

**MINUTES OF 33rd RECONSTITUTED EXPERT APPRAISAL COMMITTEE
(INDUSTRY) HELD ON 10TH AND 11TH FEBRUARY 2015**

33.1 Opening Remarks of the Chairman

33.2 Confirmation of the Minutes of the 31st Reconstituted Expert Appraisal Committee (Industry) held during 9th – 10th January 2015.

The minutes of the 31st meeting were confirmed subject to corrections to Agenda Items given below:

Agenda item - 31.5.3 Following table is included:

Boilers	Press ata	Present Capacity tph	Present Status	Post Project TPH	Post project Status
CFB 4	62	50	In Operation	--	Will be stopped *
CFB 5	62	80	In Operation	--	Will be stopped *
CFB 6	62	90	In Operation	--	Will be stopped *
CFB 7	62	90	In Operation	90	In Operation
CFB 8	62	90	In Operation	90	In Operation
CFB 9	62	130	In Operation	130	In Operation
CFB – New	110	--		220	In Operation
Total		530		530	

Total capacity of Boilers will remain same at 530 TPH (*as per consent*)

*These boilers will be operated for short duration whenever any of the boilers in operation are taken for maintenance/ IBR requirements. However at any time the overall steam generation from coal fired boilers will not exceed 530 TPH.

Agenda Item - 31.3.4: Following paragraph added

The furnace is a simple vessel with 4 circumferential parts combined to make single circular unit, detachable and movable. Before production, the vessel is combined to form a cylindrical shape and lined with fine slag powder for insulation. Thermite reaction takes place in the vessel at high

temperature using a reducing agent and hence no external fuel / electricity is required. Vessel is air-cooled post reaction and takes about 2-3 days for cooling & reuse. The diameter of the vessel is 2 meters, Height - 1.75 meters, Capacity – 5 tons, Thickness – Mild steel material, 6 – 8 mm thickness, total no of vessels are 10.

The following paragraph deleted

TOR was issued on 07.08.2009. Moratorium was imposed on 31.01.2010 to 05.07.2011 and re-imposed on 17.09.2013 to 10.06.2014. Baseline collected during March-May 2009 and revalidated in March- May 2013.

Following specific condition deleted

The proponent shall examine the feasibility of transporting coal from Belpahar and other coal mines of MCL by closed conveyor. If the problem so land acquisition persists, the PP may examine laying of overhead conveyors. Until the conveyors become operational, the PP may use trucks of large capacity covered with tarpaulin.

TUESDAY, 10th FEBRUARY 2015

33.3 Environmental Clearance

33.3.1 Proposed 3MTPA Cement Grinding Unit & 60m³/h Readymade Concrete Mixing (RMC) Unit of **M/s Reliance Cement Co. Pvt. Ltd**, at vill, Kudumalakunte, Taluka Gowribidanur, Dist.Chikballapur, Karnataka (EC) (J-11011/77/2013-IA.II(I))

M/s Reliance Cement Company Private Limited –PP and their EIA-EMP consultant (M/s Vimta Labs, Hyderabad) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 8th meeting of Expert Appraisal Committee (Industry) held on 16th - 17th May, 2013 for the preparation of EIA-EMP report. The ToR was awarded by MoEF vide F. No. J-11011/77/2013-IA –II (I) dated 25th June 2013 for the preparation of EIA-EMP report. PP submitted the final EIA EMP report vide letter dated 26.06.2014. The Proposed project of standalone cement grinding units are covered under Category ‘B’ as per activity 3(b) of the Schedule of the EIA notification 2006. However, project site is located within 10 Km of interstate boundary of Karnataka State and Andhra Pradesh. Hence due to applicability of general condition of the EIA notification, 2006, the project is appraised at Central level.

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

M/s. Reliance Cement Company Private Limited have proposed to set up a 3.0 MTPA Cement Grinding/blending unit and 60 m³/hour Ready Mix Concrete (RMC) unit at Plot No. 1 of Gowaribidanur 2nd Phase of Karnataka Industrial Area Development Board (KIADB), Taluka: Gowaribidanur, District: Chikballapur, Karnataka. The land falls between Latitude - Longitude N 13^o42’46.96’’-N - 77^o30’46.47’’-E and 13^o41’50.49’’ N - 77^o30’41.27’’ -E. The nearest village is Kudumalakunte at 2.0km west, Nearest High way is SH-9 at 1km west, Nearest Railway

station is Hindupur at 1.1km, the project adjoining to state boundary of Karnataka and Andhra Pradesh, Nearest airport is Bangaluru at 60km in SSE direction. Nearest river is Pennar is seasonal river located at 2.2km west. There is no forest, reserve forest, protected forest in proposed area as well as within 10 km. No wildlife sanctuary, archeological importance places / National park within 10km of radius. Total capital cost required for proposed project is estimated Rs. 690 Cr and cost for Environmental protection measures is Rs. 44 Cr has been kept. The manpower requirement for the project is 147 during the operation phase of the project.

The proposed unit is designed for 3.0MTPA Cement (PPC ,PSC & OPC) by providing grinding/blending facility. The detailed of raw material quantity, sources and mode of transport for the project:

Raw Material	PPC	PSC	OPC
Clinker	1.95 MTPA	1.50 MTPA	2.85 MTPA
Flyash	0.9 MTPA	NA	NA
Slag	NA	1.35 MTPA	NA
Gypsum	0.15 MTPA	0.15 MTPA	0.15
Coal	0.027 MTPA		

Sr. No	Raw Material Required	Source	Mode of Transport
1	Clinker	Proposed cement plant in Sedam / AP / other sources	Rail/Road
2	Fly ash / Slag	Nearby TPPs / Nearby Steel industries	Rail/Road
3	Gypsum	Rajasthan / Nearby sources	Rail/Road
4	Coal for dryer	Open market locally / Imported	Rail/Road

Ambient Air Quality has been carried out at 10 locations during 15th March- 15th June 2013 and the data submitted indicated PM₁₀ 27.1 to 48.3 µgm/m³, PM_{2.5} 12.7 to 24.5 µgm/m³, SO₂ 11.8 to 20.7 µgm/m³ NO_x 14.7 to 28.6 µgm/m³. The results of modeling study indicates the maximum increase of GLC for the project is 1.3 µgm/m³ for respect to the PM₁₀. The dust control systems will be installed at appropriate locations. Attempts shall be made to cover all raw materials storage systems. The bag filters at all transfer points and at Cement grinding Mill will be installed. Raw material will be fully covered during transportation to/from plant site by road/rail. Fugitive emission will be regularly monitored on period basis as per statutory requirement and control measures will be installed as per requirement.

The total power requirement is 25MW. It will be sourced from state transmission grid. Total water requirement for the proposed plant will be 300KLD. The rain water harvesting facility from roof top and other structure will be developed. The major part of total water requirement shall be utilized for the cooling purpose. There will not be waste water generation from the cement manufacturing process. Blow down and domestic waste water (22.5KLD) will be sent to Common Sewage Treatment Plant of KIADB, and 25 KLD will be used for plantation. Of the

total area of 34.39 Ha, area around 5.15 Ha has been earmarked for greenbelt development / plantation within the premises.

The public hearing was held on 09.01.2014 for the proposed Development of Phase I & II Industrial Area at Gowribidanur, Chikkaballapura District, Karnataka by KIADB for grant of Environmental Clearance. Since the project is situated within the existing Industrial Area, the commitments made during the public hearing for the industrial area by the KIADB shall be adhered to by the PP.

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

- i. The proposed greenfield project shall comply with the new MOEF&CC Standards vide GSR 612 (E) dated 25.08.2014 with respect to particulate matter, SO₂, NO_x for Cement sector.
- ii. Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. Air pollution control devices such as Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill shall be provided to control PM10 and PM2.5 to meet prescribed standards. Low NO_x burners shall be provided to control NO_x emissions. Regular calibration of the instruments must be ensured.
- iii. All the pollution control devices/equipment in raw mill/kiln, kiln feeding system, clinker cooler, coal mill, cement mill, and cement silos, 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 submitted to the Ministry and its Regional Office at Bangalore within 3 months from the date of issue of the letter.
- v. Efforts shall be made to achieve power consumption of 70 units/tonne for Portland Pozzolona Cement (PPC) and 95 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- vi. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- vii. AAQ Modelling shall be carried out based on proposed project based on the specific mitigative measures proposed for the proposed project and mitigative measures taken to keep the emissions well below the standards.

- viii. 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.
- ix. Arsenic and Mercury shall be monitored in emissions, ambient air and water.
- x. 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 shall be transported in the closed containers only and shall not be overloaded. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.
- xi. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.
- xii. Efforts shall be made to make use of rain water harvested. Only balance water requirement shall be met from other sources.
- xiii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bangalore, SPCB and CPCB.
- xiv. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / reprocessors only.
- xv. 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).
- xvi. 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.
- xvii. 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.
- xviii. Efforts shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly. The PP shall enter into an MOU with

units with potential for generating HW. And in accordance with HW Regulations and prior approval of the MPPCB.

- xix. As proposed, green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xx. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.
- xxi. All the commitments made to the public during the Public Hearing / Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Bangalore.
- xxii. 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 Bangalore. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxiii. The proponent shall prepare a detailed CSR Plan for every next 5 years for the proposed project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The 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.
- xxiv. A Risk Assessment Study and Disaster Preparedness and Management Plan along with the mitigation measures shall be prepared with a focus of Disaster Prevention and a copy submitted to the Ministry's Regional Office at Bangalore, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xxv. To educate the workers, all the work places where dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- xxvi. 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.

33.3.2 Proposed Expansion of Induction Furnace & Rolling Mill of **M/s Hindupur Steel and Alloys Pvt. Ltd.** in existing plant premises of Plot No. 29, APIIC Industrial Park, vill. Gollapuram, Mandal Hindupur, Dist. Anantapur, A.P. (EC) (J-11011/250/2012-IA.II(I))

The Project Authorities and their consultant Pioneer Enviro Laboratories & Consultants Pvt. Ltd., Hyderabad gave a detailed presentation on the salient features of the project and proposed environmental protection measures. The ToR was awarded by MoEF vide F. No. J-11011 / 250 / 2011- IA II (I), Dated 29th April, 2013 for preparation of EIA/EMP report. The PP submitted the final EIA/EMP report vide dated 9th January 2015 after conducting Public Hearing for grant of Environmental Clearance. All the Induction Furnace and Rolling Mill plants were listed at S.N. 5(k) 3(a)(b) under Secondary Metallurgy Industry under Category 'B' in EIA Notification, 2006. The present proposal comes under Category – B, but due to presence of Inter-state boundary at a distance of 0.5 Kms, the project is appraisal at the Central Level.

M/s. Hindupur Steel & Alloys Private Limited have an existing Induction Furnace, 30,000 TPA of Rolling Mill & 6000 m³/hr capacity of producer Gas plant at Plot No. 29, APIIC Gollapuram Industrial park (Phase - 3), Gollapuram Village, Hindupur Mandal, Anantapur District, Andhra Pradesh. Now the PAs proposed to expand Induction Furnace along with CCM for making additional 70,000 TPA of Billets / M.S. Ingots & Rolling mill for making additional 70,000 TPA of TMT bars / structural steel. The proposed expansion will be established in the existing plant premises only. The following are the Plant configuration & Production capacities:

Units	Existing Plant Production capacity	Proposed Expansion production capacity	Production capacity after Expansion
MS Billets / MS Ingots	30,000 TPA	70,000 TPA	1,00,000 TPA
TMT Bars / Rolled Products / Structural Steel	30,000 TPA	70,000 TPA	1,00,000 TPA
Producer Gas	6000 m ³ /hr	---	6,000 m ³ /hr

Total land in possession of management is 10 Acres. The land is acquired from APIIC. Proposed expansion will be taken up in the existing plant premises only. No forest land is involved. PAs have confirmed that the plant is not located within 10 km of critically polluted area. No National Park / wildlife sanctuary is located within 10 km. Nearest village is Gollapuram situated at a distance of 1.5 Kms. from the plant. No litigation or court case is in pending against the project and/or land. Total cost of the project is Rs. 24.15 Crores. Rs. 2.24 Crores and Rs. 10 lakhs / annum will be earmarked towards capital cost and recurring cost for environmental pollution control measures. Due to the proposed expansion about 60 people will get direct employment opportunity and about 100 will get indirect employment opportunity. Out of 10 acres, green belt will be developed in 3.3 acres.

