

MINUTES OF 37th RECONSTITUTED EXPERT APPRAISAL COMMITTEE
(INDUSTRY - I) BEING HELD ON 30th April –1st May 2015

The 37th meeting of the Expert Appraisal Committee for Environmental Impact Assessment of Industry-I Projects of the Ministry of Environment, Forest and Climate Change was held on 30th April-1st May, 2015. The list of participants is annexed.

37.1 Opening Remarks of the Chairman

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

37.2 Confirmation of the Minutes of the 35th Reconstituted Expert Appraisal Committee (Industry) held during 26th – 27th March, 2015

The minutes of the 35th meeting were confirmed as circulated.

37.3 Environmental Clearance

37.3.1 Proposed Barytes Beneficiation Plant (capacity 1,00,000) at Village Gajulamandyam, District Chitto, AP by M/s Garuda Drilling Mud Chemicals – Environmental Clearance – [F. No. J-11011/215/2014-IA II (I)]

Garuda Drilling Mud Chemicals Pvt. Ltd. (GDMC) proposed to install a 1,00,000 TPA Beneficiation Plant in the industrial area land of 1.47 Ha. at Gajulamandyam Village, Renigunta Mandal, Chittoor District, Andhra Pradesh.

As it being a category B project and SEIAA, Andhra Pradesh is in place the Committee has not considered the proposal and the PP was advised to apply to SEIAA, AP for environment clearance.

37.3.2 Proposed Manufacturing of Ferro Manganese, Master Alloy, Various Ferro Alloys and Metal Power by M/s Vigour Metals and Alloys, at Butibori Industrial area, plot no. B4/23, District Nagpur, Maharashtra – Environmental Clearance – [F. No. J-11011/287/2013-IA-II (I)]

M/s Vigour Metals and Alloys (*herein after Project Proponent –PP*) and their EIA-EMP consultant M/s PECS, Nagpur gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 14th meeting of the Expert Appraisal Committee (Industry) held on 19th – 20th December, 2013 for preparation of EIA-EMP report. The TOR was awarded by MoEFCC vide letter F.No. 11011/287/2013-IA-II(I) dated 11th March, 2014 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report vide online application dated 9th March, 2015. Public hearing is exempted for the project as the project is located in the Notified Industrial Area. 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 MoEFCC.

M/s Vigour Metals and Alloys proposed to manufacture Ferro Manganese, Master Alloy, Various Ferro Alloys and Metal Powder. The proposed project is in Buti Bori Industrial Area Plot No. B4/23, Taluka Hingna, District Nagpur. Butibori MIDC is notified industrial area. Total Area with shed leased out by MIDC Butibori is 1000 sq mt and the shed area is 600 sq mt. The project site is located at 20°55'55.77"N Latitude and 78°57'35.72"E Longitude. Nearest railway station is Butibori railway station at a distance of 4 km. Nearest village are Chichkotha and Algoni located at a distance of 1 km and 1.5 km respectively. Vena river is flowing at distance of 2.5km towards East, Krishna nala is at a distance of 3km (ES), Wakeshwar lake at 9.6km and Khadki lake at 10km(WN). Nearest forests namely Degma R.F., Dongargao R.F. and Junapani R.F. are located at a distance of 9.0 km (NW), 5 km (SE) and 7 km (S) respectively from the project site.

The Total Cost of the Project is Rs. 145 Lacs. The Cost of EMP is Rs. 30.0 Lacs and Recurring Cost of Rs. 6.5 Lacs per Annum. The raw material requirement for the plant is provided in the tables below:

**Quantitative Details of Raw Materials Required
(Thermite Process)**

Sr. No.	Raw Material	Quantity Required (TPM)				
		Low/medim carbon Fe - Cr	Low/medium carbon Fe - Mn	Fe - V	Fe - Mb	Fe - Ti
1.	Manganese Ore		100 MT			
2.	Ilmenite Sand					6.5
3.	Silico Manganese	8 MT	58 MT			
4.	Aluminum Powder			2TPA	2 TPA	1.6
5.	Aluminum Scrap	50 MT	30 MT			1
6.	Steel / Iron Scrap	10 Mt	90 MT			
7.	Molybdenum Concentrate				1	
8.	Chrome Ore	16 MT				
9.	Flourspur	0.5 MT	4 MT			
10.	Titanium Scrap					5 TPA
11.	Limestone Powder	6 MT	42 MT	2 TPA	5 TPA	25 TPA
12.	Titanium Dioxide					5 TPA
13.	Vanadium Pentaoxide			5 TPA		
14.	Furnace oil	1000 lit/year				

