

**MINUTES OF 27<sup>th</sup> RECONSTITUTED EXPERT APPRAISAL COMMITTEE (INDUSTRY) HELD ON 13<sup>th</sup> and 14<sup>th</sup> NOVEMBER 2014**

- 27.1** Opening Remarks of the Chairman
- 27.2** Confirmation of the Minutes of the 25<sup>th</sup> Reconstituted Expert Appraisal Committee (Industry) held during **13<sup>th</sup>-14<sup>th</sup> October 2014**.

The minutes of the 25<sup>th</sup> meeting were confirmed subject to corrections given in Agenda Item 27.10.12.

**THURSDAY, 13<sup>th</sup> NOVEMBER 2014**

**27.3 Environmental Clearance**

- 27.3.1 Proposed Mini Cement Plant of **M/s Amul Cement Industries** at vill. Patapar, Taluka & Dist. Junagadh, Gujarat (EC) (J-11011/721/2008-IA.II(I))

The proposal was filed with the SEIAA/SEAC, Gujarat. SEAC, Gujarat noted during the appraisal meeting held in August 2008 that the Girnar Wildlife Sanctuary is located within 10km of the project site, which makes it a category A project and hence the proposal was transferred to MOEF.

In response to MOEF's clarification sought on the precise location of the project vis-à-vis Girnar WL Sanctuary, PP vide letter dated 02.04.2014 has enclosed a letter No. WLP/32/C/404 of 2013-14 dated 10.03.2014 from the Office of the principal Chief Conservator of Forests, Government of Gujarat wherein it is stated that **the proposed Cement Plant is located at the shortest distance of 1.22km from the outermost boundary of Girnar Sanctuary, Gujarat and is outside the Eco-sensitive Zone of Girnar Sanctuary. In view of this, clearance is not required from the NBWL as per MOEF letter No. 6-10/2011/WL dated 19.12.2012.**

The aforesaid proposal, on the basis of the above-mentioned details was not considered by EAC as Member-Secretary informed that the MOEF has decided to transfer the project file to SEIAA/SEAC, Gujarat.

- 27.3.2 Proposed expansion of existing steel plant from 24,000 TPA (Ingot) to 1,38,000 TPA (TMT bars & Structure) by addition of 2x12 Tonne Induction Furnace, 1 Ladle Furnace of capacity 15 Tonne, 4/7 radius Continuous Casting Machine & 22 TPH Reheating Furnace of **M/s. D.S. Rolling Mills Private Limited** at Khasra No. 175, 181, 187-191, 195-197, village Dayalpur, Khanpur Block, Tehsil Lakshar District Haridwar, Uttarakhand (EC) J-11011/349/2013-IA-II (I)

The proposal is for proposed expansion of Integrated Steel Plant of **M/s D.S.Rolling Mills Pvt. Ltd.** located in Khasra No. 175, 181, 187-191, 195-197, village Dayalpur, Block Khanpur, Tehsil Lakshar, dist. Haridwar, Uttarakhand. M/s. D.S. Rolling Mills Private Limited has proposed to expand the existing steel plant from 24,000 TPA (Ingot) to 1,38,000 TPA (TMT bars & Structure) by addition of 2x12 Tonne Induction Furnace, 1 Ladle Furnace of capacity 15 Tonne, 4/7 radius Continuous Casting Machine & 22 TPH Reheating Furnace at village: Dayalpur, Khanpur Block, Tehsil: Lakshar District: Haridwar, Uttarakhand. It is a Category B Project, however, since the unit is located at 2km from UP-Uttarakhand border, it is a Category A project vide applicability of General Condition in the EIA Notification 2006. TOR was granted on 31.03.2014. EC application dated 13.10.2014 has been

received along with EIA-EMP Report and Public Hearing conducted on 20.08.2014. EIA-EMP Report has been prepared by Grass Roots Research & Creation India (P) Ltd.

The proposed expansion will be carried out in an existing plant area of 2.592 ha. The latitude and longitude of the project site is 29° 38' 10.53" N to 29° 38' 17.36" N and 77° 59' 48.08" E 77° 59' 56.07" E respectively. No Forest land is involved. No national park/wild life sanctuary/ecologically sensitive area located within 10 km radius of the project site. Tugalpur village is located at a distance of 0.5km from the project site. Major water bodies found in the study area include – River Banganga (4km ESE), River Ganga (5km ESE), Bodi nadi (4km NE), River Solani (5km NW) and Rohalki nala (8km N). No court cases/litigation is pending against the project. The cost of the project is Rs. 32 crores.

3. The status of existing and proposed expansion units are as given below:-

Existing units:

S.No	Facility	Production Capacity
1.	1 no. of Induction Furnace (8 Ton)	24000 TPA

Proposed units:

S.No	Facility	Capacity
1.	2 no. of Induction Furnace	12 Ton
2.	1 no. of Ladle Furnace	15 Ton
3.	Continuous Casting Machine (4/7 radius)	2 Strand
4.	Reheating Furnace	22 TPH
5.	Rolling mill	Roughing group Rolling Mill – 1 Rolling Mill -2
6.	Annual Capacity (Bars and Structure)	1,38,000 TPA

**Note: The existing 8 Ton induction furnace will be dismantled after expansion.**

PP and their consultants made a presentation. Total water requirement is 98m<sup>3</sup>/d and NOC from groundwater dept. is not required as the project falls in safe area. Zero liquid discharge unit. Existing power requirement is 4000kVA and proposed additional demand is 6000 kVA. Permission granted for 10,000kVA by Uttarakhand Power Corp. Ltd. Unit has obtained a renewal of CTO from Uttarkhand Environment Protection and Pollution Control Board vide letter No. UEPCCB/HO/Con-D-73/2014/375 dated 02.06.2014. A Rainwater harvesting pond of 3m depth and 525m<sup>2</sup> has been created with a 10days storage capacity. The storage of stockpiles with a stable liner to avoid leaching of materials. The total cost for EMP – capital cost is Rs 133 lakhs and revenue costs is Rs 21.05 lakhs for the proposed expansion project. An amount of Rs 220 lakhs has been provided for Enterprise Social Commitment which is 5% of the total cost of the projects for undertaking socio-economic activities for the initial 5 years in the areas of health and sanitation, gender issues, and education. Public Hearing was held on 20.08.2014 and chaired by Smt. Ravneet Cheema – Additional Dist. Magistrate, Hardwar. Issues raised include employment to locals, CSR details. The PP has committed to implementation of a CSR plan for a total amount of Rs 2.2 crores.

The Committee desired that two rows of trees should be planted along the boundary of the site. The Committee after deliberations recommended the project for environmental clearance subject to the following specific conditions and any other additional conditions that may be stipulated for environmental safeguards:

- i. No change of products or capacity shall be undertaken without prior approval of this Ministry.

- ii. Continuous monitoring facilities for the process stacks and sufficient air pollution control equipments viz. fume extraction system with bag filters, ID fan and stack of adequate height to furnace shall be provided to control emissions below 50 mg/Nm<sup>3</sup>.
- iii. Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- iv. The total water requirement shall not exceed 98m<sup>3</sup>/day. 'Zero' effluent discharge shall be strictly followed and no wastewater should be discharged outside the premises.
- v. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources.
- vi. Green belt over 33 % of the total project area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- vii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 20.08.2014 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office.
- viii. Occupational health surveillance of the workers including regular analysis for respiratory and audiometric parameters shall be done on a regular basis and records shall be maintained as per the Factories Act.
- ix. Proper housekeeping should be maintained within the plant premises. Process machinery, exhaust and ventilation systems shall be laid in accordance with Factories Act. Better housekeeping practices should be adopted for improvement of the environment within the work environment.
- x. 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.
- xi. Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of Environmental Clearance letter.
- xii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

7.3.3 Expansion of Integrated Steel Plant Project of **M/s Divine Alloys & Power Co. Ltd.** at village Palgam, Kaushalgarh, Vhowkda-Kandra Road, P.O. Ghatdulmi, Tehsil Chandli, Dist. Saraikela-Kharsawan, Jharkhand (EC) J-11011/492/2010.IA-II(I)

The proposal is for expansion of their existing Induction Furnace to expand to an Integrated Steel Plant. The project is located at a latitude of 22° 55' 09.85" N and Longitude of 85° 59' 33.11" E and is found on Toposheet Map 73F/13.J/1, E/16 and 1/4. The total project area is 48.77 acres. Expansion to be carried out in existing premises of 48.77 acres. The total project cost is Rs 286.37 crores. All the steel plants are listed at S.N. 3(a) in Primary Metallurgical industry under Category A of the Schedule of EIA Notification, 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF&CC.

S.N.	PROJECT DETAILS	CAPACITY
<b>A.</b>	<b>EXISTING FACILITY</b>	
	Induction Melting Furnace	5Ton/Heat
<b>B.</b>	<b>PROPOSED EXPANSION PROJECT</b>	
1.	Coal Washery Complex	40TPH Jig
2.	Coke Oven Plant	110,000TPA
3.	Sponge Iron Plant	2x100 TPD = 200TPD
4.	Captive Power Plant	7MW
5.	Mini Blast Furnace	1x250TPD, 1x70TPD
6.	Pig Casting machine	1x60TPH
7.	Sintering Plant	1x300TPD
8.	BOF Converter	1x20T/Heat
9.	Induction melting Furnace	1x15 T/Heat, 1x2T/Heat
10.	Billet Caster (CCM)	6/11 with two strands (700TPD)
11.	Rolling Mills	206000 TPA

PP and his consultant Pacific Scientific Consultancy Pvt. Ltd began a presentation. It was informed that the existing unit has a mini Blast Furnace to Induction Furnace. Sinter Plant (1x300TPD). Final product of 2,06,000 TPA will be sold in open markets in Jharkhand. Power requirement for the ISP is 26,425KVA which will be met from group companies of Divine, WHRB and existing JSEB Power line. Solid wastes will be generated as slag from the Induction Furnace, blast furnace and sponge iron unit, which will be brought to slag granulation unit and thereafter despatched to cement industry. Water will be drawn from River Suwarnarekha and Chandi Reservoir. Required make-up water is 2120m<sup>3</sup>/d. Sanction obtained for 1500m<sup>3</sup>/d and a reservoir of 1500KLD capacity is to be created. Coal to be obtained from open market.

TOR was granted on 11.03.2011. Public Hearing was conducted on 05.11.2012. Final EIA-EMP Report was submitted on 04.03.2013. MOEF had sought copies of CTE and CTO. CTE was obtained on 29.03.2006 for establishment for production of 70MT/day of Billets/Ingots. The unit has a CTO dated 03.01.2014.

The Committee noted that the EIA-EMP Report has been prepared by a Consultant – Pacific Scientific Consultancy Pvt. Ltd which has Category B accreditation. It was further noted that environmental data has been collected in November 2009. The Committee sought clear copies of CTE and CTO granted by Jharkhand PCB and specific details of products being manufactured in the existing unit along with their capacity. The Committee after deliberations deferred the consideration of the proposal and decided that the EIA-EMP Report should be revalidated along with one month fresh baseline data by a Category A accredited consultant and submitted along with the aforesaid details.

27.3.4 Proposed (Greenfield) Pellet Plant along with Iron Ore Beneficiation Plant and a Producer Gas Plant (480 TPD) of **M/s Rashmi Iron Industries Pvt. Ltd.** at village Jitusole, Mouja Bagmuri, P.S. Jhagram, Dist. Paschim Medinipur, West Bengal (EC) (J-11011/180/2012.IA-II(I))

The proposal is for installation of a proposed 1.2 MTPA Pellet Plant along with 1.5MTPA Iron ore Beneficiation Plant and a Producer Gas Plant (480 TPD) (75,000Nm<sup>3</sup>/h) at village Jitusole, Mouja Bagmuri, P.S. Jhagram, dist. Paschim Medinipur, West Bengal. All the steel plants are listed at S.N. 3(a) in Primary Metallurgical industry under Category A of the Schedule of EIA Notification, 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF&CC. TOR was granted on 09.08.2012. Location of the project is Latitude 22°21'49.93"N and Longitude is 87°01'04.79"E. Total land area is 51 acres (20.639ha), which is barren land and already under possession of the company. There are no major water bodies within 10km radius of study area – River Kangsavati and River Subarnarekha flow at 12km NE and 16km S respectively from project site. There is no National Parks/WL sanctuaries/RF existing within 10km study area. Total project cost is Rs 330 crores. The EIA-EMP Report was presented by Envirotech East Pvt. Ltd. which is a NABET accredited consultant.

PP and his consultant made a presentation. The unit is to be established in 61 acres of barren land of M/s Rashmi Cement Ltd. which has leased the land to M/s Rashmi Iron Industries Ltd. Lease Deed documents have been provided. M/s Rashmi Cement Ltd. (Steel & Power Division) is operating a sponge iron plant along with Ferro Alloy Plant and WHRB based CPP adjacent to the proposed project site. Details of R&R (land losers - partial or full) for 85 PAPs has been prepared under the National and State R&R Policy. There are no homestead losers. P.H. was conducted by M/s Rashmi Iron Industries Pvt. Ltd. on 21.01.2014 at Divisional Forest officers' Meeting hall Premises of Jhagram Range Office Campus, dist. Paschim Medinipur, West Bengal.

The details of raw material requirement and transportation details are given below:

S.N.	Raw Material	Annual Requirement (TPA)	Source	Mode of Transportation
1.	Iron ore	15,00,000	Barbil, Banspani & Jaruli (Orissa), Gua, Bara Jamda (Jharkhand)	Rail/Road
2.	Limestone	26,000	Birmitrapur (Odisha) & Raipur (Chhattisgarh)	Rail/Road
3.	Bentonite	40,000	Kutch (Gujarat)	Rail/Road
4.	Coal Fines	144,000	South Africa (imported)	Rail/Road
<b>TOTAL</b>		<b>17,10,000</b>		

Road transportations would be from Jhagram Railway Siding (12.3km), Nimpura Railway Siding (31.8km) and from RML/Gokulpur Railway Siding (35.8km) in Rail/Road mode of transport. About 70% of the pellets produced from the Pelletisation plant of M/s Rashmi Iron Industries Ltd would be transported by conveyors and consumed in the adjoining unit of M/s Rashmi Cement Ltd and the balance 30% sent by NH-6 (220 trucks/day) for other consumers.

Details of Letter of Intent with potential suppliers for supply of iron ore with M/s Rungta Mines Ltd, Indrani Patnaik, MESCO Steel and M/s Tarini Minerals (P) Ltd. have been submitted. Coal (about 1.8LTPA) is to be obtained from South Africa. The percentage of sulphur in coal to be imported is in the range of 0.4-0.7%.

The details of environmental data collected during October 2012-Dec. 2012 were presented. Details of AAQ data collected indicate that the levels of AAQ parameters such as PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> are within prescribed limits. The predicted ground level conc. (GLC) vide AQIP Modelling indicates

that there would be only a marginal increase in values of PM ( $1.02 \text{ ug/m}^3$ ) and  $\text{NO}_x$  ( $3.19 \text{ ug/m}^3$ ). The emissions from the 2 stacks from proposed processes would be kept within  $50 \text{ mg/Nm}^3$ . Bag filters would be installed in stock piles storage, material transfer points on conveyors and ESP in peelt Plant, Pulse jet Bag filter in raw material handling section. In addition, there would be dust extraction systems/dust suppression systems, fog systems to control fugitive dust emissions from raw material handling section and various other facilities inside the plant. Dust collected from bag filter would be landfilled and vegetation developed thereon.

Details of solid waste generation is given below:

S.N.	Type of Solid Waste	Quantity (TPA)	Utilisation
1.	Tailings from Beneficiation Plant	300,000	To be used for brick making/abandoned murrum khadan filling
2.	Ash from producer Gas Plant	43,200	To be used for brick making/ PPC Cement Manufacturing at M/s Rashmi Cement Ltd./ internal road making
3.	Tar from producer Gas Plant	650	To be stored in drums and sold to vendors registered with WBPCB.

There is no toxic effluents and slag generation from the plant. There is no possibility of leaching as all raw materials are stored on pucca platform provided with garland drains and sedimentation pits.

The total make up water requirement is 489KLD which will be met from borewells. Permission has been obtained vide letter 13.03.2014 from SWID from the State Irrigation Dept. for sinking new wells. Average rainfall is 1500mm. An estimated 0.0297mcm of rainwater can be harvested in a storage tank of a depth of 2.5m and area of 1.19 ha (2.93 acres). Efforts will be made to harvest rainwater which will cater to 62 days' requirement of the plant operations. Power requirement of 8MW will be met from West Bengal State Electricity Distribution Company (WBSEDCL). An Emergency preparedness-cum-Disaster Management Plan has been prepared and Teams have been established.

Public hearing was held on 21.01.2014 at Divisional Forest Officers' Meeting Hall premises of Jhagram Range Office Complex, district Paschim Mednipur. Issues raised include: water supply through Sajal Dhara scheme, employment for locals, increase in wages, raw material transportation by covered trucks and proper operation of air pollution devices. These have been addressed in the EMP Report.

The total EMP cost of the project is Rs 12.43 crores (capital) and Rs 1.81 crores (recurring). CREP measures for Steel sector will be adhered to. An estimated Rs 16.50 crores has been earmarked for CSR towards 5% of the Enterprise Social Commitment on Public hearing issues and activity-wise details prepared for the initial 5 years in the broad areas of infrastructure, skill development, health, education and social issues.

After deliberations, the Committee recommended the project for environmental clearance subject to stipulation of the following specific conditions and any other conditions for environmental safeguards:

- i. Rehabilitation and Resettlement (R&R) Plan in accordance with National & State R&R Policy shall be prepared and implemented. All the recommendations mentioned in the R & R Plan shall be strictly followed including suitable employment and other facilities to all the land

losers, etc. Compensation paid in any case shall not be less than the norms prescribed under National Resettlement and Rehabilitation Policy.

- ii. On-line ambient air quality monitoring and continuous 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 prescribed standards by installing energy efficient technology.
- iii. 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. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.
- iv. Total make up water requirement shall not exceed 489KLD/ hr.
- v. 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. Only balance water requirement shall be met from other sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly.
- vi. All the effluents 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.
- vii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent.
- viii. All stockpiles of raw materials shall be stored in covered shed and with paved flooring.
- ix. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.
- x. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xi. Proper utilization of fly ash, if generated, shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office at Bhubaneswar.
- xii. Green belt shall be developed in 33 % of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xiii. Recommendations, which are applicable, made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.
- xiv. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical

breakup/details shall be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program shall be ensured accordingly in a time bound manner.

