separate applications for the proposed changes. One application for seeking amendment of the EC dated 10th September, 2007 with regard to change in the plant configuration, wherein PP has proposed to take out/drop certain units from the earlier environment clearance. Second application for the units which are spilling over beyond the extended validity and the PP wants to commission such units, a fresh application for seeking ToR should be submitted.

The Committee during the present meeting suggested to PP to apply under clause 7(II) of the EIA Notification, 2006, since the project is related to modernization of an existing unit with

increase in the total production capacity beyond the threshold limit prescribed in the Schedule to the notification through change in process and or technology or involving a change in the product –mix. The PP should apply afresh with fresh Form I, which shall be considered by the Expert Appraisal Committee. A comparative statement of the inputs and emissions in respect of units as per earlier EC and now proposed should also be provided.

41.9.4 Manufacturing plant for Slabs, Pig iron, Billets and Rebars at Kutch, Gujarat by **M/s Welspun Iron & Steel Pvt. Ltd.**[J-11011/136/2015-IA-II(I)]

The PP along with their EIA-EMP consultant M/s Detox Corporation Pvt. Ltd. gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Terms of References for the preparation of EIA-EMP 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.

M/s. Welspun Iron and Steel Ltd proposes to install a new manufacturing unit for Slabs, Pig iron, Billets and Rebars. It is proposed to set up the plant for based on the proven route of Sinter-coke/BF-BOF and secondary process technology. The proposed unit will be located on new survey numbers. The proposed project site will be adjacent to the existing unit located at Village: Varsamedi, Taluka: Anjar, District: Kutch, State: Gujarat. The land area acquired for the integrated steel plant is 576 acres out of which 60 acres land will be used for green belt development. Total project cost is approx 7885 Crore rupees. Proposed employment generation from proposed project will be 2150 direct employment and 10750 indirect employment.

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

Name of Furnaces/ boiler	No. of furnaces/ boiler	Capacity of each furnaces/ boiler
Blast Furnace	1 No.	330 Tons/Hour.
WHRB	2 Nos.	250 Ton/Hr.
Billet Reheating Furnace	2 Nos.	250 Ton/Hr.
Twin Ladle furnace	2 Nos.	160 Ton
Pig casting machine	2 nos.	4900 TPD
Basic oxygen furnace	2 nos.	160 Tons
Twin Vacuum Degassi	1 nos.	160 Tons
Lime Localcining Plant	2 nos.	600 TPD
Oxygen Plant	1 nos.	940 TPD
Sinter plant	1 nos.	330 Sq. meters.
Slab caster	200 Tons/Hr.	
Billet Caster	150 Tons/Hr.	
Rebar Mill	1200000 TPA	
Slag granulation unit	1 MTPA	

During the manufacturing of the Pig iron, ample quantity of waste heat will be generated, which is proposed to be utilized in Waste Heat Recovery Boiler to produce electricity in Captive Power

Plant. The additional electricity load of 130 MW will be procured from SEB. Company has also proposed to install 3 nos. of 2 MW DG Set.

Proposed raw material and fuel requirement for project are Cooking Coal, Iron Ore Fines, Dolomite Fines, Limestone, Iron Ore Lump, Coal, Raw Lime Stone and Dolomite, Quartzite, Ferro alloys and Additives. Requirement would be fulfilled by local as well as imported supply. Fuel consumption will be mainly of coal, cooking coal and Diesel.

Water Consumption for the proposed project will be 43690 KL/day and waste water generation will be 855 KL/day. Domestic waste water will be treated in proposed STP and industrial waste water generated will be treated in ETP and reused within the plant premises.

The Committee observed that the information provided by the PP for such a major project was very sketchy and suggested a comprehensive document to be submitted for the Committee to provide ToR.

41.9.5 Proposed project of M/s Sri Balaji Forging Pvt. Ltd. for manufacturing of Ingots/Billets (60000 TPA) situated at # E 908, RIICO Industrial Area, Bhiwadi-301019, Alwar, Rajasthan. [J-11011/138/2015-IA-II(I)]

Consideration of the proposal was deferred as the PP did not attend the meeting. The proposal would be considered as and when requested for by the PP.

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 conveyor-cum-rail transport shall be examined.

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

8. Occupational health

- i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month 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(PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material especially slag.
13. Trace metals in water

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

Asbestos milling and asbestos based products

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

Induction/arc furnaces/cupola furnaces 5TPH or more

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

Metallurgical industry (ferrous and non-ferrous)

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Emission from sulphuric acid plant and sulphur muck management.
3. Details on installation of Continuous Emission Monitoring System with recording with proper calibration system
4. Details on toxic metals including fluoride emissions
5. Details on stack height.
6. Details on ash disposal and management
7. Complete process flow diagram describing process of lead/zinc/copper/ aluminium, *etc.*
8. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
9. Details on Holding and de-gassing of molten metal from primary and secondary 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 41st MEETING OF EAC (INDUSTRY-I)
HELD ON 1st – 2nd June, 2015

S.N.	Name		Attendance	Signature
1	Shri M. Raman	Chairman	A	
2	Shri R.K. Garg	Vice-Chairman	P	
3	Prof. R.C. Gupta	Member	A	
4	Dr. Prem Shankar Dubey	Member	P	
5	Dr. R.M. Mathur	Member	P	
6	Dr. S. K. Dave	Member	P	
7	Dr. B. Sengupta	Member	P	
8	Shri Rajat Roy Choudhary	Member	A	
9	Dr. S.D. Attri	Member	A	
10.	Dr. Antony Gnanamuthu	Member	A	
11.	Prof. C. S. Dubey	Member	P	
12.	Shri Niranjan Raghunath Raje	Member	P	
MOEF Representatives				
13.	Dr.Satish C. Garkoti	Scientist F & MS (Industry-I)		
14.	Shri Amardeep Raju	Scientist D		