**Quantitative Details of Raw Materials Required
(Induction Furnace):**

Sr. No.	Raw Material	Quantity Required (TPM)	
		Fe - Al	Aluminium master alloy
1.	Aluminum Scrap	6 TPM	17 TPM

2.	MS Scrap	11 TPM	
3.	MS Turning	6 TPM	

Dust suction system would be provided which will control fugitive emission due to material and raw material handling. Dust suppression system would be provided in the form of water sprinklers. All vibrating screens and weigh feeders below the hopper; day bins etc. are totally covered to prevent leakages of dust. All bins are packed and covered, so that there is no chance of dust leakage.

Water requirement for the project will be about 10 KLD for the process which will be sourced from the MIDC. The power requirement for the proposed project will be 125 HP, which will be sourced from the State Electricity Board. The proposed project creates employment for 40 people.

Ambient air quality monitoring has been carried out at 8 locations during January – April - 2014. PM₁₀ concentration ranged from 31.5 – 63.8 µg/m³, PM₂₅ concentration ranged from 15.2 – 40.1 µg/m³, concentration level of SO₂ ranged from 7.1-32.5 µg/m³ and NO_x concentration is 9.5-35.7 µg/m³. The model simulations deal with dispersion of three major pollutants viz., Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) and Particulate Matter (PM) emitted from the stacks. The maximum incremental ground level concentrations (GLCs) for PM₁₀, SO₂ and NO_x due to proposed units are carried out. The predicted 24 hourly maximum concentrations for PM₁₀, SO₂ and NO_x are found to be 0.012 µg/m³, 0.958 µg/m³ and 0.04 µg/m³ respectively in proposed scenario.

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

- (i) Bag filter to be installed to reduce the emission of Particulate Matter (PM). PM emission should not exceed 100 mg/m³. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB should also be followed.
- (ii) Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- (iii) Neurological Evaluation of workers exposed to Manganese should be monitored annually and the report should be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office (WCZ), Nagpur.
- (iv) 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 should be provided. In addition, sufficient air pollution control devices viz. bag house, bag filters etc. should be provided.

- (v) Dust extraction system comprising of pulse jet type bag filter, centrifugal fan and motor, duct work including suction hoods, duct supports, stack, duct hopper, rotary air lock valves etc. should be installed to control the primary and secondary emission.
- (vi) Water sprinkling arrangements as well as dry fog system to control fugitive emission shall be undertaken. Water sprinkling should be carried out at the raw material stockyard to control fugitive dust emissions.
- (vii) Driver system shall be provided at feeding point, transfer point at proportioning system to control fugitive dust emission.
- (viii) Efforts should 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. Water requirement should be modified accordingly.
- (ix) Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture of Silico Manganese (Si-Mn). All the other ferro alloy slag shall be used in the preparation of building materials.
- (x) The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- (xi) The money reserved for CSR activity shall be spent on Swachh bharat abhiyaan. 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 should prepare a detailed CSR plan in this regard incorporating the annual capital and revenue expenditure on various activities. A copy of the same should be submitted to the Ministry and its Regional Office, Nagpur. 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.
- (xii) Rainwater harvesting scheme shall be prepared so that the rainwater can be collected, re-used and may be used for ground water recharge. The drains constructed for collection of rain water should be desilted at regular interval.
- (xiii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xiv) The project shall develop its own website to upload compliance measure taken to reduce pollution and to ensure implementation of transparency with general public.

37.3.3 Proposed manufacturing of Manganese oxide and installation of new unit to manufacture various Ferro Alloys of M/s Nagpur Pyrolusite Pvt. Ltd. at village Gondkhairy, Tehsil Kamlmeshwar, District Nagpur, Maharashtra – Environmental Clearance – [F. No. J-11011/281/2013-IA-II (I)]