- xv. The proponent shall prepare a detailed CSR 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 CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO, Bhopal. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
  - xvi. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
  - xvii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 21.01.2014 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 Bhopal.
  - xviii. A Risk Assessment Study and Emergency Preparedness and Disaster Management Plan with focus on Disaster prevention along with the mitigation measures shall be prepared with a focus of Disaster Prevention and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of environment clearance letter.
  - xix. 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.
- 27.3.5 Proposed for Expansion of Sponge Iron Unit of M/s **M/s Suvan Steels Pvt. Ltd.** (formerly **M/s Sajjala Iron & Steel Private Limited**), Tehsil & District Bellary, Karnataka (**EC**) (J-11011/661/2009-IA.II(I))

The proposal is for expansion of sponge iron Unit of M/s Sajjala Iron & Steel Pvt. Ltd (formerly M/s Suvan Steels Pvt. Ltd.) from the existing 30,000 TPA to 60,000 TPA and for establishing a CPP of 8MW (WHRB – 4 MW, FBC - 4MW) within the existing premises. The existing plant facility is a Sponge Iron kiln of 100TPD and an additional unit of 100TPD is to be added. In addition a WHRB of 2x10 TPH capacity and a FBC Boiler of 30TPH capacity are proposed in the expansion project. All the steel plants are listed at S.N. 3(a) in Primary Metallurgical industry under Category A of the Schedule of EIA Notification, 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF&CC. The

unit is located in Latitude 15° 08' 03.4" (N) and 76° 49' 08.35" (E). Total plot area is 42.81 acres of which 15.5 acres is plant area. Total green belt is 6.14 acres. Total cost of the project is Rs 6.14 crores. Nearest village is Janekunta at 1.3km (W) and NH-63 is 2.1km (NE). Nearest town is Bellary. There are a number of RFs in the study area – Bellary RF (3.6km SW), Chikkantapur (8.2km W). Water bodies include Alipur Reservoir (Kere) (2.9km NE) and Tungabhadra High Level canal (6km NE). The plant is located 5km from A.P. – Karnataka border. There are no National Parks/WL Sanctuaries existing within 15km from plant site. There are a number of iron & steel units located within the 10km radius of study area.

PP and their consultant – Team Labs and Consultants, Hyderabad made a presentation. It was informed that the name of the company was M/s Suvan Steels Pvt. Ltd in 2010, which has been changed to M/s Sajjala Iron & Steel Pvt. Ltd. in 2012. The existing unit was set up in 2005 and was operating with a CTE/CTO. Unit was less than Rs 100 crores. TOR was granted on 17.02.2010 and name change in TOR was obtained on 07.02.2012. PH was conducted in Jan/Feb. 2013. Revalidated EIA-EMP Report and a fresh one-season baseline data was collected in March-May 2014.

S.N.	Raw Material	Source	Source Locality	Distance from Plant	Quantity (TPA)	Transport to Site
1.	Iron ore	Purchase	Belalry	6km/200km	1,20,000	Truck
2.	Coal	Purchase	SECL/Import thru Krishnapatanam Port	500km	66,000	By rail/trucks
3.	Limestone	Purchase	Rayalacheruvu Mines	300km	1800	Trucks

Details of Solid waste generation are given below:

S.N.	Waste Products	Quantity (TPA)	Utilisation
1.	Dolochar	40200	In-house WHRB
2.	Dust collected in Bag filter at conveyor points	11083	Cement Units
3.	Flyash	12138	Cement/brick units
4.	Dust collected in waste gas cleaning plant	37989	Cement/brick units
5.	Bag filter from Raw Material Handling	21113	Cement/brick units
6.	Dust from exhaust Gas	12000	Cement/brick units
7.	Iron ore fines	20TPD	Reused in process or sold to pelletisation units/cement plants
8.	Waste Oil	300L/y	Sold to authorised recyclers

It was informed that earlier dolochar was being sold to other units, however with the proposed WHRB, it is to be used within the plant to generate steam. ESP dust and ash are stored in silos and to be given to brick/cement units. Storage areas platforms will be lined to prevent leaching.

One-month AAQ data was collected during May 2014. Levels AAQ parameters (98 percentile values) such as PM<sub>10</sub> (67-75ug/m<sup>3</sup>), PM<sub>2.5</sub> (25-32ug/m<sup>3</sup>), SO<sub>2</sub> (13-16ug/m<sup>3</sup>) and NO<sub>x</sub> (16-18ug/m<sup>3</sup>) from 10 AAQ Monitoring stations were found to be within prescribed limits. Predicted GLC of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> were found to be 1.27, 0.57, 4.69, 3.84ug/m<sup>3</sup> at a distance of 1.6km from centre of plant in NE direction.

Total water requirement is 311 KLD which is drawn from Bellary Municipal Corporation/groundwater using bore well within the plant premises. Blowdown generated from cooling tower is treated and reused in the plant premises for ash quenching, dust suppression and green belt development. The plant operates on a zero discharge basis.

Existing plant area has 4.81 acres of green belt and an additional 1.33 acres will also be developed with plantation. Thus, total area under green belt will be 6.14 acres (39.6% in a total area of 15.5 acres). Measures for compliance of CREP Guidelines for Steel Sector were presented. The total EMP cost is Rs 789 lakhs (capital) and Rs 233 lakhs (recurring).

An amount of Rs 63.5 lakhs has been earmarked for CSR under Enterprise Social Commitment for the initial 5 years, which includes activities for drinking water, rainwater harvesting, educational tools and kits, skill development and self employment, health, greenbelt development in nearby villages, and social issues.

The Committee noted that the Public Hearing minutes indicate that a large number of persons have expressed ignorance of Public Hearing. The general public raised issues of employment to locals, pollution from the plant and transportation, and various measures for control of air and water pollution. However, it was noted that the Karnataka State Pollution Control Board had issued advertisements giving Notice of the P.H. in 'The Hindu' dated 18.01.2013 and in a kannada newspaper "Vijay Kannada" on 18.01.2013. In addition, the Notice specifically states that places of availability of the project documents kept open to the public are at (i) Office of the Deputy Commissioner, Bellary Dist., Bellary, (ii) Chief Executive Officer, Zilla Parishad, Zilla Panchayat, Bellary, (iii) District Industries Centre, Bellary, (iv) City Municipal Council, Bellary, (v) Village Panchayat Office, Belagal village, (vi) Regional Office, Karnataka State Pollution Control Board, Bellary, and (vii) Ministry of Environment and Forests, South Zone Office, Koramangala, Bangalore and (viii) HELP DESK, Karnataka SPCB, Bangalore. The Committee noted that wide publicity of the proposed hearing as well as availability of the project documents had been given as per the Notice in newspapers.

The Committee after deliberations sought the following:

- (i) Clarification whether the revalidated AAQ data is for one season (March-May 2014) or for one month (May 2014).
- (ii) A detailed CSR Plan for ESR for 5% of total project cost– village wise and activity-wise details (capital and recurring) to be prepared in consultation with Dist. Admn. and village panchayats.

## 27.4 Further consideration cases

27.4.1 Proposed Increase in production of Asbestos Sheets (from 1,08,000 TPA to 144,000 TPA) of **M/s U.P. Asbestos Ltd.**, vill Mau, Taluka Mohanlalganj, Dist. Lucknow, U.P. (EC) (J-11011/567/2011.IA-II(I))

The above proposal was considered in the 14<sup>th</sup> REAC held on 19<sup>th</sup> December, 2013. The committee sought following additional information for further consideration of the proposal

1. Data on Asbestos fibre count, total particulate count in stack emissions and work zone environment.
2. Health impacts due to asbestos fibre including chest X ray, spirometry and medical examination of all the workers.

PP vide letter dated 15.05.2014 has submitted the above mentioned information. PP along with their consultants M/s Ecomen Laboratories Pvt. Ltd presented the data on Asbestos fibre count, total particulate count in stack emissions and work zone environment for the year 2011-2014 during the meeting. Following table shows the gist of analysis done for the asbestos fibre count.

	Fibre Milling Area Unit-I	Sheet making Area ( Nr. Cabin Unit-III)	Sheet making Area ( Nr. Cabin Unit-I)	Fibre Milling Area Unit-III
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Min.	0.015	0.018	0.013	0.02
Max.	0.08	0.04	0.09	0.08
Standard	0.1			

Regarding health impacts due to asbestos fibre including chest X ray, spirometry and medical examination of all the workers PP mentioned that total 170 workers were examined for Chest X-ray in which 6 workers were detected abnormal. Out of 6 workers 3 were detected pulmonary tuberculosis, one is COPD, and rest were of different type of disease. The diseases are acquired disease or natural disease.

**After detailed deliberations, the Committee recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:**

- i. The project proponent shall adhere to the prescribed BIS standards and laws regarding use and handling of asbestos, safety of employees etc. Raw materials like asbestos fibre and cement shall be transported in closed containers. Asbestos fibre shall be brought in pelletized form in impermeable bags and under compressed condition.
- ii. Only Chrysotile white asbestos fibre shall be used. Blue asbestos shall not be utilized as raw material in the manufacturing process.
- iii. There shall be no manual handling/opening of asbestos fibre bags. The company shall install fully automatic asbestos fibre debagging system.
- iv. Fugitive emissions shall be controlled by bringing cement in closed tankers, fly ash in covered trucks and asbestos in impervious bags opening inside a closed mixer. Dust collectors shall be provided to Fibre mill, Bag opening device (BOD), Cement and Fly ash silos to control emissions. Bag filters followed by wet washer shall be provided at automatic bag opening machine, bag shredder, fibre mill and to cement silo to collect the dust and recycle it into the process. Fugitive emissions generated from hopper of Jaw crusher and pulverizer shall be channelized through hood with proper suction arrangement, bag filter and stack.
- v. The Company shall comply with total dust emission limit of 2 mg/Nm<sup>3</sup> as notified under the Environment (Protection) Act, 1986. Adequate measures shall be adopted to control the process emission and ensure that the stack emission of asbestos fibre shall not exceed the emission limit of 0.2 fibre/cc. Asbestos fibre in work zone environment shall be maintained within 0.1 fibre/cc.
- vi. Bags containing asbestos fibre shall be stored in enclosed area to avoid fugitive emissions of asbestos fibre from damaged bags, if any.
- vii. Proper housekeeping shall be maintained within the plant premises. Process machinery, exhaust and ventilation systems shall be laid in accordance with Factories Act. Better housekeeping practices shall be adopted for improvement of the environment within the work environment also. These include:
  - a) All monitoring transfer points shall be connected to dust extraction system.
  - b) Leakages or dust from machines and ducts shall be plugged.
  - c) Floor shall be cleaned by vacuum cleaner only.
  - d) Enclosed belt conveyer shall be used instead of manual transportation of asbestos within the premises.

- viii. Quarterly monitoring of pollutant ( $PM_{10}$ , asbestos fibre count) in the work zone area and stack(s) shall be undertaken by the Project proponents. In addition, the asbestos fibre count including the fugitive dust in the work zone area shall be monitored by an Independent monitoring agency like NIOH / ITRC / NCB or any other approved agency on six monthly basis and reports shall be submitted to the Ministry's Regional Office, SPCB and CPCB.
- ix. As reflected in the Environmental Management Plan, all the treated effluent shall be recycled and reused in the manufacturing process. No process water shall be discharged outside the premises and 'zero' discharge shall be maintained. All the domestic wastewater shall be treated in septic tank followed by soak pit and used for green belt development.
- x. The Company shall ensure that the entire solid waste generated including process rejects, cement, fly ash, dust from bag filters and empty asbestos bag shall be recycled back in the manufacturing process. There will be no solid waste disposal outside the plant premises. Asbestos fibres which cannot be further recycled due to contamination of iron dust shall be stored in HDPE lined secured landfill. The disposal facilities for asbestos waste shall be in accordance with the Bureau of Indian Standard Code.
- xi. The cut and damaged fibre bags shall be repaired immediately. Empty fibre bags will be shredded into fine particles in a bag shredder and recycled into the process. Piling of AC sheets shall be done in wet condition only.
- xii. The Company shall obtain a certificate from the supplier of Chrysotile fibre that it does not contain any toxic or trace metals. A copy of certificate shall be submitted to the Ministry of Environment and Forests.
- xiii. Regular medical examination of the workers and health monitoring of all the employees shall be carried out and if cases of asbestosis are detected, necessary compensation shall be arranged under the existing laws. The proponent shall create in-house facilities for spirometry test. A competent occupational health physician shall be appointed to carry out medical surveillance. Occupational health of all the workers shall be monitored for lung function test, Spirometry test, chest x-ray, sputum for acid-fast-bacilli (AFC) and asbestos body (AB), urine for sugar and albumen, blood tests for TLC, DLC, ESR, Hb and records maintained for at least 40 years from the beginning of the employment or 15 years after the retirement or cessation of employment whichever is later. Occupational Health Surveillance shall be carried out as per the directives of the Hon'ble Supreme Court including the recent Kalyaneswari case.
- xiv. To educate the workers, all the work places where asbestos dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- xv. The company shall also undertake rain water harvesting measures and plan of action shall be submitted to the Ministry's Regional Office at Bhubaneswar within three months.
- xvi. All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 5<sup>th</sup> October, 2012 shall be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhubaneswar.
- xvii. Green belt shall be developed in at least 33 % of plant area as per the CPCB guidelines in consultation with the DFO. More focus shall be given towards the South East side of the plant layout.

- xviii. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.
- xix. The company shall provide housing for 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.

## 27.5 Terms of Reference (TOR) Cases

27.5.1 Proposed Expansion in Clinker Production Capacity (2.72 to 3.1 MTPA) in Existing Line-II by process Optimization of **M/s Ambuja Cements Ltd.** (Unit: Bhatapara), (Existing Capacity: 2.72 MTPA Clinker Production (Line - II) and Existing Total Plant Area: 238.97 ha) at vill. Rawan, Tehsil & Dist. Balodabazar-Bhatapara, Chhattisgarh (**TOR**) (J-11011/355/2007.IA-II(I))

The project authorities and their Consultant (M/s J. M. EnviroNet Pvt Ltd) gave a detailed presentation on the salient features of the project. The proposal is regarding expansion in Clinker Production Capacity (2.72 to 3.1 MTPA) in Existing Line-II by process optimization. All cement plant with production capacity greater than 1.0 million tonnes/annum is listed at S.No. 3(b) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

Environmental clearance for clinker production capacity of 2.72 MTPA (Line - II) was obtained from MoEF, New Delhi, vide MoEF letter no. J-11011/355/2005-IA-II (I) dated 13<sup>th</sup> April, 2007. Monitoring was carried out by the RO, Bhopal dated 6.05.2014 and it was stated that the implementations of environmental safeguards are mostly satisfactory except green belt development and rainwater harvesting. Certified compliance report has been submitted by RO, Bhopal vide letter dated 08.09.2014.

Bhatapara unit is presently having clinker production capacity of 4.42 MTPA & cement production capacity of 3.5 MTPA; CPP of 63 MW (2 x 15 MW & 1 x 33) capacity & D.G. Set having capacity of 14 MW. ACL intends to optimize the clinker production capacity of existing Line - II (i.e. 2.72 MTPA) by process optimization. Following table shows the proposed expansion:

	Units	Existing Capacity	Proposed Expansion Capacity (Line II)	Total Capacity After Expansion
Project Proposal	Clinker (MTPA)	4.42 (Line I - 1.70 & Line II - 2.72)	Line I - Nil & Line II - 0.38*	4.8 (Line I - 1.70 & Line II- 3.1)
	Cement (MTPA)	3.5	Nil	3.5
	Captive Power Plant (MW)	63 {2 x 15 & 1 x 33}	Nil	63
	D.G. Set (MW)	14	Nil	14
Screening Category	As per EIA Notification dated 14 <sup>th</sup> Sept., 2006, as amended from time to time; the project falls under Category "A", Project or Activity '3(b)'.			

PP mentioned that the additional Limestone requirement (0.56 MTPA) will be catered from existing captive mines; for which EC has already been obtained from MoEF, New Delhi. Optimization of various Variable Frequency Drives of Pre-heater Fan, Raw Mill Fan and Cooler Fans which have margins and are underutilized at present shall be identified to achieve desired flow and pressure for better efficiency. It is proposed to run Kiln with Expert Optimizer (an automatic tool) like Fuzzy Logic System which increases efficiency and decreases the human intervention, increasing the Thermal loading to 5.73 Mkal/hr/m<sup>2</sup> which is well below the norms of 6.0 Mkal/hr/m<sup>2</sup>, running the kiln at Volumetric loading of 6.47 TPD/M<sup>3</sup> from 5.872 TPD/M<sup>3</sup>, modification of control software logic to increase the stroke frequency of both grates of cooler by 1 stroke/min, increasing the flow of Cooler Hydraulic Pump for increasing the grate speed and frequency.

PP mentioned that there is no additional land is required for the proposed expansion project, as the same will be done within the existing plant premises by optimization. No additional manpower requirement. No additional capital cost is required for proposed expansion. Existing APCEs have adequate potential for proposed marginal expansion capacity.

The Committee after deliberations decided that although the proposal was listed for the grant of ToR for the expansion project, since the expansion is only for Clinker Production Capacity from existing 2.72 MTPA to 3.1 MTPA, the Committee decided to consider the case as an amendment of EC since the expansion is only to the extent of 14%. The Committee also recommended for withdrawal of earlier TOR application dated 21.07.2014 sought by the PP.

**27.5.2 Proposal for Cement Grinding Unit of 0.14 MTPA Greenfield Portland Pozzolana Cement of M/s Himalaya Height Cements Pvt. Ltd. at Kurari, Durgauti, Bhabua Distt., Bihar (TOR) J-11011/333/2014.IA-II(I)**

The project authorities and their Consultant (M/s Visiontek Consultancy Services 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 Term of References for the preparation of EIA-EMP. Since the production capacity of the proposed project is less than 1.0 million tonnes/annum the project activity listed at S.No. 3(b) comes under Category 'B' of the Schedule of EIA notification 2006. However, General Condition is applicable due to project is located at a distance of 4.5 Km from Uttar Pradesh boundary, therefore the proposal is treated as category 'A' and appraised by Expert Appraisal Committee (I).

M/s Himalaya Height Cement Pvt Ltd (HCPL) has proposed to establish Cement Grinding Unit of 0.14 MTPA Greenfield Portland Pozzolana Cement (PPC) using Ball Mill Technology within the existing plot of 3.10 acres which has a mini-cement plant. The site is located at Kudari, Durgauti, Bhabua District, Bihar. The lat/long of the project site are 25°12' 59.16"N, 83°26' 52.88"E. Nearest habitation is village Champadihi. River Karmnasa is at a distance of 4.9 km (W), River Durgauti is at a distance of 7.6 km (E), River Gohuwan is at 5.8 km (E) and Kohira Main Canal is at 2.97 km (W). Nearest Railway Station is Karmnasa Railway Station at 3.0 km NW and Dhaniachha Railway Station at 4.5 km NE.

Project Land Area is 3.10 acres. Land has already been identified and acquired. Water Requirement for the project is 8m<sup>3</sup>/day (Nil in Process). Water will be sourced through bore well for drinking & other purposes. Power requirement will be 1000 KW. Power will be met from Bihar State Electricity Board. The cost of the project is Rs. 805.00 Lac. The HCPL has proposed an amount of Rs. 44.74 lakh for pollution control measures as capital cost and Rs. 10.54 lakh/annum as recurring cost. An amount of Rs. 40.25 Lakh for a period of 5 years has been earmarked for CSR activity.