Sponge iron, scrap, ferro alloy are raw material for manufacturing M.S Billets / M.S. ingots & M.S Billets / M.S. ingots for manufacturing TMT Bars / Rolled Products / Structural Steel in Rolling mills will be used as raw materials. Following are raw material required for the proposed expansion:

Raw Materials	Consumption (TPA)	Sources of Supply	Method of Transportation
Raw Material for Steel Melting Shop			
Sponge iron	56,000	Bellary, Karnataka	By Road (covered trucks)
Scrap	24,500	Hindupur	By Road (covered trucks)
Ferro Alloys	2,100	Gollapuram	By Road (covered trucks)
Raw Material for Rolling Mill			
Billets	70,000 5,600	Proposed SMS & Purchased from near by plants.	By Road (covered trucks)
Furnace oil	2520 KL / year	Nearby Depot.	By Road

M.S.Billets / M.S. ingots will be manufactured by melting in Induction furnace and casting in continuous casting machine. Rolled products / Structural Steel will be manufactured in reheating furnace with Furnace Oil / Producer gas fired rolling mill.

Ambient air quality monitoring has been carried out at 8 locations during March 2014 to May 2014 and the data submitted indicated: PM₁₀ (22.4 to 48.7 µg/m³), PM_{2.5} (13.8 to 26.5 µg/m³), SO₂ (6.5 to 13.7 µg/m³) and NO_x (6.6 to 14.8 µg/m³). The results of Modeling study indicates that the maximum increase of GLC for the proposed expansion project is 0.9 µg/m³ with respect to the PM₁₀, 3.0 µg/m³ with respect to the SO₂, 7.2 µg/m³ with respect to the NO_x. Fume extraction system with Bag filters will be installed to control emissions from induction furnace. A stack of 39 m height will be provided to control emissions from the Rolling Mill. Dust suppression will be provided to control emissions.

The proposed expansion project requires about 95 cum/day of water. Water required for the proposed expansion project will be supplied by APIIC. Closed circuit water system will be provided in the, Induction Furnaces, Rolling mill. Hence there will not be any waste water generation from process and cooling. Domestic effluent will be treated in septic tank followed by soak pit. No effluent will be discharged outside the premises and Zero discharge will be adopted. Rain water Storage sump is already constructed to store the Rain water. Power requirement will be sourced from State Grid. DG sets is being / will be operated only during Power Failure.

Dust from bag filters will be given to brick manufacturers in the area. Slag generated from IF will be crushed and after iron recovery the inert material will be used in road construction / given to brick manufacturers. Mill scales will be reused in SMS. Waste oil and used batteries will be sold to authorized recyclers/re-processors.

Public Hearing was conducted by the A.P. Pollution Control Board on 30th December 2014. The main issues raised in the public hearing meeting were developing of local area, providing employment, pollution control, Development of Greenbelt and Medical camps etc.

After detailed deliberations, the Committee recommended the proposal for environmental clearance subject to stipulation of following specific conditions along with other environmental conditions:

- i. Measures shall be taken to reduce PM levels in the ambient air. Stack of adequate height & diameter with continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels within prescribed standards and installing energy efficient technologies.
- ii. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled as per G.S.R. 612 (E) dated 25.08.2014. Guidelines/Code of Practice issued by the CPCB shall be followed.
- iii. Efforts shall further be made to use rainwater from the rain water harvesting sources. Capacity of the reservoir shall be enhanced, if required, to meet the maximum water requirement. The Plant shall operate on a zero discharge concept.
- iv. The wastewater generated shall be fully treated in an ETP and reused for plantation/greenbelt development. The Plant will operate on a zero discharge concept.
- v. Provision shall be made for the housing for the 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 structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.
- vi. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2010. All the fly ash shall be provided to cement and brick manufacturers for further utilization Bottom ash shall be fully utilized for road construction.
- vii. Hazardous materials such as lubricating oil, compressed gases, paints and varnishes required during construction phase shall be stored properly as per the regulations at isolated places and used/recycled as per the E(P)A Rules, 1986.
- viii. All vehicles and construction machinery are properly maintained to minimize the exhaust emission as well as noise generation to meet prescribed standards.
- ix. Green belt consisting of a 3-tier plantation of trees with thick canopy shall be developed all along the periphery of the plant, vacant areas, transfer points, etc , as part of 33% of total plant area.

- x. Noise level shall be reduced by stopping leakages from various steam lines, compressed air lines and other high pressure equipment; and provide noise proof cabins to operators where remote control for operating noise generating equipment is feasible.
- xi. Disaster management plan shall be prepared and implemented. Regular drills thereof shall be conducted.
- xii. All the commitments made to the public during public hearing/public consultation shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- xiii. Company shall develop an HSE Policy. All the permanent workers shall be covered under ESI Scheme. The company shall have the provision for treatment of its workers at the local Nursing Homes & Hospitals in case of emergency. Annual Medical Check-up on some medical parameters like Blood test, Chest X-Ray, Eye test, Audiometry, Spirometry etc. shall be conducted amongst the employees of the Company and records maintained thereof.
- xiv. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs. 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.

33.3.3 Expansion of Steel Manufacturing Unit of **M/s Allied Recycling Ltd** at village Budhewal, Tehsil Kum Kalan, Dist. Ludhiana, Punjab (EC) (J-11011/40/2013-IA.II(I))

M/s Allied Recycling Ltd (herein after Project Proponent –PP) and their EIA-EMP consultant M/s Shivalik Solid Waste Management Limited and M/s Envirotech (India) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 7th meeting of the Expert Appraisal Committee (Industry) held on 4-5th April, 2013 for preparation of EIA-EMP report. The TOR was awarded by MoEF vide F. No. J-11011/40/2013-IA II (I) dated 29.05.2013 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report vide letter dated 26.12.2014 after conducting Public Hearing for grant of Environmental Clearance. It was noted that one of the consultants was not accredited by QCI/NABET; however, the consultant has produced stay order during the presentation. The Unit falls in Category B as per schedule; but being situated within 10 km of the Critically Polluted Area of Ludhiana (Item No. ii of GC),

hence due to applicability of general condition of the EIA notification, 2006 and the project is appraised at Central level.

2. The salient points of the proposed project as per the final EIA-EMP report submitted by project authorities vide letter referred above in para 1 are as follows:

M/s Allied Recycling Ltd. is a Steel manufacturing Unit which is already manufacturing 80,000 MTA Steel Ingot/ billets and 73,000 MTA Steel Wire Rods at Village Budhewal, Tehsil- Kum Kalan, Distt. Ludhiana, Punjab. The Industry now proposes to enhance the capacity of the unit by addition of Two no of Induction furnaces of capacities 6 TPH each. The capacity of the unit after expansion will be 1,50,000 MTA Steel Ingots/ billets & 1,40,000 MTA Steel Wire Rods. The total area of the plot is about 20,866 m³. There are no Wild Life Sanctuaries, Reserved /Protected Forests or Defence Installations, Rivers and Hill Ranges within 10 km of the project. It is about 18 kms from Ludhiana and about 75 kms from Chandigarh. Total cost of the Project is 31.5 crores and 48 lakhs have been provided for pollution control Measures. About 9.5 lakhs will be spent on annual maintenance of such measures.

The raw materials used are MS/CI Scrap, Sponge/Pig Iron, Ferro alloys Manganese, Ferro Silicon, Aluminium. These will be sourced from Domestic as well as International Markets. The raw materials used in the manufacturing of structural sections is Steel Ingots and Billets will be sourced from own unit.

The water requirement for domestic purpose will be 9.6 KLD and evaporation loss will be 15 KLD. There is no use of water in the process. So the total water requirement will be 27 KLD. The total power demand for the unit is about 11.4 MW. This demand will be met by sourcing power from Punjab State Power Corporation Limited from the nearby Sub-station. There will be about 300 persons working in the unit.

About 240 Ton/annum slag received from the manufacturing process shall be given to cement plant or road making for further use. There is no process of waste water. Domestic waste water shall be treated through Septic Tank. In addition to the existing plantation, it is proposed to plant 100 no. of long leaved, low maintenance and moderate to fast growing species based on agro-climatic zones specified by PAU, Ludhiana along the boundary of unit.

Solid/hazardous wastes in the unit are expected from slag from the furnaces, solids from the Bag filters & Cyclones. Solids from Bag filters contain traces of metals in addition to dust etc. These will be collected separately in a dumping pit and sent to TSDF site for disposal. Slag from the furnace (about 20 Ton per day) received from the manufacturing process shall be used for filling of low lying area or for road making.

Ambient air quality monitoring has been carried out at 8 locations during October – December, 2013 and the data submitted indicated: PM10 (60.5µg/m³ to 79.1µg/m³), PM2.5 (35.2 to 45.7µg/m³), SO₂ (10.1 to 13.2µg/m³) and NO_x (21.7 to 28.0 µg/m³). For Air Pollution Control, Cyclones & Bag filters have been provided on Induction furnace and Scrubber on rolling mills. There will be generation of emission containing SPM. All the processes are closed circuit; as

such emission to the atmosphere will be minimal. However, APCD, cyclone, bag filters will be provided at the exit point to arrest particulate matters.

Public Hearing of the project was conducted by PPCB at site on 27.10.2014 under the Chairmanship of Smt. Amrit Kaur Gill, PCS, Additional Deputy Commissioner (G), Ludhiana. Major issues raised during the public hearing are road in the village in very bad shape and the same should be got repaired immediately, residents of the area will get employment from the expansion plan of the industrial plant.

After detailed deliberations, the Committee recommended the proposal for environmental clearance subject to stipulation of following specific conditions along with other environmental conditions:

- i. Measures shall be taken to reduce PM levels in the ambient air. Stack of adequate height & diameter with continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels within prescribed standards and installing energy efficient technologies.
- ii. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled as per G.S.R. 612 (E) dated 25.08.2014. Guidelines/Code of Practice issued by the CPCB shall be followed.
- iii. Efforts shall further be made to use rainwater from the rain water harvesting sources. Capacity of the reservoir shall be enhanced, if required, to meet the maximum water requirement. The Plant shall operate on a zero discharge concept.
- iv. The wastewater generated shall be fully treated in an ETP and reused for plantation/greenbelt development. The Plant will operate on a zero discharge concept.
- v. Provision shall be made for the housing for the 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 structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.
- vi. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2010. All the fly ash shall be provided to cement and brick manufacturers for further utilization Bottom ash shall be fully utilized for road construction. Details of Memorandum of Understanding entered shall be submitted to the Ministry's Regional Office at Bhubaneswar.
- vii. Hazardous materials such as lubricating oil, compressed gases, paints and varnishes required during construction phase shall be stored properly as per the regulations at isolated places and used/recycled as per the E(P)A Rules, 1986.

- viii. All vehicles and construction machinery are properly maintained to minimize the exhaust emission as well as noise generation to meet prescribed standards.
- ix. Green belt consisting of a 3-tier plantation of trees with thick canopy shall be developed all along the periphery of the plant, vacant areas, transfer points, etc , as part of 33% of total plant area.
- x. Noise level shall be reduced by stopping leakages from various steam lines, compressed air lines and other high pressure equipment; and provide noise proof cabins to operators where remote control for operating noise generating equipment is feasible.
- xi. Disaster management plan shall be prepared and implemented. Regular drills thereof shall be conducted.
- xii. All the commitments made to the public during public hearing/public consultation shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- xiii. Company shall develop an HSE Policy. All the permanent workers shall be covered under ESI Scheme. The company shall have the provision for treatment of its workers at the local Nursing Homes & Hospitals in case of emergency. Annual Medical Check-up on some medical parameters like Blood test, Chest X-Ray, Eye test, Audiometry, Spirometry etc. shall be conducted amongst the employees of the Company and records maintained thereof.
- xiv. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs. 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.