M/s. Nagpur Pyrolusite Pvt. Ltd (*herein after Project Proponent –PP*) and their EIA-EMP consultant M/s PECS, Nagpur gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per the Terms of Reference (ToRs) awarded during the 14th meeting of the Expert Appraisal Committee (Industry) held on 19th – 20th December, 2013 for preparation of EIA-EMP report. The TOR was awarded by MoEFCC vide letter F.No. 11011/281/2013-IA-II(I) dated 14th February, 2014 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report vide online application dated 9th March, 2015. Public hearing was conducted on 19.08.2014 at the site. 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. NPPL proposed to enhance the capacity of Manganese Oxide and to install new unit to manufacture Manganese Dioxide and various Ferro Alloys by Thermite process at Plot No. 472/2, Mouza Gondkhairy, Amravati Road, Tah: Kalmeshwar, Dist: Nagpur. The project site is located at 21° 8'46.38"N Latitude and 78°53'26.53"E Longitude. NPPL is in possession of 100 Acres of land. Out of this 100 Acres, 10 Acre land is reserved for industrial activity, 40 Acre land is under cultivation and remaining 50 Acre land is barren land. Nearest railway station is at Kalmeshwar, at a distance of 9 Kms (N). Nearest village is Khapri, which is located at a distance of 1.5 Kms (NE) and the Pethkaldongri village is at a distance of 3.5 Kms (W). The Total Cost of the Project is Rs. 3.0 Crores and the EMP Cost is Rs. 50.0 Lacs and Recurring Cost Rs. 9.00 Lacs per Annum. The capacity of existing and proposed plant is provided below:

S. No	Name	Existing Capacity	Proposed Capacity	Total after expansion
1.	Manganese oxide	840 MTPA	6000 MTPA	6840 MTPA
2.	Manganese dioxide	-----	6000 MTPA	6000 MTPA
By Thermite Process				
(10 Nos. of MS Crucibles of 500kg each)				
3.	Ferro Titanium OR	-----	500 MTPA	500 MTPA
4.	Low/medium carbon ferro	-----	4000 MTPA	4000 MTPA
5.	manganese OR	-----	200 MTPA	200 MTPA
6.	Ferro molybdenum OR	-----	200 MTPA	200 MTPA
7.	Ferro vanadium OR	-----	400 MTPA	400 MTPA
	Low/medium Carbon silico manganese			
By installing Induction Furnace				
(2 Nos. of 500kg each)				

8.	Ferro Aluminium OR	-----	6000 MTPA	6000 MTPA
9.	Ferro silicon zirconium OR	-----	500 MTPA	500 MTPA
10.	Ferro silicon magnesium OR	-----	500 MTPA	500 MTPA
11.	Lead/ Aluminum shots OR	-----	100 MTPA	100 MTPA
12.	Aluminium master alloy OR	-----	200 MTPA	200 MTPA
13.	Alloy sand casting	-----	1000TPA	1000TPA
By installing Crusher/ Raymond Mill				
14.	Crushing of all Ferro alloys and metal powder	-----	1000 MTPA	1000 MTPA

The raw material requirement for the proposed plant is as under:

Quantitative Details of Raw Material Required (Thermite Process)

Sr. No.	Raw material	Quantity required (TPA)				
		Low/medium carbon Si - Mn	Low/medium carbon Fe - Mn	Fe - V	Fe - Mb	Fe - Ti
1.	Manganese Ore	-	2500 MT	-	-	-
2.	Ilmenite Sand	-	-	-	-	300 MT
3.	Silico Manganese	400 MT	1000 MT	-	-	-
4.	Aluminum Powder	20 MT	100 MT	40 MT	40 MT	140 MT
5.	Aluminum Scrap	10 MT	400 MT	20 MT	10 MT	-
6.	Steel / Iron Scrap	-	-	-	5 MT	10 MT
7.	Molybdenum Concentrate	-	-	-	125 MT	-
8.	Flourspur,	-	-	2 MT	2 MT	5 MT
9.	Rutile / Zirconium,	-	-	-	-	50 MT
10.	Titanium Scrap,	-	-	-	-	40 MT
11.	Limestone Powder,	10 MT	400 MT	5 MT	5 MT	40 MT
12.	Titanium Dioxide,	-	-	-	-	5 MT

Quantitative Details of Raw Materials Required (Induction Furnace)

Sr. No.	Raw material	Quantity required (TPA)			
		Fe - Al	Fe - Si -Zr	Fe - Si - Mg	Al shots
1.	Rutile / Zirconium,	-	20 MT	-	-
2.	Ferro Silicon	-	275 MT	210 MT	-

3.	Aluminum Scrap	2100 MT	-	-	105 MT
4.	Steel / Iron Scrap	4000 MT	125 MT	75 MT	-
5.	Magnesium Metal	-	-	25 MT	-

The total water demand for the project is about 20 KLD, which will be sourced from the ground water. The power requirement for the proposed project will be 1200KV, which will be sourced from the State Electricity Board. The proposed expansion project creates direct employment to 40 people and indirect employment to 80 people.