Details of raw materials used:

SL	Material	Source	Transportation mode	Total R.M Requirement (PPC) in TPA
1	Clinker	K.J.S Cement, Maihar, Birla cement, Satna, M.P. Shree Cement, Rajasthan.	Road/Rail	98,000
2	Fly ash	Hindalco, Renukoot, NTPC, Anapara, U.P.	Road	36,400
3	Gypsum	Paradeep Phosphate Ltd, Odisha	Road/Rail	5,600

After 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:**

1. P.H. shall be conducted by the Bihar Pollution Control Board as per the generic TOR.
2. Photographs of the site along with green belt development should be presented at the time of EC presentation

27.5.3 Expansion of Sponge Iron (495,000 TPA), Billets (700,000TPA), Rolled products (650,000TPA), Power Plant WHRB 45MW, Power Plant PCF 180MW, Oxygen Plant 250MTA of **M/s Surya Dev Alloys & Power Pvt. Ltd.**, vill. Sirupuzhalpet and New Gummidipoondi, Taluk Gummidipoondi, dist. Tiruvallour, Tamil Nadu (**TOR**) (J-11011/11/2010-IA.II(I))

It was noted that M/s Suryadev Alloys & Power Pvt. Ltd had obtained Environmental Clearance for their existing unit vide dt. 20<sup>th</sup> May 2011. For proposed Expansion, a TOR application along with Form I & PFR was submitted to MoEF&CC on 20<sup>th</sup> December 2011. The TOR was considered in EAC(I) meeting and TOR was granted on 14<sup>th</sup> February 2012 vide letter no. J-11011/595/2011 IA-(I). Thereafter, in May 2013, PP submitted a proposal requesting for amendment in TOR letter (for change in plant configuration) and extension of TOR validity. EAC presentation was held in August 2013, however EAC recommended for Fresh TOR. Subsequently, PP again requested MoEF&CC for further revisions in sponge iron plant configuration from 4 x 175 TPD & 2 x 500 TPD to 3 x 500 TPD (ultimately reducing the total production capacity of sponge iron from 5,61,000 TPA to 4,95,000 TPA). Since there were repeated changes proposed in the plant configuration, the Ministry letter vide dated 28<sup>th</sup> October 2014, requested for fresh TOR application online along with Form I & Pre-feasibility report incorporating the changes required. Accordingly PP has submitted the application online.

The project authorities gave a detailed presentation on the salient features of the project. of Sponge Iron (495,000 TPA), Billets (700,000TPA), Rolled products (650,000TPA), Power Plant WHRB 45MW, Power Plant PCF 180MW, Oxygen Plant 250MTA. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

M/s Suryadev Alloys & Power Pvt. Limited have proposed to expand the existing steel plant (Unit – I) by addition of Unit –II at Survey nos 287/1A, 287/2, 287/3, 290/1, 291/1A, 291/1B, 291/4, 291/5 of New Gummidipoondi Village and 78/1, 78/2A1, 78/2A2, 78/2C, 78/2D, 78/2E, 81/1B, 81/2A, 81/2B, 81/2C of Sirupuzhalpettai Village, Taluk Gumidipoondi, District Tiruvollur, Tamil Nadu. The land requirement after the proposed expansion is 164.01 acres (Existing: 119.01 acres and Expansion: 45 acres). Proposed expansion will be taken up in partly in the existing plant (Unit # 1) and partly in the land adjacent (Unit # 2) to the existing plant. No National Park / Wild life sanctuary / Bird Sanctuary are located within 10 km radius of the project site. Arani River is situated at 3.4 Kms. from the

proposed project site. Gumadipoondi Railway Station is at a distance of 3.0 Kms. from the project site. Palavakkam RF exists within 10 Km. radius of the project site. Gumadipoondi Industrial area is present within 10 Km. radius of the project site. Total cost of the expansion project is Rs. 1250 crores.

Following table shows the proposed units with revised configuration and production capacities

S.No	Products	Production Capacity as per EC issued on 20 <sup>th</sup> May 2011	Present Proposal	After the Present proposal (Total Capacities)
1	Billets	12,50,000 TPA	7,00,000 TPA (4 x 40 MT)	19,50,000 TPA
2	Rolled products	12,00,000 TPA	6,50,000 TPA	18,50,000 TPA
3	Sponge Iron	*2,31,000 TPA (4 x 175 TPD)	4,95,000 TPA (3 x 500 TPD)	4,95,000 TPA (3 x 500 TPD)
4	Power Plant WHRB	18 MW	45 MW (3 x 15 MW) [Instead of existing 18 MW]	45 MW (3 x 15 MW)
5	Power Plant CFBC	2 x 80 MW	210 MW (Pulverised Coal Fired (PCF) based) w/o cost escalation	370 MW
6	Ferro Manganese	12000 TPA	---	12000 TPA
7	Silico Manganese	24000 TPA	---	24000 TPA
8	Oxygen plant	---	250 MT	250MT

4x175 TPD sponge iron is yet to be implemented and same is now proposed to be replaced with 3 x 500 TPD in the present proposal. Hence, the total sponge iron production through 3 x 500 TPD will be 4,95,000 TPA). PP also mentioned that they have completed the baseline data collection from 1<sup>st</sup> December, 2013 to 28<sup>th</sup> February, 2014 and requested that they may be allowed to use the data collected during the above period, which was agreed to.

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:**

1. P.H. shall be conducted by the Tamil Nadu Pollution Control Board as per the TOR.
2. Photographs of the site along with status of green belt development and water harvesting structures should be presented at the time of EC presentation
3. PP should submit the compliance report of the EC issued for the existing plant.

27.5.4 To re-commission existing micro blast furnace with matching Pig casting facilities for making SG iron insert for railway track of **M/s Parth Ispat (India) Pvt. Ltd.** at Dist. Dhanbad, Jharkhand (**TOR**) J-11011/300/2014.IA-II(I)

The project authorities and their Consultant (M/s Pollution and Ecology Control Services (PECS), Nagpur) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

The site is located at Village Amaghata, Dhanbad (Jharkhand). The Nearest major road is National Highway NH2 which is at a distance of 1.5km and National Highway NH32 at a distance of 1km. The Latitude of the site is 23°49'36"N and Longitude 86°30'36"E. Nearest railway station is Dhanbad Railway Station at a distance of 8km(SW). The nearest forest is Dhangi RF at a distance of 1 km (SW). The total water requirement for the project is 15m<sup>3</sup>/day. Energy requirement is 750KVA which will be sourced from DVC (Damodar Valley Corporation).

M/s Parth Ispat (India) Private limited applied for grant of NOC/Consent to Establish to Jharkhand Pollution Control Board for the production of pig iron and SG iron insert on 18<sup>th</sup> January 2006. NOC/Consent to Establish was issued by Jharkhand Pollution Control Board on 6<sup>th</sup> October 2006 to produce pig iron & SG CI inserts. Further Jharkhand Pollution Control Board issued 1<sup>st</sup> consent to Operate on 2<sup>nd</sup> June 2010 to produce 100MT/D of pig iron and 11MT/D of SG CI Inserts. However, while issuing the renewed Consent to Operate on 7<sup>th</sup> August 2013, Jharkhand Pollution Control Board advised PP to obtain Environmental Clearance to produce pig iron. It has been mentioned by the PP that the micro blast furnace to produce pig iron was in operation till August 2013. PP has applied to MOEF with request to grant environmental clearance to re-commission Mini blast furnace (23m<sup>3</sup>) and start production (unit is presently shut down).

The Committee noted that the plant started operation without obtaining valid EC after obtaining the CTO on 2<sup>nd</sup> June 2010. Therefore, the project proposal involves violation of the Environment (Protection) Act, 1986 or Environment Impact Assessment (EIA) Notification, 2006 and will be considered as per Ministry's O. M no. J-11013/41/2006-IA II (I) dated 12<sup>th</sup> December, 2012 and 27<sup>th</sup> June, 2013.

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:**

1. P.H. shall be conducted by the Jharkhand Pollution Control Board as per the TOR.

The TOR may be issued after fulfilling the action vide MOEF O.M.s on violation.

#### 27.5.5 Proposed Cement Plant of **M/s Kanodia Infratech Ltd.** at Dist. Kaimoor, Bihar (**TOR**) J-11011/329/2014.IA-II(I)

The project authorities and their Consultant (M/s Envirotech East Private Limited) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. Cement plants with production capacity greater than 1 million tonnes/annum is listed at S.No. 3(b) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

The company will set up Cement Grinding Unit with an installed capacity of 12,00,000 TPA (i.e. 4,000 TPD) at Kurai Village, Durgavati Tehsil, Kaimoor District. The total proposed production is 1.2 MTPA. The total area covered by the proposed cement grinding unit is 38,280 m<sup>2</sup> (9.457 acre). The land is under possession with the company. The raw material and finished goods will be transported by railway and road. Inter-state boundary of U.P and Bihar state is at a distance of 3.3 km North. The nearest Railway Station is Karmanasa which is 3 km NNW. The nearest river is Karmanasa, which is 3.5 km in NNW and Durgawati Nadi is 7 km in NNW. The cost of the Project Rs. 79.50 crores

No industrial wastewater will be generated from the process. Domestic wastewater generated from plant will be treated in Septic Tank - Soak Pit system. The treated wastewater will be reused for various purposes including plantation, dust suppression etc.

Raw Material	Source of Raw Material	Mode of Transportation	Estimated Quantity (Considering consumption) (TPA) Max.
Clinker	Rajasthan, Chhattisgarh, M.P. etc.	Rail and Road	8,00,000
Gypsum	Rajasthan, Chhattisgarh, M.P. etc.	Rail and Road	3,00,000
Fly Ash	Thermal Power Plant at Renukoot	Road	1,00,000
<b>Total</b>			<b>12,00,000</b>

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:**

1. P.H. shall be conducted by the Bihar Pollution Control Board as per the TOR.
2. Examine the possibility of establishing a railway siding involving all cement plants existing in the vicinity
3. Traffic survey of the existing road should be conducted and the expected load on the road by establishing the project. The capacity of the road should also be assessed.

27.5.6 Expansion of Existing Induction Furnace (26,000 TPA), M.S. Ingots/Billets, Rolling Mill (26,400TPA, M.S. Angles, Channels, Flats, & Square), TMT Rolling Mill (27,000 TPA) Structural and Construction Steel by Rolling Mill Activity by Addition of New Units (SMS/Induction Furnace Machine – 450 TPD/162,000 TPA, M.S. Ingots/Billets), Structural Rolling Mill (150 TPD/45,000TPA, Angles, Channels, Flats and Squares), TMT Rolling Mill (250 TPD/60000TPA, TMT Bars) of **M/s Shree Bhimsehwari Ispat Pvt. Ltd.** at Addl. MIDC Satara, Maharashtra **(TOR)**

The project authorities and their Consultant gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

M/s Shree Bhimeshwari Ispat Pvt. Ltd. has proposed expansion of existing Steel plant - Steel Melting Shop / Induction Furnace with concasting machine- 450 TPD/ 162000 TPA, M.S. Ingots/ Billets, Structural Rolling Mill - 150 TPD/ 45000 TPA, Angles, Channels, Flats & Square and TMT Rolling Mill - 250 TPD/ 60000 TPA, TMT Bars at Plot No. J-17, 18, 19, Kodoli (V), Satara (M & D), Maharashtra. A total of 16224 Sq. Mtrs. of land is earmarked for the proposed Induction Furnace & Rolling Mill (Structural & TMT). About 33% of the total area has been used for green belt development i.e. an area of about 5353.92 square meters out of 16224 square meters of land is allocated for Green belt development. The water required is 40 KLD, which is supplied by M.I.D.C., Satara. The total cost of the project will be Rs. 47 Crores. The total cost of Environmental management Plan is 4.7 Crores. The Process Control Measures for Induction Furnace is Fume extraction system followed Bag filter and

for Rolling Mill is Fume extraction system followed by Wet scrubber. The solid waste is slag from Induction Furnace unit and mill scale from Rolling Mill, which is disposed as per CPCB guidelines. The project is situated in Maharashtra Industrial Development Corporation, Satara. Hence public hearing is exempted as per EIA notification (14th September, 2006 and 1 st December, 2009). Following is the details of the existing and proposed facilities:

S. No	Details	EXISTING PROJECT:	PROPOSED EXPANSION:
1.	Induction Furnace	26,400 TPA, M.S. Ingots/ Billets	450 TPD/ 162000 TPA, M.S. Ingots/ Billets
2	Structural Rolling Mill	26,400 TPA , M.S. Angles, Channels, Flats & Square	150 TPD/ 45000 TPA, Angles, Channels, Flats & Square
3	TMT Rolling Mill	27000 TPA, Structural and Construction Steel by Rolling Mill activity	250 TPD/ 60000 TPA, TMT Bars

It has been observed by the committee that the consultant engaged by the proponent is not accredited as per the norms of MoEF. The Committee advised the PP to engage accredited consultant at the first instance and then carry out the EIA/EMP studies including collection of primary and secondary data.

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

1. P.H. shall be conducted by the Maharashtra Pollution Control Board as per the TOR.

27.5.7 Proposal for 4.4 MTPA Pellet Plant of **M/s Welspun Orissa Steel Pvt.Ltd.** at Dist. Bhadrak, Orissa (**TOR**) J-11011/325/2014.IA-II(I)

The project authorities and their Consultant (M/s Visiontek Consultancy Services 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 Term of References for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

M/s Welspun Orissa Steel Private Limited has proposed 4.4 MTPA Iron Ore Pellet Plant at Dhamra, Bhadrak district of Odisha. The proposed project site Latitude & Longitude is 20° 49' 32.19" N & 86° 56' 55.19"E. The company is the largest manufacturer of pipes. The site is about 56 km away from nearest town Bhadrak. Nearest railway station Bhadrak is 56.5 km away from the proposed project site. Nearest airport is Bhubaneswar about 135 km away from the proposed project site. Total proposed project area is of 156.96 Acre. Total Project Cost is Rs. 1, 05,937 Lac. A budget of Rs. 4250.00 lakhs & Rs. 135.00 lakhs will be earmarked towards capital cost and recurring cost for environmental pollution control measures. A budget of Rs. 5297.00 lakhs has been envisaged for CSR activities.

Following are the details of the proposed plant: Production capacities

Sl. No.	Units	Product	Configuration	Capacity
1	Iron ore Pellet Plant	Iron Ore Pellet	1x4.4 MTPA	44,00,000 TPA

Iron Ore Fines (64.0% Fe), Bentonite, Dolomite/Limestone, Coal/Coke breeze are the major raw materials for the proposed plant. Iron ore is proposed to be obtained from Sirajuddin Mine, Rungta Mine, Mohanty Mine and OCM mine. It is proposed to have a jetty in Dhamra Port. The pellets would be sent to Welspun for manufacture of pipes.

Total water requirement for the proposed project is of 60.3M<sup>3</sup>/hr and will be sourced from River Matai. Waste water from domestic water will be treated in STP and reused in dust suppression, greenbelt etc. RWTP in form of Back Wash will be treated in settling pond and reused in dust suppression. Domestic wastewater will be treated in septic tank and discharged to soak pit. Zero discharge norms will be maintained in the proposed plant. Dust from APC devices & broken pellets will be reused in pellet making. Sludge from RWTP will be used for landscaping. The STP sludge will be used as manure for green belt development. Green belt will be developed in **53 acres** of the total plant area.

The committee observed that the project site is very close to coastal area, which is also cyclone - prone, hence, the proponent requires submitting HTL/LTL map prepared by an authorized agency on 1:4000 scale superimposed with project layout.

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:**

1. P.H. shall be conducted by the Odisha Pollution Control Board as per the TOR.
2. HTL/LTL map prepared by an authorized agency on 1:4000 scale superimposed with project layout should be submitted. In case, the plot is falling within HTL, then the project requires to be relocated as this is not a permissible activity.
3. Disaster Preparedness & Management Plan (for Cyclone) should be prepared and submitted along with the EIA-EMP report.

27.5.8 Proposal for Integrated Steel Plant of **M/s Satyaratan Steel Pvt. Ltd.**, at Village Magoni, Distt Purpam Pare, Arunachal Pradesh (**TOR**) (J-11011/326/2014.IA-II(I))

The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

M/S Satyaratan Steel Private Ltd. proposes to set up a Integrated Steel Plant at Magoni, Holongi, district Papumpare, Arunachal Pradesh. Two numbers of 10 MT and 15 MT Induction Furnace will be set up for manufacturing of M.S. Billet/Ingot. It is also proposed to set up 3 numbers of Re-Rolling Mill for manufacturing of TMT bars thereby making the unit an integrated one.

The geographical coordinates of the proposed project is 26°57'23" North and 93°33'47" East. It is located at village Magoni, Holongi, district Papumpare, Arunachal Pradesh on a plot of land measuring 51860.89 sqm. The site is well connected by roadways and railways. The capacity of the plant is 396000 MTPA (180000 MTPA Billet/Ingot and 216000 MTPA of TMT). The total cost of the project is 7500.00 Lacs

The raw materials will be procured from the local market as well as from outside the state. The approximate requirement will be Iron and steel scrap 1.14 MT/month, silico manganese 0.007 MT/month and ferro silicon 0.002 MT/month.

The unit will require a total connected load of around 6.5 MVA which will be available from the Department of Power, Govt. of Arunachal Pradesh. The unit proposes to dig bore wells at the site to meet the water requirement. Water will be used for cooling and other domestic purpose only as water is not required in the manufacturing process.

The unit will be set up in a phase wise manner, in the first phase the furnace will be installed later in second phase, the TMT rolling mills will be set up. The unit will not create any type of water pollution. Water is required only for cooling and domestic purpose. For the control of air pollution various pollution control devices like venture scrubber, hoods, pulse jet bag filter, id fan etc. will be installed.

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:**

1. P.H. shall be conducted by the Arunachal Pradesh Pollution Control Board as per the TOR.

## **27.6 Any Other Items**

- 27.6.1 Environmental Clearance for Proposed Integrated Cement Plant (2 MTPA), Captive Power Plant (27MW) of **M/s Cosmos Cements Ltd** at Sutanga-Nonkhlieh Ridge, Kheliehriat, Dist. Jaintia Hills, Meghalaya (Request for Extension of validity of EC J-11011/417/2008-IA.II(I) dated 25.08.2009 vide PP's letter dated 13.08.2014)

M/s Cosmos Cements Ltd is a subsidiary of Dalmia Cement (Bharat) Ltd. An environmental clearance has been obtained for the Integrated Cement Plant (Cement 2MTPA, CPP 27MW, Limestone Mining 2.3 MTPA (230ha) near village Salang under Sutnga Elaka, Tehsil Khilehriat, Dist. East Jaintia Hills, Meghalaya. The total plant area is 160ha. Total project cost at the time of EC is Rs 1009.15 crores (present estimated cost is Rs 1500 crores). There are no National Parks/Wildlife Sanctuaries etc within 10km of the project area.