33.4 Further Consideration Cases (EC and TOR)

33.5 Any Other Items

33.5.1 Expansion of Sponge Iron Plant (57,000TPA) into Integrated Steel Plant (0.18 MTPA) along with CPP (24MW, WHRB 12MW & FBC 12MW) and Ferro Alloy Plant (2x9 MVA) of **M/s Maan Steel & Power Ltd.** at Jamuria Industrial Estate, Ikra, P.O. Jamuria, Dist. Burdwan, West Bengal (Letter dated 15.01.2015 seeking Amendment of EC No.J-11011/695/2009-IA.II(I) dated 31.12.2010 for change in capacity of DRI Kiln)

PP did not attend. The proposal would be considered as and when requested for by the PP.

33.5.2 EC for Expansion of Steel Plant (Sponge Iron Plant, M.S. Billet, TMT Bars/Structural Steels, Ferro Alloy Plant) along with Captive Power Plant (48MW) of **M/s B.S. Sponge Pvt. Ltd.**, at village Taraimal, Post Gerwani, Tehsil Gharghoda, Dist. Raigarh, Chhattisgarh (Letter dated 28.11.2013 seeking extension of validity of EC No.J-11011/313/2—8-IA.II(I) dated 01.01.2009)

B.S. Sponge Pvt. Ltd. (*here in after Project Proponent – PP*) has obtained Environmental Clearance for below mentioned capacity vide letter no. F. No. J-11011 / 313 / 2008 – IA II (I) dated 1st January 2009.

Units	Existing Plant	Expansion Production capacities for which EC has been obtained on 01-01-2009	Production capacities after expansion
Sponge Iron through DRI process	60,000 TPA (2 x 100 TPD)	1,20,000 TPA (4x100 TPD)	1,80,000 TPA
Manufacturing of Billets and Steel Ingots through Induction Furnace with Concast	--	1,62,000 TPA (2x12 MT & 2x15 MT)	1,62,000 TPA
Manufacturing of Re-rolled products	—	1,05,000 TPA	1,05,000 TPA
Ferro alloys		25,000 TPA (1x7.5 mVA & 1x9 mVA)	25,000 TPA
Generation of Power through WHRB Boiler	—	12 MW (6x10 TPH)	12 MW
Generation of Power through FBC Boiler	—	36 MW (1x150 TPH)	36 MW

PP has applied for extension of validity of Environmental Clearance vide letter dated 28th November 2013. PP has obtained Consent for Establishment vide no. 3006/TS/CECB/2004 dated 11/08/2009 for the above mentioned capacity and accordingly obtained Consent for Operation for one Sponge Kiln (1x100 TPD) vide dated 30/09/2014. Following is the implementation status for which EC has been accorded:

Units	Existing Plant	Expansion Production capacities for which EC has been obtained on 01-01-2009	Production capacities after expansion	Status of Implementation of Expansion project for which EC has been accorded
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Sponge Iron through DRI process	60,000 TPA (2 x 100 TPD)	1,20,000 TPA (4x100 TPD)	1,80,000 TPA	1 x 100 TPD Implemented In addition to already existing 2x100 TPD kilns (Total production capacity in operation is 90,000 TPA)
Manufacturing of Billets and Steel Ingots through Induction Furnace with Concast	--	1,62,000 TPA (2x12 MT & 2x15 MT)	1,62,000 TPA	To be implemented
Manufacturing of Re-rolled products	—	1,05,000 TPA	1,05,000 TPA	To be implemented
Ferro alloys		25,000 TPA (1x7.5 mVA & 1x9 mVA)	25,000 TPA	To be implemented
Generation of Power through WHRB Boiler	—	12 MW (6x10 TPH)	12 MW	8 WHRB civil work started
Generation of Power through FBC Boiler	—	36 MW (1x150 TPH)	36 MW	To be implemented

PP has implemented the project after obtaining the Environmental Clearance as mentioned above. However, they could not go ahead with the implementation of the unimplemented portion of the above referred EC due to severe recession in steel sector (sluggish market condition) & fall in cash flow of the company during the past few years.

The Committee after deliberations recommended for extension of validity of EC dated 1st January 2009 for further period of 5 years with effect from 1st January, 2014.

33.5.3 Expansion of Cement Plant (Clinker 6MTPA to 7.75MTPA), Cement (9MTPA to 11.7MTPA), Captive Limestone Mine (Limestone 9MTPA to 11.3 MTPA and Shale 0.5MTPA to 0.66MTPA) and CPP (61.2MW to 84.2MW) of **M/s Vasavadatta Cement** at village Sedam, Dist. Gulbarga, Karnataka (Letter dated 06.01.2015 of M/s Birla Shakti Cement for Extension of validity of EC No.J-11011/1044/2007-IA.II(I) dated 20.01.2010)

Environmental clearance for the above Integrated Proposal was accorded by the Ministry vide letter No. J – 11011/1044/2007 – IA – II (I) dated 20-01-2010. The cost of project was Rs 800 crores. The expansion of cement plant and limestone with crusher could not be implemented due to drop in Cement demand, therefore, the integrated proposal could not be executed. The land for the project is made ready for expansion and Vasavadatta Cement would like to restart the project. Construction of Power Plant is Completed. (CPP 18MW is completed 5 MW WHRB is pending).

Land for expansion is available within the existing plant site. Water permission is already in place. PP informed that till date, an amount of Rs 90 Crores has been invested in the Project

(Excluding cement plant, Lime stone with crusher and 5MW WHRB). The proponent now desires to implement the proposal in view of the improving trends of the market.

The Committee after deliberations recommended for extension of validity of EC dated 1st January 2009 for further period of 5 years with effect from 1st January, 2014.

33.5.4 Proposed Expansion of Asbestos Cement Manufacturing Unit of **M/s Visaka Industries Ltd** at vill. Velemala, Mandal R.C.Puram, Dist. Medak, A.P. (Letter dated 13.01.2015 for Extn. of validity of TOR No. J-11011/215/2012-IA.II(I) dated 18.03.2013)

Visaka Industries Ltd has obtained TOR letter vide no. J-11011/215/2012-IA II (I) dt. 18/03/2013 for the proposed expansion of asbestos cement manufacturing unit from 78000 TPA to 1,20,000 TPA at Survey No. 315, IDA, Notified APIIC Industrial area, village Velemala, Mandal R.C.Puram, District Medak, Andhra Pradesh.

PP informed that they have submitted the Draft EIA report to Telangana State Pollution Control Board, for conducting Public Consultation vide letter dated 31-10-2014 and subsequently TSPCB has sought clarification from Ministry vide their letter no. 2/TSPCB/EC/PH/2014-187 dt.19th November 2014 stating whether public hearing can be conducted for the expansion project, as plant is located within 10 Km. Radius of Osman Sagar & Himayat Sagar Lakes, as per G.O. Ms. No. 111 issued by State Govt.

PP mentioned that vide G.O.Ms. No.111 dated 8th March, 1996 State Government has prohibited polluting industries within 10 km. radius (both upstream & downstream of Osman sagar & Himayat sagar lakes) to prevent acidification of lakes due to pollution.

Subsequently SPCB has issued directions to shift the industry beyond 10 km. radius of the lakes.

PP filed an appeal vide No.6 of 2010 in Hon'ble State Appellate Authority against the directions issued by the Board. The Hon'ble Appellate Authority vide order dt. 25.03.2011 passed orders setting aside the order dt. 31.12.2010 stating that "The directions of the hon'ble Supreme Court with regard to relocation of the industries located within 10 Kms radius of the two lakes are not applicable to the Appellant industry".

Subsequently SPCB approached the Hon'ble High Court against the Hon'ble State Appellate Authority decision & Hon'ble High Court has transferred the file to Hon'ble National Green Tribunal.

Latter Hon'ble National Green Tribunal has given a verdict that the " Tribunal is unable to find any reason or circumstances to intervene with the reasoned judgment made by Appellate Authority vide Appeal No. 6/2010. Hence dismissed the case of SPCB on 26th November, 2013.

After submission of Draft EIA report to conduct Public hearing, the SPCB has sought clarification to the Ministry whether Public hearing can be conducted considering the above.

The committee after deliberation decided the following:

- i. Since the ToRs were awarded vide letter dated 18.03.2013 which were initially valid for the period of 2 years i.e up to 17.03.2015, are now valid for the period of 3 years as per Ministry's OM dated 07.11.2014, up to 17.03.2016
- ii. PP has to submit a complete background on the orders of SC, NGT and GO issued by the state government.
- iii. Modeling for niterate acidification caused by the DG set as per the SC order to be submitted as an additional ToR.
- iv. Health Check up should be conducted for the existing workers and a report should be submitted to the Ministry.
- v. Ministry has to take a view on the conduct of Public Hearing in view of the court orders and the OMs issued by the Ministry.

33.5.5 Mini Integrated Steel Plant of **M/s Singhal Steel (P) Ltd** at vill. Patrapalli, Tehsil & Dist. Raigarh., Chhattisgarh (Letter dated 16.11.2013 for extension of validity of EC No.J 11011/820/2007-IA.II(I) dated 30.12.2008)

Singhal Steels Ltd. has obtained Environmental Clearance for the below mentioned capacity vide letter no. F. No. J-11011 / 820 / 2007 – IA II (I) dated 30th December 2008.

S.No.	Units	Production capacities
1	Sponge Iron	2,00,000 TPA
2	Pig Iron	3,30,000 TPA
3	Steel ingots/ Billets	6,72,000 TPA
4	TMT Bars	90,000 TPA
5	Washed Coal	0.5 MTPA
6	Pellets	0.3 MTPA
7	Power (WHRB)	16 MW
8	Generation (AFBC)	50 MW

PP has applied for extension of validity of Environmental Clearance vide letter dated 16th November 2013. PP has obtained Consent for Establishment vide no. 998/TS/CECB/2009 dated 14/05/2009 for the above mentioned capacity. PP has also submitted land documents.

PP explained that they could not implement the units for the above mentioned Environmental Clearance because of Sluggish market conditions, Unavailability of Funds, Land required for laying of railway siding from the nearest railway station to the plant could not be procured.

The Committee after deliberations recommended for extension of validity of EC for a period of 5 years with effect from 30.12.2013.

33.5.6 Letter dated 27.01.2015 of **M/s Tata Steel Ltd.** seeking permission for commissioning the 6 MTPA Integrated Steel Plant, at Kalinganagar, Duburi, Dist. Jajpur, Odisha granted EC No. J-11011/7/2006-IA.II(I) dated 07.11.2006 and 10.10.2012.

The Environmental Clearance for the 6 MTPA Integrated Steel Plant, at Kalinganagar was accorded by the Ministry vide letter no J- 11011/7/2006-IA.II (I) on 7.11.2006 & amended vide letter dated 10.10.2012 for setting up the plant in 2 phases. PP informed that the construction and installation of various units of phase-1 with common infrastructure & facilities are close to completion and commissioning activities of various system/sub-system/equipment have already commenced.

PP mentioned that in such an integrated system of iron and steel plant, individual process units need to be commissioned sequentially due to inter-dependence to other process units for inputs, by-product gases, etc. Therefore starting all the units at the same time is technically not feasible.

PP mentioned that there is a necessity of wet quenching arrangement besides CDQ for the following reasons:

- i. CDQ system operation with low and irregular coke filling damages its cooling chamber refractory lining. Therefore, it is not recommended to operate CDQ during start-up of coke oven battery, when generation of coke is not consistent.
- ii. During start-up / ramping-up operation, waste heat available from hot coke is not adequate for running of boiler.
- iii. Most coke plants start with wet quenching and then CDQ is started / commissioned.
- iv. During statutory annual shutdown as per Boiler Act alternate arrangement is required which will control quenching emissions effectively as coke plant cannot be stopped.

PP further mentioned that in the green field project, for black start /zero start of the units, power is required which need to be generated by using fuel such as LDO in power plant or Standby DG sets. It has been informed by the PP that power plant (CPP-1) is ready for commissioning. LDO is required to be used during commissioning & synchronization and emergency situations. It has been explained that there will be some gap in getting the by-product gases to this gas based power plant. Till such time PP needs to generate steam & power from the CPP-1 by using only LDO as a fuel. Technically it is possible to operate at 50 % rating of boiler capacity with only LDO as a fuel, due to its burner design in the CPP-1 i.e. 33.75 MW from each unit. (Total 2 x 33.75 MW in phase-1)

In view of the forgoing PP has requested for following permissions:

- i. Use of wet quenching system in Coke oven batteries till the CDQ is commissioned and thereafter kept as Stand by for emergency operational requirement, if any while complying with applicable quenching norms.
- ii. Start up of Power generation using LDO during commissioning and thereafter kept as stand by for emergency operational requirement.
- iii. To start commissioning and operations of various units/system/equipment independent of each other till the stabilization of overall plant.

However, while examining the proposal the EAC observed that the Environmental Clearance for the proposal was granted in the year 2006. Further, PP has applied for amendment in the EC in the year 2011 and got amendment letter on 10th October, 2012, however, PP has not obtained the extension of validity of EC dated 7.11.2006, while obtaining the amendment in EC.

PP vide letter dated 10th February, 2015 (during the meeting) mentioned that the EC was granted vide letter J-11011/7/2006-IA-II(I) dated 7th November 2006, after which the actual Resettlement and Rehabilitation (R & R) activities were initiated and completed with the consent of all the communities and the project affected persons. Parallel action was initiated for construction activities of boundary wall, roads, construction power, fabrication yard, Civil work etc. During this period, new and better technologies were introduced in the Steel industry which were also considered by Tata Steel. It has been mentioned by the PP that they accordingly submitted a letter to MoEF in 11th November 2011 to modify the EC with the following changes:

- a) Replacement of 3 smaller blast furnaces by two efficient blast furnaces each of a bigger size.
- b) Inclusion of pelletisation plant and reduction in the nos. of Sinter plants from 2 to 1 to ensure utilization of iron ore fines.
- c) Modification in the Lime Calcining Plant using 3 vertical shaft kiln instead of twin shaft kiln. Vertical shaft kiln gives higher productivity.
- d) Reduction on the captive power plants from 4 to 3.

PP mentioned that these were the major changes in the technology and the capacities of the individual facilities were also changed. PP advised their consultant M N Dastur & Company (P) Limited, Kolkata, to undertake a study to reassess pollution load with the modified configuration. Accordingly, they conducted an environmental monitoring during January 2011 to March 2011. PP also submitted a copy of the technology environmental report prepared by them along with the technical environment report in November 2011.

PP mentioned that their understanding was that the amendment to the environment clearance granted by MoEF vide its letter No. J-11011/7/2006-IA-II(I) dated 10th October 2012, also implied inclusion of extension of the Environment Clearance by a period of 5 years which would enable the PP to complete the construction of all major facilities and commission the plant during the ensuing period.

After deliberation the EAC recommended the above request of proponent with the following conditions:

- i. For Wet quenching: permission to start the coke ovens with wet quenching till the CDQ is stabilized by June 2016, thereafter maintain wet quenching as a standby and use for 20 days (3 weeks) in a year or per annum for maintenance or operational exigencies.
- ii. For LDO: Use of LDO for generation of power in power plants and DG till Blast Furnace gas is available for power generation in power plants and thereafter maintain LDO as "Standby" and use for a 15 days (two weeks) per annum for maintenance or operational exigencies.

Regarding the issue related to extension of validity of EC dated 7.11.2006, the Committee requested Ministry to take a view as explained by the PP.

33.5.7 Projects of Iron Ore Beneficiation and Pellet Plants –Internal Discussion

The Proposal for setting-up 1 MTPA Pellet Plant with upstream slime beneficiation facilities at Iron Ore Complex (IOC) Dalli Rajhara of M/s Steel Authority of India Ltd (19 Ha) in the Balod District of Chhattisgarh state was considered in the Expert Appraisal Committee (Mining) held during 28th – 30th May, 2014 and re-considered during 24th -25th November, 2014 wherein the EAC recommended the proposal for grant of EC.

While examining the proposal it has been observed that the project has a component of Pellet plants and Beneficiation plants however the proposal has been appraised by the EAC-Mining Committee instead of EAC – Industry Committee.

The matter is therefore referred to EAC-Industry Committee to take a view whether the Pellet plants and Beneficiation plants which are integrated with the Mining project can be appraised by the EAC – Mining Committee.

The committee is of the view that the Beneficiation plant and pelletisation plant which are integrated with the Mining projects should be appraised by the Mining sector Committee. The Beneficiation plant and pelletisation plant which are stand alone or which are proposed as a part of integrated steel plant should be appraised by the Industry sector Committee.

33.6 Cases for Terms of Reference (TOR)

33.6.1 Proposed 3MTPA Coke Oven Plant & By-product Plant of M/s Dolvi Coke Projects Ltd at village Salav, PO Revdanda, Dist. Raigad, Maharashtra (TOR) – [J-11011/04/2015-IA-II-(I)]

JSW has completed the acquisition of Welspun Maxsteel Ltd. which operates a 0.75 million tons of Sponge Iron Plant at Salav, Raigad district in the state of Maharashtra. The plant has already received Environmental Clearance for expanding the sponge iron plant from 0.75 MTPA to 1.75 MTPA along with other units at Village Salav, P.O. Revdanda, District Raigad, Maharashtra vide MOEF letter No. F.No.J-11011/183/2008-IA.II (I) dated 27th January 2011. The DRI plant is based on usage of natural gas based process to produce Sponge Iron. The availability of Natural Gas is becoming very scarce in India & the prices are also increasing. PP apprehended that it may no longer be viable to operate this plant with Natural Gas leading to closure of the plant and loss of employment of people. Hence it is proposed to substitute the Natural Gas by Coke Oven Gas for producing Sponge Iron from the plant. This technology is now being developed in steel plants and is becoming viable for usage in production of Sponge Iron.

JSW or/and its subsidiary company propose to set up a 3 MTPA Coke Oven Plant for the substitution of Natural Gas with Coke Oven Gas. The by-products like benzol, sulphur, BTX shall be recovered and disposed off suitably in the market.

The project envisages installation of a 3.0 Mt/yr coke oven plant to generate 150,000 Nm³ /hr of coke oven gas along with coke and by-products at Salav village in Raigad district of Maharashtra. The 3.0 MTPA Coke Oven Plant is proposed to be set up near the existing sponge iron plant. The existing sponge iron plant is situated in Salav village of Raigad district in the

state of Maharashtra. The site is at a distance of 150 km from Mumbai, and about 45 km from Roha by Road.

The National Highway NH-17 (Mumbai-Goa) passes on the east side about 50 km from the plant. State Highway also passes on the west side of the plant. The Mumbai city is located at about 150 km on the North-West side of the plant. The nearest railway station Roha is about 50 km from the plant site and is located in the east on the Konkan Railway Mumbai - Mangalore main line.

The makeup water requirement for the proposed plant will be about 20 MLD. The estimated power requirement of the coke oven plant will be about 75 MW.

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

1. P.H. shall be conducted by the Maharashtra Pollution Control Board as per the generic TOR.
2. Capacity of the unit along with number of the units should be mentioned in the line diagram
3. Certified compliance report of RO visit for the existing plant should be submitted along with the EIA/EMP report
4. Monitoring for Benzene, xylene, toluene in the air should be conducted.

33.6.2 Expansion of Existing Sponge Iron Plant into an Integrated Steel Plant of M/s M.P.S. Steel Castings (P) Ltd., at Wise Park, Kanjikode, Palakkad, Kerala (TOR)-[J-11011/02/2015-IA-II(I)]

The Proposed expansion activity is an Integrated Steel Plant with Sponge Iron Plant, Melting Unit, Re-rolling Mill and Power Generation. CTO for the existing plant is already obtained from Kerala State Pollution Control Board (KSPCB). The existing facility consists of sponge iron kiln of 3 x 100 TPD and 1 x 10 MW (WHRB & FBC boiler) of captive power plant. This facility is commissioned in 2006. Hence CTO for the facility is obtained and is renewed until 2015. The proposed expansion involves production of MS billets of 500 TPD and Rolled products (TMT) of 500 TPD. Project Location Survey Nos. 476/2 pt, 476/3, 476/4, 476/5, 476/6 pt, 476/7 pt, 476/8, 476/9, 476/10, 476/11, 477/3, 477/4 pt, 477/5, 477/6 pt, 478/1, 478/2, 478/3, 478/4, 478/5, 478/6 pt, 482/4, 482/5, 550/2 pt Wise park (Pudussery central Village), Kanjikode, Palakkad Taluk and District, Kerala. The integrated Industrial Township in Pudussery Central Village in Palakkad Taluk/District is a declared Industrial Area of State as per G.O (Rt) No. 672/2001 (ID) dated 24th July, 2001 of Industries (J) Department, Government of Kerala.

The Existing steel plant comprises 3 x 100 TPD Sponge Iron Kiln and 10 MW/hr (WHRB & FBC Boiler) captive power plant. In the proposed expansion, 2 x 25 MT Electric Induction Furnace will be installed

Production Capacity & Plant Equipment

S. No	Products	Production Capacity
Existing		

1	Sponge Iron	3x100 TPD
2	Electric Power	10 MW
Proposed		
3	MS Billets	500 TPD
4	Rolled Products	500 TPD

In the existing plant, fresh water requirement was 221.02 KLD. After the proposed expansion, the requirement will be 364.33 KLD which includes the drinking and sanitation.

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

1. Public Hearing is exempted as the project is located within the existing Industrial Area of State as per G.O (Rt) No. 672/2001 (ID) dated 24th July, 2001.
2. Certified compliance report of CTE/CTO for the existing plant should be submitted along with the EIA/EMP report

33.6.4 Internal Discussion on Generic TOR for Industry Sector and Model TORs for Industry-1 Sectors

WEDNSDAY 11th FEBRUARY 2015

33.7 Environmental Clearance

33.7.1 Expansion of Cast iron Unit (50,000TPA) by installation of 5no.s of Induction Furnace to manufacture Cast iron (100,800 TPA) by **M/s Kiswok Industries Pvt. Ltd**, Jalan Industrial Complex, Gate No.1, village Biprannapara, PS Domjur, Dist. Howrah, West Bengal (**EC**) (J-11011/123/2012-IA.II(I) (Has sought deferment)

pp did not attend meeting. the proposal will be consider as and when requested by the PP.

33.7.2 Environmental Clearance for expansion of cement plant by addition of new Unit-IV (Clinker 1.75 MTPA and Cement 1.75 MTPA) of **M/s My Home Industries Limited**, Mellacheruvu Village & Mandal, Nalgonda Dist, Telangana State. (**EC**) [J-11011/215/2013-IA II (I)]

M/s My Home Industries Limited and their consultant B .S. Envi – Tech Pvt. Ltd gave a detailed presentation on the salient features of the project and proposed environmental protection measures. The ToR was awarded by MoEF vide F. No. J-11011 / 215 / 2013- IA II (I), dated 19th May 2014 for preparation of EIA/EMP report. The PP submitted the final EIA/EMP report vide dated 14th November, 2013 after conducting Public Hearing for grant of Environmental Clearance. 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.