PP has sought an extension of validity of EC. Consent for Establishment was obtained from Meghalaya PCB on 22.09.20209. The entire land for the cement plant has been purchased. Permission for withdrawal of groundwater has been obtained. Vide CGWA letter No. 21-4 (41)/NER/CGWA/2012-17 dated 05.02.2013 to the extent of 1955 KLD considering reuse of 170KLD treated water for greenbelt development. M/s Cosmos Cements Ltd has already incurred an expenditure of Rs 50 crores on this project.

Government of Meghalaya has granted the mining lease for the captive limestone mine over an area of 230 ha of non-forestland vide Notification No.MG/113/2007/152 dated 02.09.2010. Mining lease has been executed in April 2011. The entire land for the Proposed Integrated Project (cement-cum-limestone mine) has been declared as non-forest vide a Joint Inspection Team and a letter dated JH/VFR/CP/2010-11/563/B/1985 dated 05.03.2013 from Divisional Forest officer, Jaintia Hills.

It was stated that M/s Cosmos Cements Ltd. has stated that it is committed to establish the cement plant at the proposed site at the earliest.

The Committee after deliberations extended the validity of EC by another 5 years effective from 25.08.2014.

27.6.2 EC for Ferro Alloys and Steel Plant of **M/s Sarda Metals & Alloys Ltd** at Sy No. 179, 181-183, 185-203 of APIIC Industrial Area, vill. Kantakapalli, Mandal Kothavalasa, Dist. Visianagaram, A.P. (Request of PP vide letter dated 07.10.2014 for Ext. of EC J-11011/164/2009 dated 26.11.2009 and Amendment of EC dated 04.05.2010)

The project proponent did not attend the meeting. It was decided that the proposal will be considered as and when requested by the PP.

27.6.3 Expansion (Ph-II) of Cement Plant (from 2.6 MTPA to 8.6MTPA) of **M/s Sanghi Industries Ltd.** at Sanghipuram, Dist. Kutchh, Gujarat - Extn. of validity of EC No.J-11011/337/2006-IA.II(I) vide PP's letter dated 14.02.2012.

Environmental clearance to the above proposal was accorded by MoEF vide letter no. J-11011/337/2006-IA II (I) dated 5.4.2007. It was submitted by the proponent that, due to unfavorable market conditions and delay in financial tie-ups, there is delay in completion of the project. The basic design engineering has been completed and the project is in advanced stage. Conversion of Railway line from meter gauge to broad gauge from Bhuj to Naliya and further extension to Sanghiuram has been approved by the Ministry of Railways & plans for the execution of the same is being worked out to meet the transportation requirement of raw materials of the project.

The PP vide letter dated 14.2.2012 had requested MoEF for extension of validity of environmental clearance by a period of five years. The matter was considered in the EAC meeting held during 29<sup>th</sup> – 31<sup>st</sup> October, 2012 and after detailed deliberations, the committee recommended for the extension of validity of environmental clearance by a period of five years w.e.f 5.4.2012 subject to the specific and general environmental conditions. However, while examining the proposal it was noted that the project site is located within 3 km from Narayan Sarovar Wildlife Sanctuary. Ministry vide letter dated 3<sup>rd</sup> June, 2014 requested PCCF (Wildlife), Government of Gujarat to clarify whether the Cement Plant- Cum-Limestone Mine of M/s Sanghi Industries Ltd are located outside the eco-sensitive area (ESA) of Narayan Sarovar WL Sanctuary.

The PP furnished a letter of PCCF, Government of Gujarat vide its letter No. WLP/32/B/1163-65 dated 9<sup>th</sup> October, 2014 clarified that Cement Plant-cum-Limestone Mine of M/s Sanghi Industries Ltd are located outside the ESA of Narayan Sarovar WL Sanctuary.

The committee recommended for the extension of validity of environmental clearance by a period of five years w.e.f 5.4.2012 subject to the specific and general environmental conditions.

27.6.4 Letter dated 11.08.2014 of **M/s L&T Special Steels and Heavy Forgings** seeking exemption of P.H. on the TOR granted on 03.07.2014 (J-11011/53/2014-IA.II(I))

The ToR for the proposal of M/s L&T Special Steels and Heavy Forgings Pvt Ltd for the proposed enhancement of existing production capacity of casting by addition of one continuous caster, addition of new product (i.e Heavy Engineering Equipment and Components) and installation of Coal Gasifier at Hazira Manufacturing Complex, Surat – Hazira Road, Hazira notified Area, Village Suvali, District – Surat, Gujarat was accorded vide Ministry's letter dated 03.07.2014.

PP vide letter dated 11<sup>th</sup> August, 2014 requested for exemption of public hearing since the proposed expansion project is in the existing manufacturing facility in Hazira Notified Area.

The Committee after deliberation reiterated its stand and mentioned that PH has to be conducted as per the EIA Notification, 2006.

27.6.5 Expansion of Integrated Steel Complex (Pig Iron Plant – 175,000 TPA to 525,000TPA, Ductile Iron Spun Pipes Plant – 120,000 TPA to 400,000 TPA, Slag Cement – 90,000 TPA, Coke Oven Plant 162,000 TPA to 462,000 TPA) of **M/s Srikalahasti Pipes Ltd (Formerly Lanco Industries Ltd.)** at village Rachagunneri, Mandal Sri Kalahasti, dist. Chittoor, Andhra Pradesh – Letter dated 21.01.2013 for Extn. of validity of EC No. J-11011/914/2007-IA.II(I) dated 25.07.2008)

Environmental Clearance for the above proposal in favor of M/s Lanco Industries Ltd was issued by this Ministry vide letter no. J- 11011/914/2007—IA II (I) dated 25-07-2008. PP vide letter dated 28-1-2013 requested this Ministry to extend the validity of EC since the project cannot be implemented because of the market condition and non availability of funds. The status of implementation of the project as submitted by the PP is as under:

S.No.	NAME OF THE PRODUCT	EXISTING CAPACITY	PROPOSED EXPANSION CAPACITY	TOTAL CAPACITY AFTER PROPOSED EXPANSION	STATUS OF IMPLEMENTATION
1.	Ductile Iron Pipes	1,20,000 TPA	2,80,000 TPA	4,00,000 TPA	1,05,000 has been implemented
2.	Pig Iron	1,75,000 TPA	3,50,000 TPA	5,25,000 TPA	1,00,000 TPA has been implemented
3.	LAM Coke	1,62,000 TPA	3,00,000 TPA	4,62,000 TPA	75,000 has been implemented
	Captive Power generation	12.0 MW & 2.5 MW	20.0 MW & 6.0 MW	40.5 MW	Pending
5.	Slag Cement	90,000TPA	3,00,000 TPA	3,90,000 TPA	Pending

The PP further wants to amend the specific condition (vii) of the EC letter dated 25-07-2008 wherein it has been mentioned that "All the effluent shall be mixed in Central Monitoring Basin (CMB) and further treated in R.O. Plant. R.O. permeate and effluent from coke oven shall be recycled into the plant and R.O. rejects shall be treated in Multi-Effect Evaporation (MEE) system. The solid residue from MEE shall be sent to TSD, Dindigal. The wastewater released from various streams shall be treated recycled & reused either in the process, dust suppression and green belt development etc. No wastewater shall be discharged outside the premises and 'Zero' discharge shall be strictly followed".

However, it has been mentioned by the PP that they have proposed the following treatment system in the Final EIA report vide Pg. No. 10-12 to 10-13 for waste water:

"The boiler blow down will have pH between 9.5-10.5. The pH of R.O. rejects will be between 5-10. These two streams will be neutralized in a neutralization tank of size 4m x 4 m x 2.3 m. These two streams after neutralization will be mixed with cooling tower blow down in a central monitoring basin (CMB). The size of CMB will be 15 m x 11 m x 3.3 m. the effluent from GCP & from DI pipe division will be treated in a thickener. The treated effluent will be sent to CMB. The concentrated

slurry will be dried on sludge drying beds. The filtrate from Sludge Drying beds will be taken to CMB. Part of the treated effluent from CMB will be utilized for dust suppression and remaining for green belt development”.

PP mentioned that the RO reject water from 12 MW CPP is neutralized with blow down of cooling tower and boiler in neutralization pit and consumed entire quantity in coke quenching which gets totally evaporated in the process. Also RO reject water from 2.5 MW CPP is neutralized with blow down water of DIP and MBF in Central monitoring basin (CMB) then treated in ETP. Treated effluents entirely consumed in slag granulation, Gas cleaning plant, dust suppression etc which gets totally evaporated. Hence there is no requirement of MEE

In view of the above, PP requested to amend the point No (vii) of Specific condition as follows:

"Effluents generated in 12 MW CPP will be neutralized in neutralization tank and effluents generated in MBF and DIP are mixed in Central Monitoring Basin (CMB).The treated effluent will be utilized for coke quenching, slag granulation, gas cleaning plant, dust suppression and green belt development".

PP further requested to change the name of the company from M/s Lanco Industries Limited to M/s Srikalahasthi Pipes Limited.

The Committee after deliberations recommended extension of validity of EC for a period of 5 years with effect from 25.07.2013. The Committee also recommended the amendment of Specific Condition (vii) as mentioned above. Regarding change of name, the Committee suggested to submit necessary documents to the Ministry on change of name of the company.

#### **FRIDAY, 14<sup>th</sup> NOVEMBER 2014**

### **27.7 Consideration of EC cases**

27.7.1 Proposed Integrated Cement Plant with 8MW CPP of **M/s Ambuja Cements Ltd.**, at vill. Budavada, Gogulapadu, Dist. Guntur, A.P. (EC) (J-11011/461/2009-IA.II(I))

The proposal is for environmental clearance for Proposed Integrated Cement Plant of 3.3 MTPA clinker production capacity and cement production of 5.75 MTPA with 8MW CPP in villages Budavada & Gogulapadu, Mandal Gurajala & Dachehalli, Dist. Guntur, A.P. TOR was granted on 07.09.2009. Public Hearing was held on 23.08.2012. Final EIA report after conduct of Public Hearing was submitted vide letter No.ACL/Nadikudi/EC/2013/1 dated 27.05.2013. The captive limestone mine projects for both mining leases (ML-1 of 277.87ha and ML-II of 673.73ha) have been recommended EC by EAC (Mining).

The project site falls in latitude 16°33'16"N to 16°34'30"N and longitude 79°42'33"E to 79°43'56"E. There are two RFs – Madinapadu RF (6.9km N) and Daida RF (10.6km NW) existing within 10km radius. Nalla Vagu (0.3km E) and River Krishna (12.9km N) are two rivers flowing near project site. There are no WL Sanctuary/National Parks etc located within 10km radius of project site. The entire land for the Cement-cum-CPP of 182.87ha and corridor land of 7.87ha of a total project area of 190.74ha have been acquired and is in possession. There are a number (08) of industries including cement industries existing in the 10km study area.

Details of raw materials required along with source and mode of transportation:

S.N.	Raw Material	Quantity (MTPA)	Source	Distance (in km)	Mode of Transportation
1.	Limestone	5	Captive ML-I and ML-II	2	Belt conveyer
2.	Laterite/Bauxite	0.05	Warangal	400	Rail/Road
3.	Coal for Clinkeristaion and CPP	0.66 0.74	SCCL/Imported coal	300/300	Rail/Road/Sea
4.	Flyash	1.7	0.26 MTPA- Internally and Remaining from VTPS/NTPC/NTPC Vizag	150/480	Rail/Road
5.	Slag	0.5	Vizag Steel Plant	480	Rail/Road
6.	Gypsum	0.23	Coromandel fertilizers, Vizag	480	Rail/Road

#### Details of solid waste generation

S.N.	Unit	Quantity (MTPA)	Method of Disposal
1.	Flyash from CPP	0.26	Utilised in-plant for manufacture of PPC
2.	Bottom Ash from CPP	0.07	Will be utilised in raw mill
3.	Sludge from SWRP	0.3KTPA	Will be used as manure in plantation
4.	FO Sludge from DG sets/Used Oil	0.6KLD	Sold to CPCB/SPCB registered recyclers
5.	Batteries	350 No.s	Sale to registered recyclers as per Batteries Waste Management Rules.

The various sources of secondary emissions include unloading section, material handling section, coal storage section, clinker cooler section, clinker stock pile section, cement packing section and silo section. A number of control measures are proposed which includes water spraying at transfer and loading/unloading points, fully enclosed areas, belt conveyors to be closed conveyors, internal roads to be paved, pollution control devices such as bag filters, and dust extracted to be recycled back into process, etc.

The proposed plant also has facilities for co-processing of hazardous wastes and will have different feeding systems for solid and liquid hazardous wastes to meet specific requirements of alternate fuels. Wastes to be used include pharmaceutical wastes, paint sludge, tyre chips, waste from paper recycling units, etc as alternate fuels in the cement kiln. Blast furnace slag as an alternate raw material will be sued in the cement manufacturing.

One-season data was collected during post-monsoon season 2012. AAQ parameters such as PM<sub>10</sub> (39.1-50.8ug/m<sup>3</sup>), PM<sub>2.5</sub> (16.1-20.6ug/m<sup>3</sup>), SO<sub>2</sub> (12.2-19.4ug/m<sup>3</sup>) and NO<sub>x</sub> (15.6-20.7ug/m<sup>3</sup>) indicate that the levels are within prescribed limits. AAQ was gain calculated for winter 2013-14 and the 98% values of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> indicate that they well within limits of NAAQM Standards of 16.11.2009. The PP intends to install pollution control devices such as bag filter in most of the process area/units ESP in CPP and in Clinker cooler and bag house raw mill/kiln system. All the raw amterials will be stored under covered sheds/silos and on impervious flooring.

The PP will implement CREP Guidelines for the Cement sector.

The total water requirement for the Cement Plant is 1150m<sup>3</sup>/d, township 530m<sup>3</sup>/d and for the CPP 7120m<sup>3</sup>/d. Thus, the total water requirement for the project is 8800m<sup>3</sup>/d of which 820m<sup>3</sup>/d would be treated/recycled back for green belt (200m<sup>3</sup>/d) and to CPP (500m<sup>3</sup>/d) and for dust suppression (120m<sup>3</sup>/d). Water requirement for the proposed project is proposed to be met from Naguleru Vagu (which is a perennial stream) and supplemented by groundwater/mine sump water from the captive limestone mines. Water table is in the range of 2.15-15.7m below ground level (bgl). Groundwater development is 8.18% only of total ground water reserves and it is proposed to use 7950m<sup>3</sup>/d of

groundwater. This will be supplemented by water store din rainwater harvesting structures. The plant will operate on a zero-discharge basis.

The total green belt development for the plant is 64 ha in and around the plant, CPP and township which is 33.5% of the total project area. Total capital and recurring costs for EMP measures is Rs 300 crores and Rs 30 crores respectively.

Public Hearing was held on 23.08.2012 under the chairmanship of the Joint Collector, Guntur at PWD R&B Travelers' Bungalow, Dachehalli Mandal, Dist. Guntur, A.P. Issues raised include compensation for land losers, land for grazing, water drawl from Naguleru Stream, pulmonary diseases due to pollution from existing cement plants, employment for small pulverising units whose land has been taken for the mines, etc. The company gareed to consider the requests of the issues raised. By and large the persons attending the P.H. welcomed the project.

The Committee after deliberations recommended the project for EC subject to the following specific conditions and stipulation of any other conditions as environmental safeguards:

- i. The expansion project shall comply with the new MOEF&CC Standards vide GSR 612 (E) dated 25.08.2014 with respect to particulate matter, SO<sub>2</sub>, NO<sub>x</sub> for Cement sector.
- ii. Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM shall be controlled to prescribed standards by installing adequate air pollution control system. Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill. Low NO<sub>x</sub> burners shall be provided to control NO<sub>x</sub> emissions. Regular calibration of the instruments shall be ensured.
- iii. All the pollution control devices/equipment in raw mill/kiln, kiln feeding system, clinker cooler, coal mill, cement mill, and cement silo, shall be interlocked so that in the event of the pollution control devices/systems not working, the respective unit(s) shut down automatically.
- iv. Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report shall be prepared and an a plan for implementation submitted to MOEF, RO, Bangalore.
- v. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.
- vi. Storage yards shall be lined and covered.
- vii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. 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.
- viii. Total fresh water requirement after the proposed expansion for cement and captive power plant shall not exceed 7120m<sup>3</sup>/day. Drawl of ground water for the proposed project shall be limited to the extent possible. A detailed Plan for Rain water harvesting shall be prepared and shall supplement the water requirements of the project. The Plan shall be submitted to

Regional Office of the Ministry at Bangalore within 3 months from the date of issue of the letter.

- ix. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge should be adopted.
- x. 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.
- xi. The proponent shall implement a Plan for 100% utilisation the fly ash from the Power Plant in the Cement Plant. All the fly ash shall be utilized as per Fly ash Notification, 1999 subsequently amended in 2003 and 2008. Efforts shall be made to use fly ash maximum in making Pozzolona Portland Cement (PPC).  
However, a detailed study on chemical composition of coal used particularly heavy metal and radio activity contents shall be carried out through a reputed institute and report shall be submitted to Regional Office of the Ministry at Bangalore. Only after ascertaining its radioactive level shall fly ash be supplied for utilization in cement manufacturing.
- xii. The proposed cement plant kiln shall be provided with a flexible fuel feeding system to enable use of hazardous wastes such as oil sludge, cut tyres, etc.
- xiii. The proponent shall examine and prepare a plan for utilisation of high calorific wastes such as chemical wastes, distillation residues, refuse derived fuels, etc as alternate fuels based on availability and composition. For this, the proponent shall identify suitable industries with such wastes and enter into an MOU for long-term utilisation of such wastes as per the E(P) A Rules, 1986 and with necessary approvals.
- xiv. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices should be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / reprocessors only.
- xv. A detailed analysis of soil and crop productivity in the study area shall be carried out through a reputed institute and report submitted to Regional Office of the Ministry at Bangalore and Tamil Nadu Pollution Control Board in a time bound manner.
- xvi. 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.
- xvii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants should be implemented.
- xviii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 23.08.2012 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 Bangalore. Adequate land shall be made available within the project area/mines for grazing.

- xix. 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 CSR 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 CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO, Bangalore. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xx. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- xxi. Risk Assessment Study and Disaster Preparedness and Management Plan with a focus on Disaster Prevention along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bangalore, SPCB and CPCB within 3 months of issue of environment clearance letter.

**27.7.2 Expansion project for increase of clinker production from 1.8 MTPA to 2.2 MTPA of M/s Sree Jayajothi Cement Plant Ltd. (My Home Industries Ltd.) at village Yanakandla, Mandal Banaganapalle, dist. Kurnool, A.P. (EC) J-11011/21/2014-IA-II(I)**

The proposal is for increasing production of clinker from 1.8 MTPA to 2.2 MTPA by process modification in the Cement Plant of M/s Sree Jayajothi Cement Plant Ltd. which is 100% subsidiary of M/s My Home Industries Ltd. EC was obtained for the existing project on 18.07.2008. TOR was granted for the proposed expansion on 18.07.2014. There are no National Parks/Sanctuaries within 10km of the study area. Nearest forests are Rangapuram RF (2.2km W) and Yanakondla RF (0.6km W). The total project area is 67.58 ha and is fully acquired and owned by SJCL. No forestland is required. No additional land area is required. Limestone is to be obtained from captive Limestone Mine – Yanakandla Mines for which EC was obtained in 2011. Total water requirement is 1180m<sup>3</sup>/d for existing project. No additional water requirement for the expansion project. A total of 8.57 ha of the plant area is under green belt. Balance area of 13.73 ha will be developed during the next 5 years to attain 33% of the total land area. The break-up of land area after modernisation is proposed as: Cement Plant - 12.43ha, Open Area – 32.85 ha and greenbelt 22.30ha. No industries except slab stone quarries are located within 10km radius of the study area. MRL of the project site is 240m above MSL and that of River Jureru at 4.2km is 230m.

Raw Material	Quantity (in MTPA)			Mode of Transport
	Before Expansion	After Expansion	Sourced From	

Limestone	2.349	2.87	Yanakandla Mines	Closed belt conveyor
Coal	0.306	0.374	Imported	Road/Rail (railway line being laid)
Bauxite	0.261	0.159	Maharashtra/Rajmundhry	Road
Gypsum	0.160	0.160	Sterlite Industries, Tuticorin	Road
Slag	1.24	1.24	JSW, Bellary	Road

Limestone transport from captive limestone mine is by closed conveyor. No additional material will be transported by road. Additional clinker production from expansion will be despatched to clinker grinding unit by rail and hence no anticipated impacts on nearby villages/habitation.

Modernisation involves dry process of cement manufacture utilising pre-calciner technology. In addition, technological improvements in grinding, homogenisation, pre-calciner, as well as cement packing has been incorporated. A WHRB has not been considered as hot gases from kiln and cooler are used for slag drying.

AAQ one-season baseline data has been collected in the summer of 2014. AAQ data collected in 8 stations including plant site indicates that the 98 percentile values ( $\mu\text{g}/\text{m}^3$ ) are within prescribed limits for  $\text{PM}_{10}$  (53.3 – 61.3  $\mu\text{g}/\text{m}^3$ ),  $\text{PM}_{2.5}$  (22.8-29.2 $\mu\text{g}/\text{m}^3$ ),  $\text{SO}_2$  (10.8 – 14.1  $\mu\text{g}/\text{m}^3$ ) and  $\text{NO}_x$  (12-15.2 $\mu\text{g}/\text{m}^3$ ). Stack emission monitoring of raw mill/kiln, coal mill, cooler, Cement Mill also indicate that they are within limits specified. The predicted Ground Level Concentrations (GLC) due to the proposed expansion indicates marginal increase in  $\text{PM}_{10}$ ,  $\text{SO}_2$  and  $\text{NO}_x$  of 9.41 $\mu\text{g}/\text{m}^3$ , 2.69  $\mu\text{g}/\text{m}^3$  and 9.42 $\mu\text{g}/\text{m}^3$  respectively. The PP has installed high efficiency type bag filters for control of fugitive dust at the following areas – crushing plant, Raw Mill hoppers, Coal Mill hoppers, Blending Silo, Cement Mill hoppers, Cement silo and all belt conveyor transfer towers. In addition, pollution control devices include a bag house at raw mill/kiln, bag filter at coal mill, ESP at Cooler, Bag filters at cement Mill and Slag Mill. All the flue gases have been provided with air pollution control devices/equipment with a control efficiency of 99.8-99.9% to maintain particulate emission levels below 50mg/Nm<sup>3</sup>.

Water table is in the range of 20-30m below ground level (bgl). Rainwater harvesting will be constructed and rainfall runoff (annual rainfall is 600mm) will be routed into the rainwater harvesting pits. Water requirement of 1180 m<sup>3</sup>/d of which Cement Plant (1020 m<sup>3</sup>/d) and domestic (160m<sup>3</sup>/d) is met from Srisaillam Right Bank Canal, for which permission has been obtained from Irrigation & CAD Department, Govt. of A.P. vide G.O. Ms No. 71 dated 08.08.2013. No wastewater generated from the Cement Plant. Wastewater from colony is 128m<sup>3</sup>/d which will be treated in sewage treatment plant and used for green belt development.

Dust collected from the cement plant will be reuse in the cement plant process. No solid wastes generated requiring disposal. Slag from ISP to the tune of 1.4 MTPA is being used in cement kiln. Ash (1000 TPD) being obtained from Rayalseema TPS located at a distance of 140km by 50 trucks and through closed bunkers and transferred into silos using a pneumatic pipeline.. All stockpiles are provided with paved floors to avoid leaching of materials to groundwater. Unit is complying with CREP conditions. Certified compliance report of the RO, Bangalore has been furnished and EC conditions for the existing project found to be compliant. P.H. has been exempted in the TOR vide provisions of clause 7(ii) of the EIA Notification 2006. Earlier P.H. was conducted on 04.12.2007. PP will contribute Rs 1.1 crores for CSR measures over a period of 5 years for need based activities in

the broad sectors of education, health, infrastructure, sustainable development & livelihood and social issues.

The Committee after deliberations recommended the project for environmental clearance subject to the specific conditions given below and any additional conditions for environmental safeguards:

- i. The expansion project shall comply with the new MOEF&CC Standards vide GSR 612 (E) dated 25.08.2014 with respect to particulate matter, SO<sub>2</sub>, NO<sub>x</sub> for Cement sector.
- ii. Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM<sub>10</sub> shall be controlled to prescribed standards by installing adequate air pollution control system. Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill. Low NO<sub>x</sub> burners shall be provided to control NO<sub>x</sub> emissions. Regular calibration of the instruments shall be ensured.
- iii. All the pollution control devices/equipment in raw mill/kiln, kiln feeding system, clinker cooler, coal mill, cement mill, and cement silo, shall be interlocked so that in the event of the pollution control devices/systems not working, the respective unit(s) shut down automatically.
- iv. Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report shall be prepared and an a plan for implementation submitted to MOEF, RO, Bangalore.
- v. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.
- vi. Storage yards shall be lined and covered.
- vii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials shall 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.
- viii. Total fresh water requirement after the proposed expansion for cement shall not exceed 1180 m<sup>3</sup>/day. No ground water shall be drawn for the proposed expansion.
- ix. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge should be adopted.
- x. Rain water harvesting plan shall be prepared and shall supplement the water requirements of the project. The Plan shall be submitted to Regional Office of the Ministry at Bangalore within 3 months from the date of issue of the letter.
- xi. 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.

- xii. Plan for use of fly ash in making Pozzolona Portland Cement (PPC) shall be prepared only after ascertaining its radioactive level shall fly ash be supplied for utilization in cement manufacturing.
- xiii. The proposed cement plant kiln shall be provided with a flexible fuel feeding system to enable use of hazardous wastes such as oil sludge, cut tyres, etc. The proponent shall examine and prepare a plan for utilisation of high calorific wastes such as chemical wastes, distillation residues, refuse derived fuels, etc as alternate fuels based on availability and composition. For this, the proponent shall identify suitable industries with such wastes and enter into an MOU for long-term utilisation of such wastes as per the E(P) A Rules, 1986 and with necessary approvals.
- xiv. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices should be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers /reprocessors only.
- xv. 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.
- xvi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants should be implemented.
- xvii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on the project for the existing EC 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 Bangalore.
- xviii. 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 CSR 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 local administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO, Bangalore. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xix. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- xx. Risk Assessment Study and Disaster Preparedness and Management Plan with a focus on Disaster Prevention along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bangalore, SPCB and CPCB within 3 months of issue of environment clearance letter.

## **27.8 Further Consideration Case**

27.8.1 Expansion of Alumina Refinery (1 MTPA to 6 MTPA) and Expansion of captive power plant (from 75MW to 285MW) of **M/s Sesa Sterlite Ltd.** (Formerly M/s Vedanta Aluminium Ltd.) at Dist. Kalahandi, Odisha (EC) (J-11011/406/2011.IA-II(I))

The proposal was considered in the 23<sup>rd</sup> meeting of EAC(I) held on 18<sup>th</sup>-19<sup>th</sup> September 2014. The proposal was taken up for further consideration on the issues raised by the EAC(I) on the basis of response received from PP. PP and their consultant – M/s Global Experts, Bhubaneshwar made the presentation.

It was informed that the break-up of the existing project land in terms of agricultural, forest, water bodies, wasteland (as per revenue records), habitation (settlements), etc.

S.N.	Type of Land	Area (in ha)	Area in acre
1.	Agriculture	635.45	1570.21
2.	Forest	Nil	Nil
3.	Water bodies	5.69	14.06
4.	Wasteland	184.48	455.84
5.	Habitation	7.69	19.01
	<b>TOTAL</b>	<b>833.31</b>	<b>2059.12</b>

It was stated that the facilities for the proposed expansion will be accommodated within the vacant area lying within the existing plant area. Additional land will be required for Red Mud Pond, Ash Pond as existing ponds may suffice for an additional 10 years for the expansion project. To ensure storage space for another 25 years, additional land would be required. In addition to the above, additional land is required to ensure availability of 33% area for green belt across various facilities.

The phase-wise implementation of the project is as given below:

PHASE	CAPACITY	ACTIVITIES
Phase-I	To increase the existing plant capacity from 1 MTPA to 2 MTPA	The increase from 1MTPA to 2MTPA shall be achieved by the following: <ul style="list-style-type: none"> <li>- Increasing plant availability from 92% to 95% and increasing recovery from 93% to 94%.</li> <li>- Increasing liquor productivity from 80gpl to 90gpl.</li> <li>- Increasing design flow by 16%.</li> <li>-</li> </ul>
Phase-II	To increase the capacity from 2 MTPA to 5MTPA	3 new streams to be added
Phase-III	To increase capacity from 5MTPA to 6MTPA.	De-bottlenecking by process improvement & plant availability by installing additional equipment & accessories.

The total bauxite requirement for the expanded capacity (6MTPA) project will be 16MTPA. For this, OMC has entered into an MOU with M/s Sesa Sterlite Ltd., for supplying 150 MT of bauxite for the refinery. The company has also applied to Govt. of Odisha for 42 bauxite mines in Odisha having a cumulative bauxite deposit capacity of more than 1.8 billion tonnes of bauxite. These are at various stages of application. PP informed that bauxite for the existing project is being procured from their sister concern – M/s BALCO and other companies. The bauxite procurement plan of 15.36 MT of bauxite for M/s Sesa Sterlite for production of alumina is – domestic (2.8MTPA), other domestic sources (9.15 MTPA) and export (3.41 MTPA). The State-wise proposed procurement of 8.15 MTPA of bauxite from domestic sources is – MP (0.15 MTPA), Jharkhand (0.50 MTPA), Chhattisgarh (1.9MTPA), AP (0.8MTPA), West Coast (4.15 MTPA), Odisha (0.65 MTPA). The details of proposed

import of 9.5 MTPA of bauxite – Guinea (4MTPA), Australia (2.5MTPA), Sierra Leone (1MTPA) and Indonesia/Malaysia (2MTPA).

The year-wise production of alumina by the company is given below:

YEAR	Calcined Alumina Production (Tonnes)
2009-10	7,92,195
2010-11	7,06,640
2011-12	9,11,621
2012-13	5,27,052
2013-14	5,24,060
2014-Sept. 14	4,59,600

PP informed that an action plan for storage of red mud generated from refinery are as follows:

Year	Alumina Production (MT)	Red-Mud Generation (MT)	Red-Mud Volume (m3)	Height increase (in m) of Red Mud Pond
1 <sup>st</sup>	1.5	1.8	692308	0.4
2 <sup>nd</sup>	3	3.6	13846154	0.8
3 <sup>rd</sup>	4	4.8	1846154	1.0
4 <sup>th</sup>	5	6	2307692	1.3
5 <sup>th</sup>	6	7.2	2769231	1.5
6 <sup>th</sup>	6	7.2	2769231	1.5
7 <sup>th</sup> -15 <sup>th</sup>	6 x 9	7.2x9	24923079	1.5 x 9 – 13.5

In addition, a plan for utilisation of red mud has also been prepared. Under the Plan, an MOU with CVKI has been signed for supply of red mud for a minimum period of 2 years. Some cement companies such as ACC (Bargarh Unit), Bharathi Cement Corporation, Hyderabad, Ambuja Cements, Bhatapara have placed orders for use of red mud in manufacture of cement. It was clarified that the quality of cement manufactured with red mud as raw material mix is not different from the cement with regular raw material mix. Moreover, the alkalinity of red mud (3-4% in red mud cake) helps in neutralising the sulphur present in the pet coke.

It was informed that the requirement of make-up water at present is 0.20 cumecs and on full expansion to 6MTPA, it will be 0.65cumecs. As per the Data furnished by the Central Water Commission vide their letter No. TD/905/CE/Vol.IV/2014/2043 dated 10.11.2014, the average discharge water flow in River Tel at Kantamal from Jan 2014 – October 2014 is as follows, which indicates that the average lean period flow of River Tel is 133.74cumecs, and the max. water requirement would be only4% of the total water discharge flow:

MONTH (2014)	Water Flow (in cumecs)
January	46.34
February	69.21
March	87.30
April	95.97
May	217.96
June	153.89
July	1315.30
August	1752.18
September	1487.01
October	362.97

It was informed that the existing raw water reservoir (2.1 lakh m<sup>3</sup> capacity), storm water pond (75,000m<sup>3</sup> capacity), caustic water pond (94,350m<sup>3</sup> capacity), red mud pond (7.2 lakh m<sup>3</sup> capacity), process water lake (21.4 lakhm<sup>3</sup> capacity), Ash water Lake (7.1 lakh m<sup>3</sup> capacity) totalling 39 lakh m<sup>3</sup> will be utilised as rain water harvesting pond. In addition, about 1 lakh m<sup>3</sup> of rainwater will be harvested from township which will be recharged to groundwater and can meet the domestic requirement of 2300 people for a complete year. All these water harvesting measures will enable a reduction of about 40% of fresh water consumption. The company will construct separate RCC drains for carrying storm water inside the plant. Decanted water from red mud pond is collected in the Process Water Lake during the monsoon and the same water recycled back to the process through pumping arrangements.

The details of greenbelt development were presented. It was noted that a total of 215.20 ha of green belt has been already developed of the total 512.37 ha (33%) of the total project area of 1552.65 ha. It was stated that further land to be covered under greenbelt after acquisition of land. It was also stated that more focus would be given for plantation along the remaining boundary wall of 3km of the 8km in a width of 15-20m.

Member-Secretary apprised the EAC that an e-mail dated 13<sup>th</sup> November 2014 was received late in the evening of 13.11.2014 which was also e-mailed to all EAC members by **Amnesty International India** raising issues regarding the project. Copy of their letter received by e-mail was circulated to the EAC during the meeting and also handed over to the project proponent. In this regard it was noted that the Ministry of Home Affairs has brought out a Report of the Intelligence Bureau titled "Concerted efforts by select foreign funded NGOs to 'take down' Indian developmental projects, wherein there is a specific reference has been made on activism by European NGOs including the UK-based Amnesty International for stalling of mega industrial projects such as Vedanta (in Odisha).

It was clarified that as per the EIA Notification 2006, the EIA Reports were submitted by the PP in the offices of the Member-Secretary, OPCB, Bhubaneswar, MOEF RO, BBSR, District Collector Kalhandi, GM (DIC), Kalhandi, Chairman Jilla Parishad Kalhandi, BDO Lanjigarh Block, RO, SPCB Rayagada and the Executive Summary Reports of the EIA in both Odia and English were circulated by the SPCB in all the 21 Gram Panchayat Offices of Lanjigarh Block. The date and venue of the Public Hearing were published in the English and Odia daily namely "The Samaj" and the "Sunday Statesman" dated 29.06.2014, i.e. 31 days before the date of Public Hearing by the SPCB.

The Committee noted that the details of landuse break-up for the entire project area of 1552.65 ha has not been provided and sought details of the same. The company noted that the 150MT of bauxite to be obtained from 2 mines of OMC which are at a very preliminary stage of obtaining PL/ML. There is no immediate committed availability of bauxite for the proposed expansion. The Committee noted that there is discrepancy in the procurement of bauxite from domestic sources referred in one place as **9.15** MTPA and under State-wise proposed procurement of bauxite from domestic sources as **8.15** MTPA.

The Committee after deliberations sought the following:

- (i) Details of land use break-up of total project area of 1552.65 ha has not been provided (break-up for 833.31 ha has been provided)
- (ii) It is stated that forestland is 'Nil' in the existing project which is incorrect, as forestry clearance has been granted by MOEF&CC for the forestland within the existing project site. The correct details of forestland (revenue/Protected Forest/Reserve forest/DLC land/etc) in the existing and proposed expansion project and status of forestry clearance should be provided. If forestland exists, status of forestry clearance.

- (iii) Clarification whether 783 ha is over and above the 1552.65 ha of total project area. If so, details of land use break-up for the additional area of 783 ha required for storing red mud, additional area for storing ash (specific details required) and for green belt. Specific clarification to be provided of this has forestland (revenue/Protected Forest/Reserve forest/DLC land/etc) and if so, details. If forestland exists, status of forestry clearance.
- (iv) Status of land acquisition for the expansion project along with supporting documents vis-à-vis MOEF O.M. No. 22-76/2014-IA.III dated 07.10.2014 for (iii) above.
- (v) The details of land requirement as per phase-I, II and III and by which year they (phase-I, II and III) are expected to be reached/achieved (2 MTPA, 5 MTPA and 6 MTPA).
- (vi) Status of EC of the bauxite mines from where the domestic sources of bauxite are identified as long term supplier of bauxite.
- (vii) A specific Alternate Plan for Procurement from both domestic and import should be provided in case no specific mines are available for mineral extraction of bauxite from mines in Odisha and rest of the country.

The Committee decided to further consider the project after receipt of the aforesaid details.

## 27.9 Terms of Reference (TORs)

27.9.1 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 (**TOR**) J - 11011/678/2008-IA-II (I)

The project authorities and their Consultant M/s Grass Roots Research And Creation India (P) Ltd gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

The project is located at Barjora within the industrial estate (WBIDC). EC was granted on 11th February, 2009 vide letter F. No. J - 11011/678/2008-IA-II (I) for Submerged Arc Furnace (4 x 6 MVA). PP mentioned that they could not start the project work due to unavailability of power & recession in the steel market. Construction was started in June, 2012 and stopped in July, 2013 due to non availability of finance for the product mix for which EC was granted. EC has expired on 10<sup>th</sup> February, 2014. The company has decided to change the product mix and the project configuration for smooth completion of the project. PP has requested for TOR for the new configuration. The new configuration is as under:

- i. Submerged Arc Furnace (2 x6 MVA),
- ii. Induction Furnace (4 x 15 T )
- iii. Billet Caster
- iv. Rolling Mill of 89280 TPA.