M/s. My Home Industries Limited have proposed to expand the existing cement plant [Clinker – 2.78 MTPA & Cement – 3.90 MTPA] by addition of new Unit IV [Clinker: 1.75 MTPA and

Cement: 1.75 MTPA] at Mellacheruvu Village & Mandal, Nalgonda District, Andhra Pradesh. The existing project obtained environmental clearance from MoEF vide F.No.J-11011/1014/2007-IA.II(I) dated 11.6.2008. The land requirement for the proposed expansion is 32 ha which is already available within the existing plant premises. The longitude of the project site is 79° 54' 34.4"- 79° 54' 47.67" E and latitude is 16° 47' 55.58" to 16° 48' 4.91" N respectively. No Forest land is involved. No National Park, Wildlife Sanctuary is exists within 10 km radius of the project site. No court cases/litigation is pending against the project. The Krishna river and Vemuleru river is located at a distance of 11.5km and 14.1km respectively. The Mellacheruvu village and Venkataramapuram village is located at a distance of 0.8 km and 1.5 km respectively. Yepamadhavaram RF is located at a distance of 1.8km from the project site. The raw materials required are Limestone (2.72 MTPA), Laterite (0.27 MTPA), Gypsum (0.07 MTPA), fly ash (0.31 MTPA) and Coal (0.30 MTPA). The Limestone will be sourced from the captive mines (1 km from the project site) at Mellacheruvu village. The water requirement is 800 m³/day which will be sourced from existing mine pit and ground water. The power requirement is 30 MW which will be met from the existing captive power plant and APCPDCL. Total cost of the project is Rs.355 crores. 5 % of the total project cost i.e Rs 17.70 Crores will be spent as part of Enterprise Social Commitment on the issues raised during PH. The plant and mine has given direct employment to 340 people. The existing and proposed production capacities are as follows:

S. No.	Unit	Existing capacity	Proposed Expansion by Unit IV	Total Capacity after Expansion
1.	Clinker Production	2.78 MTPA	1.75 MTPA	4.53 MTPA
2.	Cement Production	3.90 MTPA	1.75 MTPA	5.65 MTPA

The details of the raw material required for the project is provided in the following table:

Raw Material	Quantity per annum (in MTPA)				Mode of Transport
	Unit – I, II and III	Unit – IV	Total	Sourced from	
Limestone	4.43	2.60	7.03	Captive mines	Closed Conveyor/Dumpers
Coal	0.53	0.30	0.83	Singareni Collieries	Road /Rail
Iron Ore	0.11	0.10	0.27	YSR Kadapa District	Road
Bauxite	0.06			Rajahmundry	Road
Gypsum	0.17	0.08	0.25	Coramandel Fertilizers Ltd	Road
Fly ash for PPC	0.64	0.61	1.25	From VTPS and KTPS	Closed pipelines

Ambient air quality monitoring has been carried out at 8 locations during March 2014 to May 2014 and the data submitted indicated: PM₁₀ (43.5 to 71.3 µg/m³), PM_{2.5} (21.1 to 35.9 µg/m³), SO₂ (8.3 to 11 µg/m³) and NO_x (10.2 to 13.5 µg/m³). The results of Modeling study indicates that the maximum increase of GLC for the proposed expansion project is 13.63 µg/m³ with respect to the PM₁₀, 2.12 µg/m³ with respect to the SO₂, 12.38 µg/m³ with respect to the NO_x. All the pollution control equipment are designed for ≤ 30 mg/Nm³. The dust collected will be recycled back into the process. Clinker will be stored in clinker storage tanks. Gypsum and additives will be stored in covered storage sheds. Cement will be stored in silos. All raw material transfer conveyor will be covered with non-asbestos sheets. All roads and open area in the plant are cement concreted. Flyash is transported in bulk tankers only. Transport vehicle are periodically checked for Pollution Under Control certificate from approved RTA agencies. Separate 25 km railway line from Jagaiahpet was laid for transport of raw materials and cement to reduce impact of transport on the surrounding environment. Truck mounted vacuum cleaner and road sweepers are deployed and good housekeeping is being maintained.

Present water consumption for the plant and colony is 1260 m³/day. The source of the water is borewells. Additional water requirement for the expansion project will be 800 m³/day. Permission obtained from Ground Water Department for 1500 m³/day. Additional 580 m³/day of water will be met from Mine pit /Ground water. No wastewater is generated from cement plant process. Wastewater generation from the colony will increase by 24 m³/day. MHIL will install a new STP of 50 m³/day capacity for handling the additional wastewater generated from the colony

Public hearing was conducted on 12/11/2014 at MHIL – Line - IV Mellacheruvu . The major issues discussed were pollution and limit damage to environment, to provide Water Harvesting Structures or rain water storage tanks to increase ground water level, green belt with fruit bearing plants, employment training programmes to improve skills, providing air pollution control systems for the proposed plant development of the area and creation of jobs for the unemployed.

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

- 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, SO₂, NO_x 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 meet prescribed standards by installing adequate air pollution control system. Low NO_x burners shall be provided to control NO_x emissions. Regular calibration of the instruments must be ensured.
- iii. All the pollution control devices/equipment in raw mill/kiln, kiln feeding system, clinker cooler, coal mill, cement mill, and cement silos, shall be interlocked so that in the event of the pollution control devices/systems not working, the respective unit(s) shut down automatically.

- iv. Efforts shall be made to achieve power consumption of 70 units/tonne for Portland Pozzolona Cement (PPC) and 95 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- v. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- vi. AAQ Modelling shall be carried out based on proposed expansion based on the specific mitigative measures proposed for the expansion project and mitigative measures taken to keep the emissions well below the standards.
- vii. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.
- viii. Arsenic and Mercury shall be monitored in emissions, ambient air and water.
- ix. 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 shall be transported in the closed containers only and shall not be overloaded. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.
- x. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.
- xi. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.
- xii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office, SPCB and CPCB.
- xiii. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / reprocessors only.

- xiv. 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).
- xv. 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.
- xvi. 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.
- xvii. Efforts shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly. The PP shall enter into an MOU with units with potential for generating HW. And in accordance with HW Regulations and prior approval of the MPPCB.
- xviii. As proposed, green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xix. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.
- xx. All the commitments made to the public during the Public Hearing / Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office.
- xxi. 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. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxii. 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.

- xxiii. A Risk Assessment Study and Disaster Preparedness and Management Plan along with the mitigation measures shall be prepared with a focus of Disaster Prevention and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xxiv. Trace mettles in the air should be analyzed and should be submitted along with the 6 monthly
- xxv. 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 submitted to the Ministry and its Regional Office within 3 months from the date of issue of the letter.
- xxvi. To educate the workers, all the work places where dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- xxvii. 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.

33.7.3 Proposed Capacity Expansion from 3,45,000 TPA of Pig Iron Production to 5,00,000 TPA to 5,00,000 TPA Hot Metal production and 10 MW waste heat recovery power plant of **M/s Tata Metaliks Limited** at Gokulpur village, PO Samraipur, Tehsil Kharagpur, District Pashchim Medinipur, West Bengal (**EC**) (J-11011/377/2013-IA.II(I))

M/s Tata Metaliks Limited and their consultant M/s Vimta Laboratories Ltd gave a detailed presentation on the salient features of the project and proposed environmental protection measures. The ToR was awarded by MoEF vide F. No. J-11011 / 377 / 2013- IA II (I), dated 19th May 2014 for preparation of EIA/EMP report. The PP submitted the final EIA/EMP report vide dated 5th February, 2015 by hand during the EAC meeting after conducting Public Hearing for grant of Environmental Clearance. The proposed project activity is listed at S.No. 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.

M/s Tata Metallic Limited has received Environmental Clearance for Expansion of Pig Iron Production from 3,20,000 TPA to 3,45,000 TPA (vide letter No. F.No.J-110011/601/2008-IA-II(I) dated 24th June 2009). The proposed expansion will be carried out within the existing plant area of 162 acres and no additional land is required for the proposed expansion. No forest land in proposed project area, no agriculture land, no national park or wildlife sanctuary within 10 km radius. Kalaikunda Air Force Station, 6.4 km, SW. Plant site doesn't fall within any critically polluted areas. Protected Forests, within 10 km are PF near Khejurdanga Village (3.4 km, N), PF near Koradana Village (8.4 km, N), PF near Prem nagar (8.5 km, S), PF near Srikrishna colony

(9.4 km, S), Kasai River is at 1.7 km in the North, Gokulpur, Medinipur, Kharagpur railway stations are 1.5 km SE, 4.2 km NE, & 5.2 km, SSE away from the plant site respectively, nearest town – Medinipur 4.8 km (NE), Khargpur -4.0 km (S). The greenbelt has already been developed in an area of 54 acres which constitutes more than 33% of the total plant area of 162 acres. Plan is to maintain the existing greenery and develop further. Cost of the project Rs.125.686 Crores. Total manpower required during the operation phase is 25 people. Following table shows the capacities for the existing and the proposed project:

Sr. No.	Particulars	Existing (Phase-I)	Expansion (Phase-II)
1	Production of Hot Metal /Pig Iron	MBF-1 – 215 m ³ (Working Volume) MBF-2 – 215 m ³ (Working Volume) <u>Auxiliaries</u> CPP1- 2.76 MW CPP2- 4.0 MW Sinter Plant- 40.5 m ² capacity	MBF-1 from 215 m ³ to 259 m ³ (Working volume) MBF-2 from 215 m ³ to 259 m ³ (Working Volume) 10 MW WHR power plant
2	Production	3,45,000 TPA (Pig Iron)	5,00,000 TPA (Hot Metal)
3	Land Area	162 acres for Phase-I and Phase-II. No additional land requirement	
4	Capital Project Cost for capacity expansion (Phase-II)	Rs 125.686 Crores	
5	EMP Cost	About Rs.8.9 Crores	

The raw material are sinter, coke, iron ore, flux, coke breeze and iron ore fines transported through the railway siding. Following table shows the details of the raw material:

Raw Materials	Existing Quantity (MTPA)	Proposed Quantity (MTPA)	Total Quantity (MTPA)	Source	Mode of transport
Sinter	0.384	0.1440	0.528	In-house (from own sinter plant)	Conveyor belt
Coke	0.252	0.1033	0.3553	Japanese, Chinese, Domestic (KSPL, Bengal Energy)	Rail/Road
Iron Ore	0.300	0.1167	0.4167	TSL Noamundi, Joda mines	Rail
Flux (MBF +)	0.1769	0.0165	0.1934	Katni, Gomardih	Rail/Road

Sinter plant)					
Coke Breeze	0.0300	0.0032	0.0332	Own generation, Ennore, Bengal Energy	Road
Iron Ore Fines	0.4320	0.0180	0.4500	Own generation, Nomundi, Khanband	Rail

Ambient air quality monitoring has been carried out at 8 locations during March 2014 to May 2014 and the data submitted indicated: PM₁₀ (50.1-87.5 µg/m³), PM_{2.5} (25.3-42.8 µg/m³), SO₂ (12.3-22.6 µg/m³) and NO_x (16.4-33.2 µg/m³). The results of Modeling study indicates that the maximum increase of GLC for the proposed expansion project is 1.53 µg/m³ with respect to the PM₁₀, 2.06 µg/m³ with respect to the SO₂, 0.85 µg/m³ with respect to the NO_x.

High efficiency air pollution control equipment like ESP and Bag Filters has been already installed and propose to augment the gas cleaning plant and put bag filters. Sinter, Coke, Iron Ore, Flux (MBF + Sinter Plant), Coke Breeze and Iron Ore Fines are covered and will be maintained. Water sprinkling system are already in place & will be provided in remaining dust prone areas & inside roads. Dry fog dust suppression system are already present in RMHS & will be installed in other dust prone areas. The stack emission are & will be maintained within stipulated limits

Waste water generated from blast furnace gas cleaning plant is treated in thickener or clarifier by adding flocculating agent and clear water recycled to GCP recirculation tank for reuse. Waste water treatment plant in canteen containing 6 nos of meshes (for solid waste separation), Pressurized Sand Filter, Activated Carbon Filter, Cartridge Filter and Chemical dozer to treat the canteen waste water for using it for road dust suppression. Waste water generated from MBF & CPP areas are collected and planned to be treated for using as make up to reduce ground water consumption further

Three rain water harvesting system utilizing roof top & runoff water followed by filtration & chemical dozing are already in place & harvested rain water is used for domestic & gardening purposes. Two more RWH projects are planned to be constructed. Granulated slag is being sent to cement plant. Iron ore fine and Coke fine are reused in the sinter plant. GCP & SPCM sludge and flue dusts to be used in sinter plant.

Public hearing was conducted on 12/12/2014 at meeting hall of BDO, Kharagpur-I Dev. Block, Kharagpur, District Paschim Medinipur. The major issues discussed were local youth for employment in the proposed expansion project, development of local road conditions, CSR activities to other villages of the locality where no such activities have been initiated in the past.

It has been observed by the Committee that RO, Bhubaneswar has yet to conduct the site visit for monitoring the compliance of the existing plant. After detailed deliberations, the Committee recommended the proposal for environmental clearance subject to stipulation of following specific conditions along with other environmental conditions. The Committee, however, is on the opinion that if compliance report is not up to the mark then the recommendation of the EAC stands cancelled.

- i. 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 50 mg/Nm³ by installing energy efficient technology.
- ii. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points. Bag filters shall be provided to hoods and dust collectors. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.
- iii. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- iv. Multi stage scrubber, cyclone and bag filters etc. to control particulate emissions within the prescribed limits from coke oven shall be provided. Carbon mono-oxide (CO) shall also be monitored along with other parameters and standards notified under Environment (Protection) Act shall be followed. The reports shall be submitted to the Ministry's Regional Office, CPCB and SPCB.
- 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 outside the premises via drains 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. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional, SPCB and CPCB.
- viii. Prior approval of this Ministry shall be obtained in case change of fuel.
- ix. Risk Assessment and Disaster Management Plan for the project focussing on Disaster Prevention shall be prepared and implemented in conjunction with District Disaster Management Plan.

- x. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xi. Coal and coke fines shall be recycled and reused in the process. The breeze coke and dust from the air pollution control system shall be reused in sinter plant. The waste oil shall be properly disposed of as per the Hazardous Waste (Management, Handling, Handling and Transboundary Movement) Rules, 2008.
- xii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants and Coke Oven Plants shall be implemented.
- xiii. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program shall be ensured accordingly in a time bound manner.
- xiv. The Company shall submit their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/ procedure to bring into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xv. All the commitments made to the public during the Public Hearing / Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office.
- xvi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, 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.
- xvii. Haulage roads shall be sprinkled with water at regular intervals for which water tankers with sprinkler arrangement are deployed. Regular sweeping of roads shall be practiced with vacuum sweeping machine or water flushing to minimize dust.
- xviii. Trucks carrying coal and other raw material shall be covered with tarpaulin to prevent spreading of dust during transportation.
- xix. Greenbelt of 20-30 meters in width and greenery shall be developed around storage yards, around plants, either side of roads and around the periphery of the industry as per CPCB Guidelines

33.8 Further Consideration Cases

Setting up of Magnesium Recycling Technology Development & Demonstration Facility (MRTDDF) [Magnesium – 260 kg/day and Chlorine – 760 kg/day] of **M/s Department of Atomic Energy (A Unit of Nuclear Fuel Complex, Hyderabad)**, at Zirconium Complex, village Pazhayakayal, Tehsil Srivaikuntam, Dist. Tuticorin, Tamil Nadu (**TOR**) (considered in 21st EAC meeting held on 30th July- 1st August 2014) (J-11011/209/2014-IA.II(I))

PP not attend the meeting. the matter shall be considered as and when requested by the PP.

33.9 Any Other Items

33.9.1 Expansion of Sponge Iron Unit (2x100 TPD) to Integrated Steel Plant (Sponge Iron Plant (2x100TPD), Steel melting Shop (Billets 90,000TPA), Rolling Mill (TMT Bars 300 TPD), Ferro Alloy Plant (2x9 MVA), Coal Washery (1MTPA), and Captive Power Plant (WHRB 8MW, AFBC 46MW) of **M/s Raigarh Ispat & Power (P) Ltd.** at vill. Delari, Tehsil Raigarh, Dist. Raigarh, Chhattisgarh (Letter dated 24.01.2015 for **Extension of validity of EC** No.J-11011/1040/2007-IA.II(I) dated 27.01.2010)

Raigarh Ispat & Power Pvt. Ltd. (*here in after Project Proponent – PP*) has obtained Environmental Clearance for be below mentioned capacity vide letter no. F.No. J-11011/1040/2007 – IA II (I) dated 27th January 2010.

S.No.	Products	Existing	Expansion Production capacities for which EC has been obtained on 27-01-2010	After expansion
1	Sponge iron	60,000 TPA (2X100 TPD)	60,000 TPA (2X100 TPD)	1,20,000 TPA
2	MS Billets	--	90,000 TPA(3x10 TPH IF)	90,000 TPA
3	TMT Bars	--	90,000 TPA (1X300 TPD)	90,000 TPA
4	Ferro alloys	--	30,000 TPA (2x9 MVA)	30,000 TPA
5	Washed coal	--	1.0 MTPA	1.0 MTPA
6	Power WHRB AFBC	-- -- --	54 MW 8 MW (4x2 MW) 46 MW	54 MW

PP has applied for extension of validity of Environmental Clearance vide letter dated 24th January 2015. PP informed that implementation of units for which EC has been accorded is yet to be initiated, as final order of honorable court of Chhattisgarh in reference to writ petition (civil) 2662/2009 dated 19th May 2009 is yet to issued.

The Committee after deliberations recommended for extension of validity of EC for a period of 5 years with effect from 27th January, 2015.

33.9.2 Cement Plant (Clinker 1.09 MTPA), Cement Grinding Unit (0.6MTPA) of **M/s Bhilai Jaypee Cement Ltd.** At vill. Babupur, Dist. Satna, M.P. (**Amendment of EC/TOR**) (J-11011/29/2008)

Environmental clearance to the aforesaid proposal was accorded by the MoEF vide letter no. J-11011/29/2008-IA II (I) dated 21.7.2009.

Thereafter, the proponent vide letter dated 23.5.2012 have requested for amendment in the environmental clearance accorded on 21.7.2009 for augmentation of clinker production from 1.09 MTPA to 1.3 MTPA at Village Babupur, District Satna in Madhya Pradesh. The proposal was considered in the 3rd REAC meeting held during 3-5th December, 2012.

However, while examining the proposal it was noted the proponent vide letter dated 24.4.2012 requested the Ministry for grant of ToR for the project titled “Enhancement of Clinker production from 1.09 MTPA to 1.3 MTPA at Village Babupur, District Satna in Madhya Pradesh by M/s Bhilai Jaypee Cement Limited” The proposal was considered in the 36th EAC meeting held during 24-25th May, 2012 wherein the proponent informed that they will not be able to attend the meeting. The Committee decided to consider the project as and when requested by the proponent. Presently, the proposal is pending with the Ministry.

It was noted that the proposal for amendment in EC and the proposal for grant of ToR were for the same project located at Village Babupur, District Satna in Madhya Pradesh. In view of this a show cause notice was issued by the Ministry on 20.06.2013.

The matter was again examined in the Ministry and it was decided that at the first instance PP must submit month-wise and year-wise production of the cement unit and the linked limestone mine to ascertain whether the unit along with the captive mines have already expanded.

PP vide letter dated April 23, 2014 submitted information regarding month-wise and year-wise production of the cement unit and the linked limestone mine. It was noted that the PP has not exceeded the approved capacity of clinker of 1.09 MTPA for the year 2010 to 2014 and approved capacity of lime stone mining of 2.1 MTPA.

Based on the presentation made by the PP and additional information submitted, the committee observed that the expansion of the plant from 1.09 to 1.3 is by process modification only without any additional equipments. The recent baseline data and the RO report and the production details month wise has been reviewed by the committee and found to be in order.

The committee after deliberation recommended the proposal for amendment in EC dated 21.7.2009 for expansion of the plant from 1.09 to 1.3 by process modification only without any additional equipment.

33.9.3 Expansion of Installing Induction Furnace, Rolling Mill, Ferro Alloys 8t Slag Crushing plant of **M/s Hanuman Alloys Pvt. Ltd.** at Dist. Borkaro, Jharkhand (**Extn. of validity of TOR**) J-11011/238/2011.IAII (I)

The ToR for the above proposal was accorded vide Ministry's letter F. No. J-11011/238/2011-IA-II(I) dated 09.09.2011. Vide letter dated 28.08.2013 PP have requested the Ministry to extend the validity of ToR by one year since the validity of ToR was expiring in September, 2013. The matter was considered in the 13th REAC meeting held during 18th to 20th November, 2013. However, vide letter dated 17.11.2013 PP expressed their inability to attend the meeting due to some unavoidable circumstances and requested to consider the proposal in the next EAC meeting.

The matter was considered in the EAC meeting held on 13th – 14th October, 2014 and the Committee after consideration noted that the ToR was accorded on 9th September, 2011 at that time, 3 years were over and validity of TOR was expired. In view this the Committee decided that the PP has to apply afresh for obtaining fresh ToRs by making application to the Ministry online.

However, in view of the OM dated 7th November, 2014 the PP has once again requested to extend the validity of ToR so that EIA report can be submitted.

The Committee after deliberation noted that the ToR for the project was issued vide letter dated 09.09.2011 and the PP has requested to extend the validity of ToR on 14.08.2014, i.e within the validity period of 3 years as per the OM dated 7th November, 2014. Therefore, the Committee extended the validity of ToR for further period of 1 year with effect from 9th September, 2014

33.9.4 Expansion of Integrated Steel Plant of **M/s Jayeswal Neco Industries Ltd.** at Siltara Industrial Growth Centre, Siltara, Raipur, Chhattisgarh – **Corrigendum of EC No.J 11011/809/2007-IA.II(I)** dated 08.09.2008 3 MTPA Beneficiation plant and pellet plant of capacity 2.5 MTPA

Environmental Clearance for the proposal of Expansion of Integrated Steel Plant of M/s Jayeswal Neco Industries Ltd. at Siltara Industrial Growth Centre, Siltara, Raipur, was accorded vide letter No. J/11011/809/2007-IA-II (I) dated 08.09.2008 and revalidated on 26.09.2014. In the EC letter dated 08.09.2008 following capacity has been mentioned:

Name of the Unit	Existing Units	Expansion Units	Total Capacity
Iron Ore Beneficiation of Pellet Plant		2.5 MTPA	2.5 MTPA

It has been observed by the Committee that the PP in the EIA report submitted the following details:

- i. Iron ore requirement for Beneficiation plant – 3.00 MTPA
- ii. Finished pellets production – 2.5 MTPA

The PP requested to amend the EC by changing the name of the unit from 'Iron Ore Beneficiation of Pellet Plant – 2.5 MTPA' to 'Iron ore requirement for Beneficiation plant – 3.00 MTPA' and 'Finished pellets production – 2.5 MTPA', as mentioned in the following table:

Name of the Unit	Existing Units	Expansion Units	Total Capacity
Iron Ore Beneficiation Plant		3.0 MTPA	3.0 MTPA
Pellet Plant	-	2.5 MTPA	2.5 MTPA

After deliberation the Committee recommended to amend the EC dated 08.09.2008 for the above mentioned changes.

33.9.4 Letter dated 17.10.2014 on Expansion of Integrated Steel Plant (0.1 MTPA to 0.35 MTPA) of **M/s Shri Mahavir Ferro Alloy Pvt. Ltd.** at Jiabahal, Kalunga Industrial Estate, Kalunga, Dist. Sundergarh, Odisha – on **Corrigendum dated 20.04.2012 to the EC No. J-11011/606/2007-IA.II(I)** dated 29.01.2008

The Environmental Clearance for the project of expansion of integrated steel plant (0.1 MTPA – 0.35 MTPA) was accorded by the Ministry vide letter dated 29th January, 2008. Further vide letter dated 20th April, 2012 a corrigendum was issued. It has been mentioned that, ‘The capacity of pelletization and sinter plant after the proposed expansion (Phase - II) may be read as 2000 TPD instead of 1X1000 TPD’.