Nearest Settlement to the project is Kadasole, Ghutgoria. Nearest Town is Barjora & Bankura. Durgapur railway station is at a distance of 10 km and the nearest airport is Kolkata Airport 150 km. the approach road is 3 km East from SH-9 and 1 km from Durgapur Purlia Raghunathpur Road. The site is situated at latitude 23°25.868' N and longitude 87°15.061' E. There is no National Park/Wildlife Sanctuary/Tiger Reserve/Elephant Reserve/Core Zone of Biosphere Reserve/ Habitat

for migratory birds within 10 km radius from the project boundary. River Damodar flows at a distance of 6 km, North East direction. Barjora protected forest is the nearest protected forest.

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:**

1. P.H. shall be conducted by the West Bengal Pollution Control Board as per the TOR.

27.9.2 Addition of a 2.0 MTPA Pellet Plant and 7m tall top charged Coke oven battery of 0.768 MTPA production capacity to Existing Bokaro Steel Plant of **M/s Steel Authority of India Ltd.** at Bokaro Steel City, at Bokaro Dist., Jharkhand (**TOR**) J-11011/327/2014.IA-II(I)

The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

Bokaro Steel plant has already been accorded EC on 16.10.2008 by MoEF for expansion of its capacity from 4.0 MTPA to 7.0 MTPA of crude steel vide memo no. J-11011/99/2007-IA II(I). Extension of the EC was accorded for a period of five years w.e.f. 15.10.2013 vide memo no. J-11011/99/2007-IA II(I) dtd. 24.01.2014.

Proposed Project is for addition of 2.0 MTPA Pellet plant and 0.768 MTPA 7m tall, top charged Coke Oven battery within the premises of SAIL at Village Bokaro, Tehsil Chas, District Bokaro, Jharkhand by M/s SAIL. There is no additional requirement of the land as all the new units will come within the premises of Bokaro Steel Plant. No Forest land is involved. No National Park, Wildlife Sanctuary is exists within 10 km radius of the project site. River Damodar is flowing at a distance of 2.6 km from the project site boundary. Bokaro Steel City Station is about 11 km from plant site. The plant is situated 215 to 243m above MSL gently rolling towards River Damodar, flowing west to east. There are no RF/PF within 10km radius of the project site. The cost of the project is 2388.17 cr. the cost of environmental measures is 167.18 cr.

The raw material required for the additional facilities will be sourced from existing sources. Iron ore fines will be sourced from Bolani iron ore mines and Kiriburu & Meghataburu Iron ore deposits. Limestone will be sourced from quarries of Kuteshwar and Bhawanathpur while dolomite requirement shall be met from quarries of Tulsidamar. Coal requirement shall be met mostly by imported coal and a small percentage (approx. 36%) of indigenous coal sourced from Dugda, Monnidih, Rajrapa, Kathara, Mohuda and other coal mines.

The requirement of additional water for the expansion has been estimated to be about 455m<sup>3</sup>/h and it will be met from existing source Tenughat. It is also envisaged to treat and recycle entire quantity of water. Solid Wastes are gainfully utilised inside plant boundary. Hazardous wastes are disposed in Secured Land Fill Facility of BSL, designed as per CPCB guidelines, which is within BSL premises. No Solid Wastes/Hazardous Wastes are disposed outside plant boundary. Green Belt development: BSL has already planted 41.15 lakh trees in and around Bokaro Steel Plant covering around 33% of the area.

The additional power requirement for the project will be 32 MVA, which will be met from existing facilities. The additional fuel/energy requirement is shall be met from existing BF gas and Coke Oven gas generation from within the plant.

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:**

1. P.H. shall be conducted by the Jharkhand Pollution Control Board as per the TOR.
2. A write-up on the Cyanide removal scheme should be provided for the existing coke oven plant

27.9.3 Application for prior Environment Clearance for our proposed project of 3x 7MT Induction Furnace with Billet caster, 1 x 4 MVA Ferro Alloy and Re- Rolling Mill of **M/s Steelax Electrocast Pvt. Ltd.** at Plasto Steel Park, Barjora, dist: Bankura in West Bengal (**TOR**).

The project authorities and their Consultant M/s Visiontek Consultancy Services 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 Term of References for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

Steelex Electrocast Pvt. Ltd. intends to expand its existing unit of 1 x7 Mt induction furnace by setting up 3 x7 Mt Induction Furnace along with Billet Caster, 1 x 4 MVA Sub Merged Arc Furnace for Ferro Alloy along with a Re-Rolling Mill in the WBIDC Plasto Steel Park in the Industrial belt of Barjora in the district of Bankura. The main purpose of this plant will be to produce Billets to be used in the Rolling Mill. Ferro Alloy product will be consumed by the Billet Casting Plant. The proposed plant shall be equipped with one number of submerged arc furnace of 4 MVA, three numbers of 7 Mt capacity Induction Furnace & 200 TPD Rolling Mill with Re- Heating Furnace. The cost of the project is 6324.60 lakhs.

The proposed plant having an area of 9.5 acres of land is located at Barjora in the Dist of Bankura, West Bengal. The nearest settlement is Ghutgoria which is 0.35 Km and Kamarol 1.29 Km. the nearest town is Barjora, Durgapur railway station is approximately 8.5 km from the site. The site is in close proximity of the DVC power substation where power shall be provided. The proposed location is situated near the Durgapur Industrial belt. The coordinates of the site are Latitude 23<sup>o</sup> 26' 11.21" N and longitude 87<sup>o</sup> 15' 9.43" E. There is no National Park/Wildlife Sanctuary/Tiger Reserve/Elephant Reserve / Turtle Nesting ground/ Core Zone of Biosphere Reserve/ Habitat for migratory birds within 10 km radius from the project boundary.

The total water requirement for the project is 67m<sup>3</sup>/day. The water supply would be sourced from nearest source of water through intake well and also, water will be made available from bore wells inside the plant premises. In remote case of non-availability of water plant will be operated through air cooled condenser system.

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:**

1. P.H. shall be conducted by the West Bengal Pollution Control Board as per the TOR.

2. Layout plan for the existing and the proposed plant should be submitted clearly demarcating the boundary of the existing and the proposed plant.
3. Photograph of the present plant along with the photographs of the land available for the proposed plant should be submitted
4. Damoder water availability and sanction letter from the concerned department be submitted
5. Management plan for the disposal of solid waste should be submitted
6. Design details for bag filter, fugitive emission control etc. should be submitted

27.9.4 Proposed Capacity Expansion of DI pipes Plant (1,10,000 TPA to 300, 000 TPA) of DI pipes of **M/s Tata Metalliks DI Pipes Limited** at Samraipur Block, Gokulpur, Block- Kharagpur-1, Paschim Medinipur, West Bengal (**TOR**) (J-11011/173/2007-IA.II(I))

The project authorities and their Consultant M/s Vimta Labs 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 Term of Reference for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

Tata Metalliks DI Pipes Limited proposed capacity enhancement from 1,10,000 TPA to 3,00,000 TPA. The expansion will be carried out within the existing plant premises of 40 acres located at PO-Samraipur, block-Kharagpur-I, district - Paschim Medinipur, West Bengal. The existing plant is located between the geographically co-ordinates: Latitude and Longitude- A : 22°23'10.1" N to 87°17'10.5"E, B : 22°22'59.1"N to 87°17'13.0"E, C: 22°22'46.5"N to 87°17'06.9"E, D:22°23'0"N to 87°16'53.5"E and E :22°23'08.8"N to 87°17'01.0"E. The cost of the project will be about Rs. 380 crores.

The existing plant is located 1.0 km SE from Gokulpur Railway Station and 120 km,E from Kolkatta Airport. Nearest water body is Kasai River located at a distance 2.2 km in North direction. PF near Khejurdanga Village located at a distance 3.9 km in North, PF near Koradana village is located at distance 8.9 km in North direction, PF near Prem nagar is located at distance 9.0 km in south direction, PF near Srikrishna colony located distance at 9.8 km in South direction and PF near Gorabandh chati village located distance at 14.0 km in south direction. In 10 km radius eight other industries are comes which are Tata Metalliks Limited, Bansal Cement Limited, Rasmi Metalliks Limited, Ramsarup Industrie Limited, APS Energy Private Limited, Kalimati Steel Pvt Limited, Wellman and Mittal Foundary. The project area comes under seismic zone-III.

TMDIPL propose expansion is based on the existing technology. Making DI pipes from molten metal by using Centrifugal Casting Machine. These Pipes are annealed by Annealing Furnace by using LDO, LVFO, and BGF. Then these pipes are coated by Zinc and Bitumen/epoxy based paint. Internally pipes are coated with cement slurry. Existing storage of finished goods or materials shall be expanded to meet the increased production capacity accordingly. ETP capacity will be enhanced and treated water will be recycled. Solid waste will be disposed to authorized recyclers.

Permission for 150 MGD water has been obtained from the WBIDC vide letter dated 30<sup>th</sup> May 2007. The proposed expansion from 1,10,000TPA to 3,00,000 TPA will be about 1800 m<sup>3</sup>/ day.

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:**

1. P.H. shall be conducted by the West Bengal Pollution Control Board as per the TOR.
2. Compliance report for the existing plant should be submitted along with the EIA report
3. Merger details from Tata Metalliks to Tata steel should be submitted
4. Permission from ground water board for additional water requirement should be obtained and the NOC should be submitted
5. Compliance report for the commitment made during the Old public hearing should be submitted
6. Air pollution as shown for the existing data is on the higher side. Mitigative measures for air pollution control should be incorporated in the final EIA/EMP report

27.9.5 Regularization of EC for 0.9 MTPA operational Pellet Plant of **M/s Rashmi Metaliks Ltd.** installed and commissioned at vill. Gokulpur, PO Shamraipur, PS: Kharagpur, Dist. West Midnapore, West Bengal (**TOR**) (J-11011/12/2014-IA.II(I))

The project authorities and their Consultant M/s EMTRC Consultants 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 Term of References for the preparation of EIA-EMP. The application is for regularisation of their existing Pellet Plant by obtaining EC under the EIA Notification 2006, vide NGT Judgement dated 27.05.2014 and MoEF&CC letter dated for regularisation.

M/s Rashmi Metaliks Limited (RML) has established 0.9 Million Tons Per Annum (MTPA) Iron Ore Pelletization Plant at village Gokulpur, PO Shyamraipur, PS: Kharagpur, District Paschim Midnapur, West Bengal after obtaining the NOC/ Consent to Establish for 1.2 MTPA Pellet Plant from West Bengal Pollution Control Board on 12.08.2010. Consent to Operate was obtained from West Bengal Pollution Control Board on 02.08.2012 to produce 0.6 MTPA (50000 tons per month) Pellets. The Consent to Operate was amended on 22-08-2014 to produce 0.9 MTPA (75000 tons per month) Pellets. The project cost of 0.9 MTPA Pellet Plant is Rs.170 crores.

Pursuant to NGT Order – 05 of 2014 dated 27-05-2014 and MOEF letter No.J.11011/12/2014-IA.II (I) dated 08-09-2014, Environmental Clearance for the operating Pellet Plant to be regularised from MoEF, Govt. of India as per provision of EIA Notification 2006.

The site located adjacent to NH-6 and railway line. Nearest Railway Station is Gokulpur about 1.5 km away and Kharagpur is about 5 km away from the project site. The annual requirement of raw materials is Iron ore fines-11,00,000 TPA, Bentonite- 20,000 TPA, Coke fines – 30,000 TPA, Dolomite fines – 21100 TPA for 0.9 MTPA Pellet Plant at Full Capacity in Tons/year. All raw materials and finished products are transported by rail.

The construction of the integrated steel plant started after obtaining Environmental Clearance from MOEF in 12-6-2008. The 0.9 MTPA Pellet Plant was established on 10 acres land inside the existing integrated steel plant, which is spread over an area of 188 acres. No forest land was involved. Entire land has been purchased and converted to industrial use. 33% land area has been earmarked for greenbelt development.

Water requirement for the 0.9 MTPA Pellet Plant is 120m<sup>3</sup>/day; 100m<sup>3</sup>/day for mixing the raw materials as nodules and 20m<sup>3</sup>/day water for domestic purpose. Presently ground water is used. Water abstraction work and laying of pipeline from Kansai river bed is in progress. RML obtained permission from State Authority to take ground water. No wastewater is generated from the Pellet Plant. Sanitary wastewater is treated in septic tank and disposed in soak pits.

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:**

1. P.H. shall be conducted by the West Bengal Pollution Control Board as per the TOR.
2. Cumulative impact of the existing plant along with the operational Pellet Plant should be assessed and presented in the EIA/EMP report
3. Baseline data collected for the earlier project should be compared with the data to be collected for the operational Pellet Plant and an analysis should be carried out on the trends of the environmental parameters around the site.

27.9.6 Expansion of Cement Plant (clinker – 4.06 MTPA to 5.30 MTPA, Cement 6.10 MTPA to 9MTPA, Power (35 to 52.5MW) of **M/s Mangalam Cement Ltd.** at vill. Morak, Tehsil Ramganj Mandi, Dist.Kota, Raj (**TOR**) (J-11011/30/2007-IA.II(I))

The project authorities and their Consultant M/s B .S. Envi – Tech 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 Term of References for the preparation of EIA-EMP. All cement plant with production capacity greater than 1.0 million tonnes/annum is listed at S.No. 3(b) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

The project is for modernization of existing manufacturing units for increase of clinker and cement production and installation of new power plant of 17.5 MW within the existing owned complex of MCL No additional land will be required for the proposed expansion. Earlier ECs were granted on 22nd March 2013 for Unit-I and Unit-II expansion and 17th July, 2007 for Unit – III. Present proposal is to increase of Clinker and Cement Production capacity of Unit – I, II & III and Increase in Power generation. Following table provides details of the existing and the proposed plant.

Cement Plant	Present approved Capacity as per MoEF EC (MTPA)			Capacity after proposed enhancement (MTPA)		
	Clinker	Cement	Power (MW)	Clinker	Cement	Power (MW)
Unit –I	0.99	1.70	35	1.90	3.22	52.5
Unit –II	1.32	2.30		1.40	2.37	
Unit –III	1.75	2.10		2.00	3.41	
Total	4.06	6.10		5.30	9.00	

The project is located at village Morak, Ramganj Mandi, district Kota, Rajasthan. The latitude of the site is N 24°42'37.50" to 24°43'16.20" E and longitude is 75°56'52.50" to 75°57'33.20". Total Plant Area is 167 ha. No additional land is required for proposed expansion. The Nearest National Highway is NH-12 which is 6.0 Km – NE. Morak Railway Station is at a distance of 2km. **Darrah Wildlife Sanctuary (Also known as Game Sanctuary) exist at 8km in NE direction from plant boundary.** River Takli Nadi is at a distance of 6.0 kms and Amajar River is 8 kms.

The present water requirement for the plant is 1882m<sup>3</sup>/day (Source: mine pit). After expansion the quantity of water required will be 2332m<sup>3</sup>/day i.e additional 500m<sup>3</sup>/day will also be sourced from mine pit.

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:**

1. P.H. shall be conducted by the Rajasthan Pollution Control Board as per the TOR.
2. Compliance report for the EC granted for the existing plant should be submitted along with the EIA / EMP report.
3. A letter to be provided by the proponent that the existing CPP will not be extended to 52.5 however power to the tune of 13.5 MW will be sourced from existing windmill and 3 MW solar power will be installed separately.
4. Additional TORs in regard to Wildlife clearance for **Darrah Wildlife Sanctuary (Also known as Game Sanctuary)** as given in Annexure-5 for obtaining approval of the NBWL vide MOEF O.M. No.J-11013/41/2006-IA.II(I) (Part) dated 20.08.2014.

27.9.7 Proposed expansion of steel plant of **M/s Mahendra Sponge & Power Ltd.** at Plot no. 76 & 77, Siltara Industrial Growth Centre, Phase-II Siltara Ind. Area, Siltara Village, Raipur, Chhattisgarh (**TOR**)

The project authorities and their Consultant M/s Pioneer Enviro Laboratories and Consulting 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 Term of References for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

Mahendra Sponge & Power Ltd. is existing steel plant at Plot No. 76 & 77, Phase # 2, Siltara Industrial Growth Centre, Raipur District, Chhattisgarh. Existing plant does not have Environmental Clearance as it was in operation prior to September 2006 and obtained only Consent for Establishment from Chhattisgarh Environment Conservation Board, Raipur. Now as a part of expansion, PP is planning to enhance the capacity of Pellet plant and establish new unit of Induction furnace, Rolling mill and Ferro alloys.

The proposed project is situated in Siltara Industrial Growth Centre. The proposed project area falls in Raipur area which is severely polluted area as categorized by CPCB with CEPI of - 65.45. There are no National Parks / Sanctuaries / Reserve Forest within 10km. radius of the plant. Rivers Kharun & Kulhan nala are flowing at distance of 3.2kms. & 9kms. respectively from the plant. National Highway (NH # 200) is passing at a distance of 1.30kms. from the plant. Nearest Railway Station is Mandar situated at distance of 6.2kms. from the plant. Nearest village Sondra is situated at a distance of 0.5kms. from the plant. No Forest land is involved in the site. Total water requirement for the expansion Project will be 1070 KLD and will be supplied by C.G. Ispat Bhumi Ltd.

Following table shows the details of existing units and the proposed expansion.

S.No.	Unit	Existing plant	Proposed Expansion	After Expansion
1	Pellet plant	90,000 TPA**	6,00,000 TPA	6,90,000 TPA
2	Sponge Iron	60,000 TPA * (2 x 100 TPD)	---	60,000 TPA (2 x 100 TPD)
3	Induction furnace	50,000 TPA * (2 x 6 MT & 1 x 8 MT)	50,000 TPA (1 x 15 MT)	1,00,000 TPA (2 x 6 MT, 1 x 8 MT & 1 x 15 MT)
4	Rolling Mill	---	1,00,000 TPA	1,00,000 TPA

			(1 x 300 TPD)	(1 x 300 TPD)
5	Ferro Alloys	---	FeSi – 12,600 TPA SiMn – 28,400 TPA FeMn – 37,000 TPA (2 x 9 mVA)	FeSi – 12,600 TPA SiMn – 28,400 TPA FeMn – 37,000 TPA (2 x 9 mVA)
6	Power (WHRB)	4 MW*	---	4 MW
7	Power (FBC)	4 MW*	---	4 MW

Proposed expansion will be taken up in the existing plant premises. 35.0 acres of land is in possession of management (out of which 10.75 acres of land is in Industrial area and 24.25 acres of land is in Private land).

Closed circuit cooling water system will be adopted in Pellet plant, Induction furnace unit, Rolling Mill & Ferro alloys unit. Hence there will be no wastewater from the process/cooling due to the proposed expansion project. Sanitary waste water will be treated in septic tank followed by soak pit. Zero effluent discharge will be maintained.

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:**

1. P.H. shall be conducted by the Chhattisgarh Pollution Control Board as per the TOR.
2. Consent to Establish and Consent to Operate of the existing facility shall be submitted.

27.9.8 Integrated Project for Modernisation of Kumarasamy Raja Nagar Cement Plant for Increase of Clinker production from 2.8MTPA to 3.185 MTPA by Upgradation of Line-1 & Optimum Utilisation of Line-II and Installation of 6MW Turbo generator of **M/s Ramco Cements Ltd.**, at KSR Nagar, Jaggayyapet Mandal, Dist. Krishna, A.P. (TOR) (Expn. of EC -J-11011/403/2006-IA.II(I) dated 09.06.2009)

The project authorities and their Consultant M/s B .S. Envi – Tech 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 Term of References for the preparation of EIA-EMP. All cement plant with production capacity greater than 1.0 million tonnes/annum is listed at S.No. 3(b) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

The Ramco Cements Limited is operating Jayanthipuram Cement Plant, located in the Krishna District of Andhra Pradesh, commissioned in the year 1986, has Cement production capacity of 3.65 MTPA. The present proposal is regarding upgradation of line –I for increase of Clinker production from 1.225 to 1.61 MTPA and Installation of 6 MW turbo generator. The total area of the project is 812.75 Acres which is an existing land. No additional land is required for the proposed expansion. Following table shows the details of existing units and the proposed expansion.

		Present approved Capacity as per MoEF EC (MTPA)		Proposed enhancement (MTPA)		Capacity after proposed enhancement (MTPA)	
		Clinker	Cement	Clinker	Cement	Clinker	Cement
Cement Plant	Line –I	1.225	3.65	0.385	0.00	1.610	3.65
	Line –II	1.575		0.000		1.575	

	Total	2.80	3.65	0.385	0.00	3.185	3.65
Power Plant		36 MW		6 MW		42 MW	

Nearest rivers from the project site are Palleru at 1.5km, Krishna at 5.4km, Nagarjuna Sagar Left bank Canal at 4.9 km. Nearest Highway is National Highway (NH-9) Connecting Vijayawada – Hyderabad at 2.4 km NE Direction. Nearest Railway station is Vijayawada at 70.0 km. nearest village is Jayantipuram at 1.3 Km. The present water requirement is 6259.8m<sup>3</sup>/day (Source: Bore well). After expansion the water requirement will be 6429.8m<sup>3</sup>/day (Source: Bore well) (50m<sup>3</sup>/day for Modernization of cement plant 380m<sup>3</sup>/day for power plant). Power requirement will be 45 MW (Source: Existing 2x18 MW Power Plant and proposed 6 MW generator).

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:**

1. P.H. shall be conducted by the Andhra Pradesh Pollution Control Board as per the TOR.
2. Compliance report for the EC granted for the existing plant should be submitted along with the EIA report
3. Aerial photograph of the entire site showing the existing facility and the site for the proposed plant should be submitted.

27.9.9 Expansion of Cement Plant by setting up of an additional plant to produce 2.20 MTPA Clinker and 1.50 MTPA Cement Plant of **M/s Jaiprakash Associates Ltd.** at Dalla Cement factory, vill. Dalla, Tehsil Robertsoganj, Dist. Sonebhadra, U.P. (TOR) ( J-11011/560/2007-IA.II(I)

JAL proposed to set up, an additional plant to produce 2.20 MTPA clinker and 1.50 MTPA cement within the existing complex of Dalla Cement Factory (DCF) at Dalla village, Robertsoganj tehsil, Sonebhadra district, Uttar Pradesh. DCF comprises of an integrated cement plant having two clinkerisation plants, cement grinding unit and captive power plant. Environmental clearance for existing integrated project was granted by MoEF vide ref no: J11011/560/2007-IA.II dated 29th September, 2008. The existing plant is located between the geographically co-ordinates: Latitude and longitude - 24°26'50.0" N to 24°27'08.2" N and 83°02'09.0" E to 83°02'44.5" E respectively.

The total area of the existing cement plant is 67ha. One additional production line will be installed within the DCF premises hence no additional land required. Water required for the proposed expansion 1400m<sup>3</sup>/day which will be sourced from existing water allocation of 6000m<sup>3</sup>/day for DCF, from radial bore well (River Sone). Manpower required during the construction phase will be 2000 nos. and during operational phase 500 nos. The estimated power requirement for the proposed plant is about 26 MW which will be met from the existing CPP at DCF/UPSEB. The estimated cost of the proposed expansion is about Rs.1400 crores.

The existing plant is located 0.6km from Mirzapur Pipari State Highway. Nearest water bodies are River Sone river located at a distance of 2.7km and River Rihand at 6.7km. Barhar PF is located at a distance of 10.5 km and Dudhi RF is located at 14.7km from the existing project area. Kaimur wild sanctuary is located a distance of 3.5 km from project boundary. Seismically the project site falls in zone-II as per IS 1893 (Part-I) 2002.

The Committee noted that the Kaimur wild sanctuary is located a distance of 3.5km from project boundary and PP has submitted his application to DFO, Kaimur Wilfdlife Division, Mirzapur. It has been mentioned by the PP that Principal Chief Conservator of Forest (Wild Life), Lucknow, Uttar Pradesh has recommended the proposal along with necessary documents in prescribed proforma to

Principal Secretary, Department of Forest, Lucknow, Govt of UP requesting him to process the proposal to obtain the recommendation of the State Board for Wild life. PP has requested that since recommendation of PCCF (Wildlife), UP has already been obtained, as per the Ministry's OM dated August 14, 2014, the same may be processed further to be placed before the Standing Committee of NBWL. The Committee advised the Ministry to take a view in the matter.

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:**

1. P.H. shall be conducted by the Uttar Pradesh Pollution Control Board as per the TOR.
2. Compliance report for the EC granted for the existing plant should be submitted along with the EIA report
3. Arial photograph of the entire site showing the existing facility and the site for the proposed plant should be submitted.
4. Arial Photograph for the green belt plantation along with latest Google image should be submitted.
5. Additional TORs at Annexure-5 for obtaining approval of the NBWL vide MOEF O.M. No.J-11013/41/2006-IA.II(I) (Part) dated 20.08.2014.

27.9.10 Capacity Expansion of Crude Steel (3MTPA to 5MTPA) of **M/s Bhushan Power & Steel Ltd.** at P.O. Lapanga, village Thelkolo, Tehsil Rengali, Dist. Sambalpur, Odisha (**TOR**) (EC J-11011/40/2009-IA.II(I) dated 02.04.2010 read with Amendment dated 17.10.2012)

The project authorities and their Consultant (M/s M. N. Dastur & Co. (P) 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. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

Bhushan Power & Steel Limited (BPSL) is operating an integrated steel plant at Rengali, district Sambalpur of Odisha. The existing plant capacity is 3.0 million ton per year (MTPA) of carbon and alloy steels. BPSL obtained EC for 3.0 MTPA crude steel production from MoEF vide letter number J-11011/40/2009-IA.II(I) dated 17.10.2012. BPSL now intends to expand the plant capacity to 5.0 MTPA through integrated route of steel production. The enhance capacity of 2.0 MTPA would produce value added products of International standard catering to market demand. This expansion of 2.0 MTPA additional steel, would be largely dependent on the existing infrastructure of the plant. The new facilities proposed under this expansion program would be installed in the area adjacent to its existing plant facilities. The CTO for the existing plant is valid upto 31.03.2015.

Bhushan Power and Steel Limited (BPSL) is located at Rengali of Sambalpur district in the State of Odisha, between latitudes 21° 44' N to 21° 46' N and longitudes 84° 01' E to 84° 03' E and 204 m above mean sea level (MSL). The Rourkela - Jharsuguda - Sambalpur road state highway No. 10 passes on the west of the existing plant site. The nearest railway station is Lapanga on Jharsuguda - Sambalpur line.

Requirement of some of the major raw materials considered for the production viz. coking coal, PCI coal and SMS grade limestone would be met through import. Iron ore fines & lump, BF grade limestone, dolomite and quartzite would be procured from indigenous sources. Wagon

tippers/truck tippers are envisaged for unloading of the raw materials and mechanised systems are considered for storage and distribution of various raw materials.

Requirement of fuel, power and other utilities viz. plant and instrument grade compressed air, steam, industrial gases (oxygen, nitrogen & argon), chilled water would be fulfilled through installation of new facilities/augmentation of existing facilities. Blast furnace gas and LD gas would be available as by-product gases inside the plant for various process needs and heating applications of the plant, besides being a source of power generation. Total make-up water requirement for the plant after full implementation would be about 2,020 cu.m per hour, which would be drawn from the backwater of Hirakud Reservoir. A new raw water reservoir of 2.43 lakh cu m capacity has been considered to cater to the additional needs of the expansion.

The requirement of power for the expansion would be 1,521 Million KWh, which would be met partly through captive power generation from coal fired power plant. In addition power would also be generated from TRT of blast furnace. The capital cost for the expansion project is estimated to be Rs. 13,630 crores approximately. About 7-9 per cent of the total plant cost has been kept for environment management measures.

After detailed deliberations, the Expert Appraisal Committee prescribed the TORs given in Annexure-1 read with Annexure-2 for preparation of EIA-EMP report:

1. P.H. shall be conducted by the Odisha Pollution Control Board as per the TOR.
2. Photographs of the site should be presented at the time of EC presentation
3. Details of existing facility vis-à-vis expansion project (including green belt, water harvesting structures, etc)
4. Certified compliance report on existing EC of 3MTPA from MOEF&CC's Regional Office, Bhubaneswar.
5. MoU for the linked iron mines (existing + proposed expansion) should be submitted and details of iron ore being bought from the local market until MOU is signed. For coal use in the project also, details submitted regarding linkages (for existing + expansion project).
6. Baseline data collected for the earlier project should be compared with the data to be collected for the proposed expansion project and an analysis should be carried out on the trends of the environmental parameters around the site.

## **27.10 Any Other Items**

### **27.10.1 NGT case on use of hazardous wastes in Cement Plants.**

Member-Secretary informed the Committee that an appeal has been made in the NGT in regard to cement plants being used for co-incineration of hazardous and municipal wastes in different parts of the country and probable risks of incineration of hazardous substances.

The Committee deliberated on the issues and it was recalled that the Central Pollution Control Board, which is also one of the respondents in the case, has formulated detailed guidelines for use of wastes in co-processing keeping in view the environmental health, safety and operational concerns.

27.10.2 Renovation and Modernisation of Existing Blast Furnace (600m<sup>3</sup> to 750m<sup>3</sup>) to enhance Hot Metal/Pig Iron Production (650,000 TPA to 750,000TPA) of **M/s Jayeswals Neco Ltd., at Siltara Growth Centre, Raipur, Chhattisgarh** –Letter dated 21.11.2013 of PP for Extension of validity and Amendment of EC – J-11011/883/2007-IA.II(I) dated 26.03.2009

The Environmental Clearance to the above proposal was accorded by the Ministry vide letter EC – J-11011/883/2007-IA.II(I) dated 26.03.2009. PP vide letter dated 21.11.2013 requested Ministry to extend the validity of EC for further period of 5 years. Further, PP sought an amendment in the EC letter which states that “slag to be used in cement plant” and in view of this, PP informed the Committee that the CECB is seeking details of the PP’s Cement Plant wherein the slag would be used. PP has requested modification of the words “to be used in cement plant” as “slag generated in the plant sent for use in cement plant(s)”

The Committee recommended the extension of validity of EC for the further period of 5 years. The Committee also agreed to the aforesaid amendment sought by PP.

**27.10.3 Extn. of validity of EC and change of name from M/s Arsh Iron & Steel Ltd. to M/s Mahendra Sponge & Power Ltd. (EC No. J-11011/1154/2007-IA.II(I) dated 27.01.2010**

PP informed that the existing EC was granted on 27.01.2010 to M/s Arsh Iron & Steel Pvt. Ltd. which is valid until 26.01.2015 and sought extension of validity of EC. Further, PP sought change in name of company from M/s Arsh Iron & Steel Ltd. to M/s Mahendra Sponge & Power Ltd. Further, the PP also sought an amendment in the EC as given below:

- i. Change the production from 29700TPA to 30000TPA by removing bottlenecks in material handling system and using good raw materials.
- ii. Change the product from Billets & Ingots to TMT Bars (by direct charging the metal from Induction Furnace to Bar Mill – without using any Reheating Furnace).

The specific amendment to the EC are as given below:

S.N.	UNIT	Existing	Proposed in the EC	TOTAL
1.	Sponge Iron Plant	Change from 29700 TPA to 300000TPA	66000TPA (no Change)	Change from 95700TPA to 96000TPA
2.	Mild Steel Ingots & Billets through Induction Furnace (10T x3) Change – Mild Steel ingots & Billets through Induction Furnace (10t x3) and Direct charging to Bar Mill to produce TMT Bars (without Reheat Furnace)	-	100,000TPA (No change)	100,000TPA (No change)
3.	Captive Power Plant	-	15MW 7MW WHRB + 8MW through CFBC	15MW (No change in capacity)

Change in Sponge Iron Plant			
S.N.	Parameter	Existing	Proposed change after overhauling
1.	Production Capacity	29,700TPA	
2.	Sp. Iron Ore consumption	1.7	1.6

3.	Sp. Coal consumption	1.5 (34% ash)	1.3 (30% ash)
4.	Sp. Dolomite Consumption	0.04	0.04
5.	Sp. Power consumption (unit/tonne of sponge iron produced)	62.5	60

The proposed overhauling will result in:

- Low dust, char and accretion generation
- Specific coal consumption less due to use of washed coal
- Specific iron ore consumption less due to use of sized iron ore/pellets
- Better Metallisation due to good iron ore, better yield
- Modification in transfer of chute gate to minimise the feed loss
- Improved vibro feeder of Char circuit.

The Committee after deliberations, agreed to extension of validity of EC by another 5 years. In regard to change of name from M/s Arsh iron & Steel Ltd to M/s Mahendra Sponge & Power Ltd., the EAC stated that while the Committee has no objections, the relevant documents for change of name require being submitted to Ministry. The extension of validity of EC dated 27.01.2010 would be considered after change of name in the EC. The Committee also agreed for revising the production capacity of existing Sponge Iron (DRI) Plant from 29,700 TPA to 30,000TPA by removal of bottlenecks in material handling system and using good raw materials. The Committee also agreed for change of product from Billets & Ingots to TMT Bars (by direct charging the metal from Induction Furnace to bar Mill- without using any Reheating Furnace).

27.10.4 Expansion of Cement Plant (0.594 MTPA to 3.85 MTPA), Clinker (0.40 MTPA to 2.31 MTPA), limestone mining (0.6MTPA to 3MTPA) and setting up of a coal based CPP (16MW) of **M/s Anjani Portland Cement Ltd.** at village Chintapalem, dist. Nalgonda, A.P. (extn. of validity of EC No. J-11011/892/2008-IA.II(I) dated 05.01.2010)

Environmental Clearance to the above proposal was granted vide dated 5<sup>th</sup> January 2010 with a validity upto 4<sup>th</sup> Jan 2015 for the proposed expansion of its Cement Plant & Mines and establishment of 16 mw Captive Power Plant in Chintalapalem Village, Mellacheruvu Mandal, Nalgonda District, Telangana State.

PP informed that the project was granted an EC on 05.01.2010 whose validity expires on 01.01.2015. It was informed that of the Integrated project, only some of the units have been installed. PP further requested for use of imported coal of which the range of sulphur would be 06-1%. Further, the PP informed that there is an error in the EC letter on the water requirement, which states that water required is 250m<sup>3</sup>/d whereas in the page 133& 142 of the EIA-EMP Report, it is stated to be 1947m<sup>3</sup>/d. PP further informed that due to installation of air cooled condensers in the CPP, the actual water requirement would reduce from 1947m<sup>3</sup>/d to 1100 m<sup>3</sup>/d. PP requested for this correction in the EC. PP also stated that adjoining the cement project site, a land of 10.9 ha is available wherein no agriculture is being carried out. PP proposes to purchase this land from the private owner. The total project area of the cement plant would increase from 41.48 ha to 51.48 ha.

Looking into the status of implementation of the units and the reasons given by the PP, the Committee recommended the extension of validity of EC for a period of 5 years with effect from 5<sup>th</sup> January, 2015. The Committee also recommended to amend the EC dated 5<sup>th</sup> January, 2010 to use of Imported Coal (100 %) / Indian Coal (100%) / 70 % Imported coal + 30 % Indian Coal (Blended coal), total water consumption of 1100 m<sup>3</sup>/day for Cement Plant, Captive Power Plant and Captive

Limestone Mine instead of 250 m<sup>3</sup>/day indicated vide specific conditions xii & xiii and the total area for Plant & Colony to be amended as (34.58 ha +16.9 ha) 51.48 ha (with no change in mining lease area).

The Committee after deliberations agreed to the aforesaid –(i) extension of validity of EC, (ii) corrections in the water requirement to be 1100 m<sup>3</sup>/d instead of 250m<sup>3</sup>/d and (iii) revision in the total land area to be 51.48 ha instead of 41.48 ha.

27.10.5 Issue of Extension of EC and of Expansion of Integrated Steel Plant of **M/s Sova Ispat Ltd**, at J.L. No. 11, Jemua Mouza, Mejla Block, Dist. Bankura, West Bengal (E-mail dated 05.11.2014)

The proposal for extension of validity of EC & Amendment to EC has already been duly approved in the 20<sup>th</sup> Reconstituted Expert Appraisal Committee (Industry) meeting held on 23.06.2014 (Sl. No: 20.6.7). But there was typographical error in the minutes of the said meeting as highlighted by PP's letter dated 11.08.14 as given below:

Agenda Item 20.6.7	For	Read
	Thereafter, EC amendment was granted by MoEF on 18.4.2012 for the change in configuration of the sponge iron unit from 2x300 TPD + 3x100 TPD to 3x300 TPD.	Thereafter, EC amendment was granted by MoEF on 18.4.2012 for the change in configuration of the sponge iron unit from 3x300 TPD to 2x300 TPD + 3x100 TPD

On the basis of said communication, the typographical error was duly rectified and updated in the Minutes of 21<sup>st</sup> Reconstituted Expert Appraisal Committee (Industry) meeting held on 30.07.14 - 01.08.14. (Sl. No : 21.2 (2)).

The Committee noted that the DRI Plant Configuration will remain same as mentioned in approval letter dated 18.04.12 i.e. 2X300 TPD + 3X100 TPD and there is no further action on the matter. The Committee after deliberations recommended for extension of validity of EC as recommended in the 20<sup>th</sup> meeting of EAC.

27.10.6 Proposed expansion of integrated cement plant (Clinker from 10.4 MMTPA to 11.2 MMTPA) of **M/s Shree Cement Ltd.** at Dist. Pali, Rajasthan (**EC**) [J-11011/343/2012-IA-II(I)] (letter dated 20.10.2014) regarding captive limestone mine) (Internal consideration)

The PP vide letter dated 31.10.2014 has requested for review of the EC condition stipulated by the EAC in the Minutes of EAC(I) meeting held on 18<sup>th</sup>-19<sup>th</sup> September 2014 under Agenda Item 23.91.1 with regard to the aforesaid project that "Project shall not start without EC for the expansion of captive limestone mines."