PP now requested that the product will be 200 TPD Iron ore Sinter and 1800 TPD Iron ore Pellet.

The Committee after deliberation noted that there will be no additional impact if the production is configured as 200 TPD Iron ore Sinter and 1800 TPD Iron ore Pellet. The committee recommended the amendment of EC for the above change.

33.9.5 Expansion of Steel Plant of **M/s Drolia Electrosteels (P) Ltd.** at Siltara, Block Dharsiwa, Dist. Raipur, Chhattisgarh - Letter No. DESPL/ENV/EC/2013-14/0122 dated 24.08.2013 seeking extension of EC No.J-11011/386/2008-IA.II(I) dated 15.12.2008

Environmental Clearance for the steel plant for the following capacities was accorded by the Ministry vide letter No.J-11011/386/2008-IA.II(I) dated 15.12.2008.

Sr. No	Facilities	Capacity
01.	Sponge Iron (100TPD x 2 DRI Kiln)	66000TPA
02.	Semi Finished Steel Billet & Ingot	166000TPA
03.	Iron Ore Beneficiation & Pelletization Plant	200000TPA
04.	Dry Coal Beneficiation	150000TPA
05.	Power plant (WHRB) based on waste heat	5 MW
06.	Power plant (CFBC) based on Coal	6 MW
07.	Ferro Alloys (Fe Mn/Si Mn)	11500TPA
08.	Rerolled Steel	150000TPA

The project is partially implemented and the capacities for respective facility in operation are as follows:

S. No	Units	Capacity
1	Sponge Iron Kiln = 100 TPD X2 Nos.	66000 TPA
2	Semi Finished Steel Billet & Ingot	145200 TPA
3	Power Plant (WHRB) based on waste heat	5 MW
4	Power Plant (CFBC) based on Coal	6 MW

The following units are yet to be implemented by the PP

S. No	Units	Capacity
1	Semi Finished Steel Billet & Ingot	20800TPA
2	Iron Ore Beneficiation & Pelletization Plant	200000TPA
3	Dry Coal Beneficiation	150000TPA
4	Ferro Alloys (Fe Mn/Si Mn)	11500TPA
5	Rerolled Steel	150000TPA

PP has requested to grant the extension for the validity of Environment Clearance (EC) for another period of 5 years.

The Committee after deliberations recommended for extension of validity of EC for a period of 5 years with effect from 15th December, 2013.

33.9.6 Expansion of Capacity of Hot Metal production from 4 MTPA to 6.5MTPA of **M/s Rashtriya Ispat Nigam Ltd.**, by a revamping of Existing Facilities–cum-Modernisation programme of Sinter Machines, LD Converters of Steel Miting Shp and Insatallation og Additional Converter and Caster at their Existing Integrated Steel Plant in Vishakapattanam, Andhra Pradesh – **Amendment of EC** No. J-11011/96/2005- IA.II(I) dated 11.08.2005

Pp did not attend the meeting. the proposal shall be considered as and when requested by the Ministry.

33.10 Terms of Reference (TORs)

33.10.1 Expansion of Integrated Steel Plant (1MTPA to 1.3MTPA) of **M/s JSW Steel Ltd.** at Mecheri, Taluk Mettur, Dist. Salem, T.N. (J-11011/281/2006-IA.II(I))

The PP along with their EIA-EMP consultant M/s. MECON, Bangalore gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Terms of References for the preparation of EIA-EMP report. The proposed project activity is listed at Sl. No. 3(a) under category ‘A’ of the Schedule of EIA Notification, 2006 and appraised at the central level.

M/s. JSW Salem Works is proposed to expand 1 to 1.3 MTPA production of “Special Steel Alloys” at Survey number, Pottenari village - 75B, 76B, 77B, 80B, 81B, 83 to 86, 89 to 95, 98 to 103,104B, 105, 303 to 305, 308 to 321,106B. M.Kallipatti:189 to 191,197 to199, 203, 205, 298 to 317, at Mecheri, Mettur-Taluk, Salem District, Tamilnadu. The raw material will be sourced from local mines and imported from other countries. Total 586.09 Acre of land is in possession

of M/s. JSW Salem Works. No Rehabilitation and resettlement is required. Nearest NH 7 is passing in eastern direction of plant site at about 22 Km. Nearest airport is Bangalore which is 200 Km. Nearest railway station is Salem which is 35 Km. Nearest town is Mettur which is 12 Km. Nearest water body is Mettur Dam which is 12 Km. Investment incurred for this expansion is Rs. 800 Cr. The tentative budget for environmental protection measure is Rs. 52.5 Cr. Latitude: 11° 48' 16"N to 11° 49' 2"N and Longitude: 77° 54' 17"E to 77° 55' 43"E. After expansion Captive power generation will be to the tune of 97 MW.

No National park, biosphere reserve and wild life sanctuary including notified Eco-Sensitive areas within 10 Km radius. There is no archaeological monument, interstate boundary and defence installation observed in the 10 Km radius of study area. No nallah/water body, public highways, forests within the project site.

The existing and proposed plant configuration for 1.3 MTPA expansion is as shown below:

Manufacturing Facilities	Existing Capacity	Proposed Expansion	Total Capacity after Expansion
1.0 Coke Oven Plant -1 (Non – Recovery Type)	0.50	-	0.5
2.0 Sinter Plant – 1 (20 Square Meter)	0.175	-	0.0
2.1 Sinter Plant – 2 (90 Square Meter)	1.06	-	1.06
2.2 Sinter Plant – 3 (90 Square Meter) -		1.06	1.06
3.0 Blast Furnace – 1 (402 to 650 Cubic Meter)*	0.367	0.316	0.683
4.0 Blast Furnace – 2 (550 to 650 Cubic Meter)	0.578	0.105	0.683
5.0 Energy Optimising Furnace – 1 (45 T to 65 T)	0.41	0.23	0.64
6.0 Energy Optimising Furnace – 2 (65 T)	0.62	-	0.62
7.0 Continuous Casting Machine - 1	0.35	-	0.35
8.0 Continuous Casting Machine - 2	0.5	-	0.5
9.0 Continuous Casting Machine – 3	-	0.45	0.45
10.0 Bar & Rod Mill Augmentation	0.4	0.08	0.48
11.0 Blooming Mill Augmentation	0.36	0.12	0.48
12.0 Annealed Steel unit	-	0.06	0.06
13.0 peeled and ground	-	0.04	0.04
14.0. Air Separation Plant 1 – 150 Ton/Day	150T/day	-	150 T/day
15.0 Air Separation Plant 2 – 390 Ton/Day	390T/day	-	390 T/day
16.0 Air Separation Plant 3 – 250 Ton/Day New	-	250 T/day	250 T/day
17.0 Captive Power Plant 1 (7 MW)	7 MW	-	7 MW
18.0 Captive Power Plant 2 (2 x 30 MW)	2X30MW	-	2X30 MW
19.0 Captive Power Plant 3 (1 x 30 MW)	-	30 MW	30 MW

The water is 100% re-circulated after proper treatment, so that Zero effluent discharge is ensured. The total requirement of fresh water after expansion is about 4.4 MGD against PWD's

(Government of Tamilnadu) permission for withdrawal of 5 MGD of water from downstream of Mettur Dam. Rainwater harvesting will be continued.

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-2:**

1. P.H. shall be conducted by the Tamil Nadu Pollution Control Board as per the generic TOR.
2. Site visit by RO and certified compliance report should be submitted along with the EIA report

33.10.2 Proposed (Greenfield) Integrated Cement Plant (capacity – Clinker 2x2.6MTPA, Cement 3MTPA, Captive Power Plant 2x25MW & WHRB Power Generation 2x20MW) of **M/s Shree Cement Ltd.** near village Joga, Tehsil & District Jaisalmar, Rajsthan (**TOR**)

The project authorities and their Consultant (M/s J.M. EnviroNet 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.

Shree Cement Ltd. is now proposing Integrated Cement Plant - Clinker (2 x 2.6 Million TPA), Cement (3.0 Million TPA), Captive Power Plant (2 x 25 MW) & Waste Heat Recovery Power Generation (2 x 20 MW) near Village: Joga, Tehsil & District: Jaisalmer (Rajasthan). Project will be implemented in phased manner. Total Project area 400 ha (including colony). Greenbelt / Plantation area 132 ha (i.e. 33% of the total project area). Nearest Town / City is Ramgarh. Nearest National Highway NH -15. Nearest Railway Station Jaisalmer. Nearest Airport Jodhpur. There is no National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger / Elephant Reserve etc. within 10 km radius of the proposed project site. Following table shows the capacity and phases of the project

Units	Proposed Capacity	
	1 st Phase	2 nd Phase
Clinker Production (Million TPA)	2.6	2.6
Cement Production (Million TPA)	3.0	
Captive Power Plant (MW)	25	25
Waste Heat Recovery Power Generation (MW)	20	20
D.G. Set (KVA)	2000 KVA (Size 1000/500/250/125 KVA)	

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:**

3. P.H. shall be conducted by the Rajasthan Pollution Control Board as per the generic TOR.
4. Capacity of the unit along with number of the units should be mentioned in the line diagram
5. Water requirement details along with the source of water and quantity of water requirement
6. Use of hazardous waste in the cement plant

33.10.3 Proposed Further Expansion of Existing Integrated Cement Plant capacity by 4.4 MTPA) through addition of Units – Clinker Unit (0.4 MTPA (under EC) and 0.6MTPA (further expansion) and Clinker Unit (0.4 MTPA (under EC) and 0.6MTPA (further expansion) and New Clinker Unit (2.6 MTPA) and WHRB (22MW) and DG Sets (1000 KVA) of **M/s Shree Cement Ltd.** located near vill. Ras, Pali (Rajasthan) (J-11011/400/2012- IA.II(I) & J-11011/343/2012- 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 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.

Shree Cement Ltd. (SCL) is having an existing Integrated Cement Plant - Clinker, Cement, Captive Power Plant, WHRB, synthetic gypsum unit & D.G Set near Village: Ras, Tehsil Jaitaran, District : Pali, Rajasthan. Environmental Clearance for the existing project has been obtained from MOEF, New Delhi vide their letter no. J-11011/298/2012-IAII (I) dated 27th August, 2012.

Shree Cement Ltd. is now proposing for expansion of existing Integrated Cement Plant capacity- Clinker(11.2 to 15.0 MTPA), Cement (8.8 to 13.2 MTPA), WHRS (65 to 80 MW), CPP (180 MW), Synthetic Gypsum (1560 TPD) & D.G Sets (1000 to 2000 KVA), near Village Ras, Pali (Rajasthan).

Details of the products along with their production capacity are given below:

S. No.	Product	Name of Unit	Existing EC Granted Capacity	Additional Capacity	Total Capacity
1.	Clinker Units (Million TPA)	Unit-III to Unit-VIII	6 Units X 1.2 = 7.2	Nil	7.2
2.	Clinker Unit (Million TPA)	Ras New Cement Unit (Unit-IX)	1.6	0.4 (Under EC)	2.6
			2.0 (Under EC)	0.6 (further expansion)	

3.	Clinker Unit (Million TPA)	Unit-X	1.6	0.4 (Under EC)	2.6
			2.0 (Under EC)	0.6 (further expansion)	
4.	Clinker Units (Million TPA)	Unit-XI	New unit	2.6	2.6
5.	Cement Mill (Ball Mill with RP) (Million TPA)	Unit-III & IV	2 Units X 2.2 = 4.4	Nil	4.4
6.	Cement Mill (VRM + Ball Mill) (Million TPA)	Ras New Cement Unit	4.4	Nil	4.4
7.	Cement Mill (VRM + Ball Mill) (Million TPA)	Cement Unit	Nil	4.4	4.4
8.	Thermal Power Generation (MW)	Thermal Power Generation	180	Nil	180
9.	Waste Heat Recovery Power Generation (MW)	Waste heat recovery Power Generation	68	22	90
10.	Synthetic Gypsum (TPD)	Synthetic Gypsum (TPD)	1560	Nil	1560
11.	DG Sets (KVA)	DG Sets (KVA)	1000	1000	2000

Existing plant area is 187.5 ha. Additional available area is 116.7 ha. Thus, total area after proposed expansion project will be 304.2 ha. Existing Bhagatpura colony area is 40 ha. 63.8 ha (34% of the total existing plant area) has already been developed under green belt/ plantation. Additional 38.5 ha will be developed under green belt / plantation. Geographical coordinates for the plant site are Latitude 26° 15' 37"- 26 °16' 34" N & Longitude 74° 11' 06"- 74° 11' 49" E.