In this regard, PP has vide their letter dated 31.10.2014 has stated that the power and fuel consumption in proposed clinker unit (Unit IX and X) is lower compared to other units. In view of this, the expansion of the proposed clinker units keeping the limestone mining upto the existing EC capacity of 17.2 MTPA.

The Committee after deliberations agreed to the aforesaid amendment of the EC condition in the minutes of meeting held on 18<sup>th</sup>-19<sup>th</sup> September 2013 that instead of the sentence "Project shall not start without EC for the expansion of the captive limestone mines" with the following sentence "the

expansion of the proposed clinker units keeping the limestone mining upto the existing EC capacity of 17.2 MTPA”.

27.10.7 Integrated Cement Plant (2x1.5MTPA Clinker & 2.2 MTPA, 2x25MW Captive Thermal Power Plant of **M/s Shree Cement Ltd.** located near vill. Khapradih, Tehsil Simga, dist. Balodabazar-Bhatapara, Chhattisgarh and Limestone Mining (4.8 MTPA (531.126ha) locted near village Semaradih & Bharuwadih, Tehsil Balodabazar, dist. Balodabazar-Bhatapara, Chahttisgarh (Amendment of EC) (J-11011/235/2008-IA.II(I)

The PP vide letters dated 08.10.2014 and 10.11.2014 has sought an amendment to the minutes of the EAC(I) meeting held on 28<sup>th</sup>-29<sup>th</sup> August 2014 in Agenda Item 22.6.4 wherein it is stated that transport of the clinker will be by rail. PP has sought an amendment that the transport of clinker would be by rail and road. Further, two other corrections have been sought: (i) village is Khapradih instead of Chandi and (ii) district is Baloda Bazar-Bhatpara and not Raipur.

The Committee after deliberations agreed to the aforesaid amendment of the EC condition in the minutes of meeting held on 28<sup>th</sup> -29<sup>th</sup> August 2014.

27.10.8 Expansion of Steel Plant (Billets 51,250 TPA & TMT Bars 50,000 TPA) of **M/s A-One Steels India Pvt. Ltd.** at Sy No. 15, vill. Manisamundram, Mandal Hindupur, Dist. Anathapur, A.P. (Letter dated 28.10.2014 seeking amendment of EC J-11011/644/2009-IA.II(I)

Environment Clearance for the above proposal was accorded by MOEF vide letter F.No. J-11011/644/2009-IA II (I) dated 27.10.2010. PP vide letter dated 28.10.2014 requested to amend the EC for the component of Induction Furnace. Para 3 of EC letter indicates an existing Induction Furnace of capacity 1X4 T and the proposed capacity of 1X15 T, making the total capacity of 19 T. PP has requested to amend the EC letter by changing the existing Induction Furnace from 1X4 T to 1X8 T and proposed capacity of 1X15 T to 1X10 T, making the total capacity of 18 T. Following table shows the changes requested by the PP:

S. No	Capacity for which EC was accorded	Amendment requested by the PP
Existing Induction Furnace		
1	1X4 T	1X8 T
Proposed Induction Furnace		
1	1X15 T	1X10 T

It has been explained by PP that because of this amendment the Investment cost will be reduced, as some of the existing machinery and components will be remain same hence no need to remove the existing and replaced by the new. This will save the losses on the existing machinery and components. Also as the capacity of the Induction furnace (8 ton and 10 ton) approx. same hence no need to make further heavy changes in the infrastructure like Building shed , EOT Cranes Etc. Other benefits are reduced cost of production, use of existing manpower, saving of time.

The Committee after deliberations agreed for the aforesaid amendment.

27.10.9 Cement Plant (3 MTPA) and 2 MTPA Clinker along with CPP of 43 MW of **M/s Lafarge India** at village Ravur, Mandal Chittapur, district Gulbarga, Karnataka (Letter dated 09.07.2014 seeking extn. of validity of EC No.J-11011/822/2007-IA.II(I)

Environmental Clearance to the above proposal was granted vide letter No. J-11011/822/2007-IA.II(I) dated 30<sup>th</sup> September, 2009 for setting up a 3 MTPA integrated cement plant and 43 MW CPP at village Ravur, district Gulbarga. PP mentioned that environment clearance for the Mines was awarded in 2007 and mining lease was executed in November 2008 for a period of 20 years.

PP mentioned that they had also acquired most of the plant land (more than 80%). However there has been a delay in the commencement of the plant construction as PP still do not have the entire plant land in their possession. PP mentioned that they are following up closely with KIADB Gulbarga and Bangalore offices for the early completion of the land acquisition process. Till date, an investment to the tune of Rs 125 crores has been made by the PP

PP mentioned that the contract for supply of fly ash has been done with KPCL, Raichur for a period of 10 years, Rail Traffic Clearance permission has been received from Railway Board in January, 2011, permission for drawl of water from Kagina river has been obtained from water resources department on 10<sup>th</sup> August, 2012, temporary power connection (1500kVA, 33kV Connection) has been approved by GESCOM, Gulbarga on 25<sup>th</sup> February, 2014. Plant boundary fencing work has been completed and site office has been erected at the plant site.

In view of the above, PP requested the Ministry to extend the validity of EC for the period of 5 years.

The EAC after considering the status of implementation of the units and the reasons given by the PP for seeking extension, the Committee recommended the extension of validity of EC for a period of 5 years with effect from 30<sup>th</sup> September, 2014.

#### 27.10.10 Correction in Minutes of 22<sup>nd</sup> meeting of EAC(I) held on 28<sup>th</sup>-29<sup>th</sup> August 2014 on Agenda Item 22.3.1 on M/s Satia Industries Ltd.

The Table at para 4 page 2 of the minutes read as given below:

S.N.	Raw Material/Chemicals	Consumption for existing Plant (60TPD capacity)	Consumption for Proposed Expansion (150TPD capacity)
1.	Raw materials/Chemicals	155 MT	315MT
2.	Wheat Straw + Sarkanda + Bagasse	-	62MT
3.	Wood & Veneer Chips	120MT	250MT
4.	Rice Husk	29.6 MT	76.36MT
5.	Caustic Soda	6MT	Nil
6.	Chlorine (as element)	Nil	3.75MT
7.	Chlorine Dioxide	-	4.5MT
8.	Oxygen	-	1.8MT
9.	Hydrogen peroxide	15MT	51.2MT
10.	Lime	15MT	35MT
11.	Nutrients: Urea DAP	100Kg, 35Kg	210Kg, 105Kg
12.	Paper Additives	0.965MT	2.405MT

Corrected Minutes are as given below:

S.N.	Raw Material/Chemicals	Consumption for existing Plant (60TPD capacity)	Consumption for Proposed Expansion (150TPD capacity)
1.	Wheat Straw + Sarkanda + Bagasse	155 MT	315MT
2.	Wood & Veneer Chips	-	62MT
3.	Rice Husk	120MT	250MT

4.	Total Caustic Soda	29.6 MT	76.36MT
5.	Chlorine (as element)	6MT	Nil
6.	Chlorine Dioxide	Nil	3.75MT
7	Oxygen	-	4.5MT
8	Hydrogen peroxide	-	1.8MT
9	Lime	15MT	51.2MT
10	Soapstone	15MT	35MT
11	Nutrients: Urea DAP	100Kg, 35Kg	210Kg, 105Kg
12	Paper Additives	0.965MT	2.405MT

27.10.12 The minutes of the 23<sup>rd</sup> Meeting of the EAC held on 13<sup>th</sup> -14<sup>th</sup> October 2014 on Agenda item No.25.6.3 **M/s MPL Mineral Processing Private Limited, considered** under any other item and subsequently considered for appraisal of Environmental Clearance is corrected as given below:

Page No. of Minutes displayed in the website	Location	Item specified	Request made by PP vide letter dated 10.11.2014 to be changed/read as
15	Table last row & last column	WHRB – <b>1x10 MW</b> = 20 MW	<b>2x10 MW</b> = 20 MW
16	4 <sup>th</sup> Para (1 <sup>st</sup> line)	<b>139.90</b> Acres of Private land	<b>130.90</b> Acres of Private land
18	one para, last line	Induction furnace, concast & auxillary and ladle furnance ( <b>3MW</b> )	Induction furnace, concast & auxillary and ladle furnace ( <b>41MW</b> )
18	3rd Para 1 <sup>st</sup> line	Of the total area of <b>147 acres</b>	Of the total area of <b>143.20</b> Acres
19	Condition V	Hot gases from the <b>kiln</b>	Hot gases from the <b>Pre heater Kiln</b>
19	Condition VI	Total make up water requirement after the <b>proposed expansion</b> shall not exceed <b>2593 m<sup>3</sup>/day</b>	Total makeup water requirement for the <b>proposed steel plant</b> shall not exceed <b>3630 m<sup>3</sup>/day</b>
20	Condition xii	All the blast furnace (BF) slag shall be granulated and provided to cement manufacturers for further utilization. Flue dust from pellet plant, sinter plant, DRI and SMS and sludge from BF shall be re-used in sinter plant. Coke breeze from coke oven plant shall be used in sinter and pellet plant. Slag shall be given for metal recovery or properly utilised. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.	Since there is no Blast furnace, sinter plant, coke oven, the condition reads as following "Slag shall be given for metal recovery or properly utilised. All the other solid wastes shall be properly disposed off in environment-friendly manner as per regulations."

The meeting ended with a Vote of thanks to the Chair.

**LIST OF PARTICIPANTS OF EAC (I) IN 27<sup>th</sup> MEETING OF EAC (INDUSTRY-I) HELD ON  
13<sup>th</sup>-14<sup>th</sup> NOVEMBER 2014**

S.N.	Name		
1	Shri M. Raman	Chairman	A
2	Shri R.K. Garg	Vice-Chairman	P
3	Prof. R.C. Gupta	Member	P
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	P (1 <sup>st</sup> Day Forenoon)
10.	Dr. Antony Gnanamuthu	Member	P
11.	Prof. C. S. Dubey	Member	P
12.	Shri Niranjana Raghunath Raje	Member	P
<b>MOEF Representatives</b>			
13.	Dr.T.Chandini	Scientist F & MS (Industry-I)	
14.	Shri Amardeep Raju	Scientist C	

**GENERIC TERMS OF REFERENCE (TOR) IN RESPECT OF INDUSTRY SECTOR**

1. Details of the EIA Consultant including NABET accreditation (including sector details and whether A/B and Accreditation No. shall be provided on the cover the EIA-EMP Report as well as in the Hard Copies of the presentation made before the Expert Appraisal Committee. Copy of NABET Accreditation for the period of preparation until submission of the EIA-EMP Report to MOEF and for presentation made before the EAC should be provided in the Annexures. If more than one consultant has been engaged, details thereof, including details of NABET accreditation as mentioned above.
2. Executive summary (*maximum 8-10 sheets in A4 size paper*) of the project covering project description, description of the environment, anticipated environmental impacts & its mitigation measures, environmental management plan, environmental monitoring programme, public consultation, project benefits, Social impacts including R&R.
3. **Site Details:**
  - i. Location of the project site covering village, Taluka/Tehsil, District and State on Indian map of 1:1000,000 scale.
  - 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.
  - iii. Co-ordinates (lat-long) of all four corners of the site.
  - iv. Google map-Earth downloaded of the project site.
  - v. A map showing environmental sensitivity [land use/land cover, water bodies, reserved forests, wildlife sanctuaries, national parks, tiger reserve etc.] and from critically/severely polluted area(s) and Eco-sensitive Areas within 10km radius of the project site vis-à-vis shortest (aerial) distance from the project. If the project is located within 10km of CPAs/severely Polluted Areas, confirm whether moratorium has been imposed on the area.
  - vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. In addition, if located within an Industrial area/Estate/Complex, layout of Industrial Area and location of unit within the Industrial area/Estate/Complex, layout of Industrial Area.
  - vii. Photographs of the proposed and existing (if applicable) plant site. If existing, in addition to site map, provide photographs of plantation/greenbelt in the existing project. If fresh EC application, photographs
4. Landuse break-up of total land of the project site (identified and acquired) – agricultural, forest, wasteland, water bodies, settlements, etc shall be included.
5. A copy of the mutual agreement for land acquisition signed with land oustees.
6. Proposal shall be submitted to the Ministry for environment clearance only after acquiring at least 60% of the total land required for the project. Necessary documents indicating acquisition of land shall be included.
7. **Forest and wildlife related issues:**
  - i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department.
  - 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

8. **Expansion/modernization proposals:**

- i. 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 30<sup>th</sup> 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.
- ii. 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.

**Details of Industrial Operations**

9. A list of major industries with name and type within study area (10km radius) shall be incorporated.
10. Details of proposed raw materials and products along with production capacity. If expansion project, details for existing unit, separately for existing and new (proposed) unit.
11. Details of manufacturing process, major equipment and machinery. If expansion project, details of existing unit, separately for existing and new (proposed) unit.
12. List of raw materials required and its source along with mode of transportation shall be included. All the trucks for raw material and finished product transportation must be "Environmentally Compliant".
13. Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished
14. Project site layout plan to scale using AutoCAD showing raw materials, fly ash and other storage plans, bore well or water storage, aquifers (within 1 km) dumping, waste disposal, green areas, water bodies, rivers/drainage passing through the project site shall be included.
15. Manufacturing process details of all the plants including captive power plant if any along with process flow chart shall be included.
16. Mass balance for the raw material and products shall be included.
17. Energy balance data for all the components of the plant shall be incorporated.

**Environmental Status**

18. Geological features and Geo-hydrological status of the study area shall be included.
19. 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 river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of RL of the project site and mRL of the river shall also be provided.
20. If the site is within 1 km radius of any major river, Flood Hazard Zonation Mapping is required at 1:5000 to 1:10,000 scale indicating the peak and lean River discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years.
21. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) at 8 locations for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and HC (methane & non-methane) shall be collected. The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16<sup>th</sup> November, 2009 and take into account the predominant wind direction, population zone and sensitive receptors including reserved forests.
22. Determination of atmospheric inversion level at the project site and 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.
23. Surface water quality including trace elements of nearby River (60m upstream and downstream) and other surface drains at eight locations to be provided.
24. Ground water monitoring including trace elements at minimum at 8 locations shall be included.
25. Noise levels monitoring at 8 locations within the study area.
26. Coal Characteristics – of indigenous and imported coal to be used in the project in terms of Calorific value, ash content and Sulphur content.

27. Traffic study of the area for the proposed project in respect of existing traffic, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
28. Detailed description on flora and fauna (terrestrial and aquatic) exists 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.
29. Emissions (g/second) with and without the air pollution control measures.
30. 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.
31. 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.
32. Details of water requirement, water balance chart for new unit or for existing unit as well as proposed expansion (in case of expansion).
33. Source of water supply and quantity and permission of withdrawal of water (surface/ground) from Competent Authority.
34. Details regarding quantity of effluents generated, recycled and reused and discharged to be provided. Methods adopted/to be adopted for the water conservation shall be included. Zero discharge effluent concepts to be adopted.
35. 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.
36. Action plan for control of ambient air quality parameters as per NAAQM Standards for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>, etc as per GSR 826(E) dated 16<sup>th</sup> November, 2009.
37. An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30<sup>th</sup> May, 2008.
38. Action plan for solid/hazardous waste generation, storage, utilization and disposal. Copies of MOU regarding utilization of solid waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
39. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. A detailed plan of action shall be provided.
40. 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. All rooftops/terraces shall have some green cover.
41. 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. Rain water harvesting and groundwater recharge structures may also be constructed outside the plant premises in consultation with local Gram Panchayat and Village Heads to augment the ground water level. Incorporation of water harvesting plan for the project is necessary, if source of water is bore well.
42. Environment Management Plan (EMP) to mitigate the adverse impacts due to the project along with item wise cost of its implementation. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
43. Details of Rehabilitation & Resettlement (R & R) involving the project. R&R shall be as per policy of the State Govt. and a detailed action plan shall be included.
44. Action plan for post-project environmental monitoring shall be submitted.
45. Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control needs to be addressed and included.
46. 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. Action plan for the implementation of OHS standards as per OSHAS/USEPA.
  - v. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
47. 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
48. 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.
49. 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 included. Socio-economic development activities need to be elaborated upon.
50. 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.
51. The questionnaire for industry sector (available on MOEF website) shall be submitted as an Annexure to the EIA-EMP Report.
52. '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.
53. A tabular chart with index for point wise compliance of above TORs.
54. Name of the Consultant and the Accreditation details shall be printed on the cover page of the EIA-EMP Report in the Introduction as well as on the cover of the Hard Copy of the Presentation material for EC presentation as per requirements in TOR condition No. (1).
55. The TORs prescribed shall be valid for a period of two 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 4<sup>th</sup> 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.

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**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 generation of coal and iron ore from coal & iron ore mines and the projects they cater to
  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. Respirable Suspended particulate matter (RSPM) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements). The RSPM shall also be analysed for presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction, where applicable. Chemical characterization of RSPM and incorporating of RSPM data.
  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 must be prepared.
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**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 generation of coal and limestone from coal & limestone mines and the projects they cater to;
  3. For large Cement Units, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.
  4. 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.
  5. If the raw materials used have trace elements, an environment management plan shall also be included.
  6. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
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**ADDITIONAL TORs FOR PULP AND PAPER INDUSTRY**

- i. For major Pulp and Paper Units, 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.
- ii. A note on pulp washing system capable of handling wood pulp shall be included.
- iii. 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
- iv. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for Eucalyptus/Casurina to produce low kappa (bleachable) grade of pulp.
- v. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be abolished within 2 years of issue of environment clearance.
- vi. A commitment that no extra bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills.

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**ADDITIONAL TORS FOR PROJECTS REQUIRING NBWL CLEARANCE vide MOEF O.M. No.J-11013/41/2006-IA.II(I) (Part) dated 20.08.2014**

**Form for providing Information for consideration of Standing Committee of NBWL**

1. Name and Area (ha) of National Park/Sanctuary involved.
  2. Type of forest in which the proposed area falls.
  3. Conservation value/critical wildlife habitats in the PA.
  4. Prevalent landuse categories within 10km distance/ESZ around the PA.
  5. Is any project of similar nature already located within 10km of the PA boundary/ESZ around the PA? If so, please give the following details separately for each project.
    - Name of Project
    - Distance from PA
    - Size (capacity/output in appropriate units)
    - Impact(s) perceived, if any, on the conservation status of the PA
  6. Provide your assessment of the likely POSITIVE and NEGATIVE impact(s) of the proposed project giving scientific and technical justification for each impact.
  7. Whether the project applicant has ever committed violation of the Wildlife (Protection) Act 1972 or Forest Conservation Act 1980 in the past. If yes, provide details of the offences and the present status of each case.
  8. Have you examined the project appraisal document and the alternatives as provided in the EC application form?
  9. Any information that would like to bring to the notice of the National Board for Wildlife or its Standing Committee that may be relevant and assist in decision making.
  10. Do you recommend the project?  
(please provide full justification to support your recommendation)
  11. Conditions, if any, to be ensured in the interest of protection and conservation of the PA for according EC to the project?
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