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 Rajasthan Pollution Control Board as per the generic TOR.
2. Capacity of the unit along with number of the units should be mentioned in the line diagram
3. Use of hazardous waste in the cement plant
4. Certified compliance report of RO visit should be submitted along with the EIA/EMP report
5. EIA should be prepared for the impact of total existing 10.4 to 15.0

33.10.4 Proposed Expansion of Integrated Cement Project - Clinker (6.0 to 9.5 MTPA), Cement (8 MTPA to 12MTPA), CTPP (80 MW to 140 MW) & WHRB (18 to 30 MW) of **M/s Wonder Cement Ltd.** at villages: Sangaria, Borakheri, Peerkhera and Rasulpura, Tehsil: Nimbahera, District: Chittorgarh (Rajasthan) (**TOR**) J-11011/298/2012-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 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.

Wonder Cement Limited (WCL) is having an Integrated Cement Plant - Clinker, Cement, Captive Power Plant, WHRB & D.G. Set at Villages- Bhatkotri, Lasrawan, Phalwa & Rasulpura, Tehsil: Nimbahera, Chittorgarh (Rajasthan). Environmental Clearance for the same has been obtained from MoEF, New Delhi vide Letter No. J-11011/298/2012- 1A II (I) dated 21st Feb., 2014.

Wonder Cement Ltd. is now proposing Expansion of Integrated Cement Project - Clinker (6.0 to 9.5 MTPA), Cement (8 to 12 MTPA), CTPP (80 to 140 MW) & WHRB (18 to 30 MW) by installation of new Line - III at Villages: Sangaria, Borakheri, Peerkhera & Rasulpura, Tehsil: Nimbahera, District: Chittorgarh (Rajasthan). Following table presents the details of existing and the proposed capacity.

Units	Existing Granted Capacity (Line I & II)	Proposed Expansion Capacity (New Line - III)	Total Capacity after Expansion
Clinker (MTPA)	6	3.5	9.5
Cement (MTPA)	8	4	12
Captive Power Plant (MW)	80	60	140
WHRB (MW)	18 (2 x 9)	1 x 12	30 (2 x 9 & 1 x 12)
D.G. Set (MW)	7 (1 x 2 & 1 x 5)	Nil	7 (1 x 2 & 1 x 5)

Total Plant area is 191.064 ha and the proposed expansion will be done within the existing plant premises; thus, no additional land will be acquired for the same. 71.31 ha i.e. 37% of the total plant area has been proposed to be developed under greenbelt / plantation, out of which 33 ha has already been developed. Geographical coordinates for the plant site are Latitude 24° 39' 12.47" N & 24° 40' 14.8" N & Longitude 74° 37' 43.26" E & 74° 38' 48.56" E

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 Rajasthan Pollution Control Board as per the generic TOR.

2. Capacity of the unit along with number of the units should be mentioned in the line diagram
3. Water requirement details along with the source of water and quantity of water requirement
4. Use of hazardous waste in the cement plant
5. The EIA report should include the impact of both the project i.e the existing project, which is under construction and the proposed expansion project

33.10.5 Proposed (Greenfield) Integrated Cement Manufacturing Unit (Clinker of 5.28 MTPA in two phases) – 1st Phase 2.64MTPA (3.7MTPA Cement) and 2nd Phase- 2.64 MTPA Clinker (3.7 MTPA cement) and Installation of 10MW x2 WHRS and 25 MW x2 CPP in Captive Power Plant of **M/s Vertex Cements (P) Ltd.**, at village Gangavaram, Mandal Gurazala, Dist. Guntur, A.P. **(TOR)**

The project authorities and their Consultant (M/s Team Labs and Consultants, Hyderabad 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.

M/s Vertex Cements (P) Limited proposes to establish an integrated Cement plant consisting of Clinker manufacturing of capacity 5.28 (2 x 2.64) MmTPA, Cement manufacturing unit with capacity of 7.4 (2 x 3.70) MMTPA, Waste Heat Recovery System of 20 (2 x 10) MW and Captive Power plant of 50 (2 x 25) MW at Gangavaram village, Gurazala mandal, Guntur district, Andhra Pradesh. The land area of the project is 156.50 ha (386.72 acres). No forest land and R&R is involved. The estimated capital cost of the project is Rs. 1890 crores.

The site location falls in survey of India Top sheet no. 56 P/10 at the intersection of 79° 35’ 34.41” E longitude and 16° 35’ 38.06” N latitude. The site is connected to Gujarala – Rantachintala road in south direction. The site elevation above Mean sea Level (MSL) is 110 m. The plant site is surrounded by open lands in all directions. The nearest revenue village is Satyanarayanapuram at a distance of 2.1 km in southwest direction. The nearest railway station is Rentachintala at a distance of 7.5 km in southwest direction. Interstate boundary Andhra Pradesh and Telangana state is at a distance of 6.5 km in Northwest direction. Krishna River is at a distance of 6.5 km in northwest direction. The captive Limestone mines are located adjacent to Plant site in North direction. There are no national parks and or wild life sanctuaries within 10 km radius. The following reserve forests are located within 10 km radius ; Daida RF – 4.5 km in North direction, Virilapalem RF - 7.0 km in North direction, Goli RF - 8.4 km in Northwest direction, Paluvayi RF - 9.6 km in Southwest direction, Madagula RF - 9.7 km in Southwest direction.

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 Andhra Pradesh Pollution Control Board as per the generic TOR.

2. Status of the land, whether rehabilitation is required. Consent of land owners should be submitted at the time of EIA report
3. Capacity of the unit along with number of the units should be mentioned in the line diagram
4. Water harvesting details should be included in the EIA report

33.10.6 Integrated Steel Plant (2MTPA), Cement Plant (1.4 MTPA) and Captive Power Plant (230 MW) of **M/s BMM Ispat Ltd.**, at village Danapur, Taluk Hospet, Dist. Bellary, Karnataka – J-11011/236/2008-IA.II(I) (**TOR**)

The proposal was considered in the 21st meetings of EAC held on 30th July to 1st August, 2014, wherein the EAC after deliberations noted that there is a change in configuration in a number of units of the Integrated Steel Plant and several new sections/units are also being introduced in the ISP for which appraisal of their impacts have not been carried out. The proposed amendment is being sought after 4 years, during which the environmental profile of the area would have presumably changed. After deliberations, the Committee decided that an EIA-EMP Report would be required to assess the impacts of the changes proposed and cannot be introduced in the EC letter as an amendment.

The Committee however noted that there is no change in land requirement for the aforesaid project and the water requirement would reduce with appropriate recycling measures. The EAC requested that a Form-I be submitted providing the aforesaid details and as described in the minutes of the EAC meeting of June 2014.

PP has submitted the Form-1. The EAC recommended the proposal for grant of ToRs as decided in the EAC meeting held on 30th July to 1st August, 2014.

33.10.7 Proposed Clinker Grinding Unit (1.2 MTPA) of **M/s Rinam Trading Pvt. Ltd.** located in Plot No. 14/-148, village Kurari, Tehsil Bhabhua, district Kaimur (Bhabhua), Bihar (**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. The Proposed project stand alone cement grinding units are covered under Category 'B' as per para 3(b) of the Schedule of the EIA notification 2006. However, Uttar Pradesh – Bihar interstate boundary is at the distance of approx 3 km in NW direction from the proposed project site, hence due to applicability of general condition of the EIA notification, 2006 and the project is appraised at Central level.

M/s. Rinam Trading Pvt. Ltd. is proposing for Clinker Grinding Unit of cement production capacity 1.2 MTPA at Plot No. 147 & 148, village Kurari, Post Karmnasha, Durgawati, tehsil Bhabua, district Kaimur (Bihar). The proposed cement production capacity is 1.2 MTPA. Clinker (0.8 MTPA), Fly ash (0.3 MTPA) and Gypsum (0.1 MTPA) will be purchased from Madhya Pradesh, HINDALCO (Renukoot, U.P.) and Rajasthan respectively. Total land area of the proposed project is 2.9719 hectares. Green belt will be developed on 33% land area with local species all around the plant boundary. The Project site lies between longitude 25° 13' 0.099"N to 25° 13' 0.95"N and Latitude 83° 26' 0.75"E to 83° 26' 0.84"E. No National Park, Wildlife Sanctuary, Biosphere Reserve, Protected Forest exists within 10 km radius. The project is located in seismic zone-III. The total manpower requirement for the proposed project will be approx. 74

persons which will be sourced from nearby areas. Total water requirement of the proposed Clinker Grinding unit project will be 8.0 KLD which will be sourced from Ground water. It will be used for drinking, dust suppression, plantation etc. Total power requirement after the proposed project will be 6.0 MW, which will be sourced from State Electricity Board. A DG Set of 4.0 MW capacity will be installed for emergency backup. Total cost of the project is Rs. 79.5 Crores along with cost for environment protection measures will be Rs. 4.0 Crores.

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. Study should be conducted to assess the impact of transportation on the environmental parameters, since the material is proposed to be transported by road.

**LIST OF PARTICIPANTS OF EAC (I) IN 29th MEETING OF EAC (INDUSTRY-I)
HELD ON 11th-12th DECEMBER 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	A
10.	Dr. Antony Gnanamuthu	Member	A
11.	Prof. C. S. Dubey	Member	P
12.	Shri Niranjana Raghunath Raje	Member	P
MOEF Representatives			
13.	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 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB shall be attached with the EIA-EMP report.
 - 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.
22. AAQ data (except monsoon) at 8 locations for PM₁₀, PM_{2.5}, SO₂, NO_x, 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 16th November, 2009 and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
23. Raw data of all AAQ data for 12 weeks of all stations as per frequency given in the NAAQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
24. 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.
25. Surface water quality including trace elements of nearby River (60m upstream and downstream) and other surface drains at eight locations to be provided.
26. Ground water monitoring including trace elements at minimum at 8 locations shall be included.
27. Noise levels monitoring at 8 locations within the study area.
28. Coal Characteristics – of indigenous and imported coal to be used in the project in terms of Calorific value, ash content and Sulphur content.
29. 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.
30. 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.
31. Emissions (g/second) with and without the air pollution control measures.
32. 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.
33. 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.
34. Details of water requirement, water balance chart for new unit or for existing unit as well as proposed expansion (in case of expansion).
 35. Source of water supply and quantity and permission of withdrawal of water (surface/ground) from Competent Authority.
 36. 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.
 37. 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.
 38. Action plan for control of ambient air quality parameters as per NAAQM Standards for PM₁₀, PM_{2.5}, SO₂ and NO_x, etc as per GSR 826(E) dated 16th November, 2009.
 39. 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 30th May, 2008.
 40. 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.
 41. 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.
 42. 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.
 43. 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.
 44. 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.
 45. 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.
 46. Action plan for post-project environmental monitoring shall be submitted.
 47. Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control needs to be addressed and included.
 48. 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.
49. 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
50. 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.
51. 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.
52. 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.
53. The questionnaire for industry sector (available on MOEF website) shall be submitted as an Annexure to the EIA-EMP Report.
54. '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.

55. A tabular chart with index for point wise compliance of above TORs.
56. 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).
57. 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 4th August, 2009, which are available on the website of this Ministry shall also be followed.
- viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

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/Casuarina* 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.

**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?