Ambient air quality monitoring has been carried out at 8 locations during January – April - 2014. PM₁₀ concentration ranged from 32.2 – 59.4 µg/m³, PM_{2.5} concentration ranged from 16.1 – 33.4 µg/m³, concentration level of SO₂ ranged from 6.2 – 24.5 µg/m³ and NO_x concentration is 8.0 – 28.2 µg/m³. The model simulations deal with dispersion of three major pollutants viz., Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) and Particulate Matter (PM) emitted from the stacks. The maximum incremental ground level concentrations (GLCs) for PM₁₀, SO₂ and NO_x due to proposed units are carried out. The predicted 24 hourly maximum concentrations for PM₁₀, SO₂ and NO_x are found to be 1.38µg/m³, 8.74 µg/m³ and 12.96 µg/m³ respectively in proposed scenario.

The public hearing was conducted at the site on 19.08.2014 under the Chairmanship of Additional District Magistrate, Nagpur. The issues raised during the public hearing inter-alia include measures to be taken for environment conservatrion, to provide proper arrangement regarding toilets in surrounding villages, schools, etc.

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

- (i) Secondary emission should be reduced by installing efficient bag filters. Particulate matter should not exceed 100 mg/m³. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB should be followed.
- (ii) Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- (iii) Neurological Evaluation of workers exposed to Manganese should be monitored annually and the report should be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office (WCZ), Nagpur.
- (iv) 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 should be provided. In addition, sufficient air pollution control devices viz. bag house, bag filters etc. should be provided .

- (v) Dust extraction system comprising of pulse jet type bag filter, centrifugal fan and motor, duct work including suction hoods, duct supports, stack, duct hopper, rotary air lock valves etc. should be installed to control primary and secondary emission.
- (vi) Water sprinkling arrangements as well as dry fog system to control fugitive emission shall be undertaken. Water sprinkling should be carried out at the raw material stockyard to control fugitive dust emissions.
- (vii) Driver system shall be provided at feeding point, transfer point at proportioning system to control fugitive dust emission.
- (viii) Efforts should 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. Water requirement should be modified accordingly.
- (ix) Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture of Silico Manganese (Si-Mn). All the other ferro alloy slag shall be used in the preparation of building materials.
- (x) The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- (xi) The money reserved for CSR activity shall be spent on Swachh bharat abhiyaan. 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 should prepare a detailed CSR plan in this regard incorporating the annual capital and revenue expenditure on various activities. A copy of the same should be submitted to the Ministry and its Regional Office, Nagpur. 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.
- (xii) Rainwater harvesting scheme shall be prepared so that the rainwater can be collected, re-used and may be used for ground water recharge. The drains constructed for collection of rain water should be desilted at regular interval.
- (xiii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xiv) The project shall develop its own website to upload compliance measure taken to reduce pollution and to ensure implementation of transparency with general public.

37.4 FURTHER CONSIDERATION CASES

- 37.4.1 **Proposed Establishment of Pellet Plant within the existing premises of Integrated Mini Steel Plant of M/s S.S.C. Steels Pvt. Ltd. at Distt. Bellary, Karnataka J-II011/406/2012.1A-II (I)**

The matter was earlier considered during the 25th meeting of EAC held on 13th – 14th October, 2014. It was informed that the EIA Consultant for the project K.R.S. Enterprises, has not been accredited for Category A projects and has obtained a Stay Order dated 05.08.2013 from the Hon'ble High Court of Karnataka. EAC after deliberations was of the view that the Stay Order for accreditation is for Category B projects as the Consultant had obtained accreditation earlier only for Category B projects from QCI/NABET. The Committee after deliberations decided that the PP may get his EIA-EMP Report revalidated through a Category A accredited consultant along with fresh collection of one-month baseline data.

PP vide letter dated 4.03.2015 submitted the revised EIA report as advised by the Committee. The report was prepared by M/s Metamorphosis Project Consultants Pvt Ltd.

The project is located in village Hanumanahalli, Taluka Snadur, District Bellary, Karnataka. The project site is at 14°59'21.1'' North Latitude and 76°44'07.1'' East Longitude. The project site is close to the main Iron Ore mining area i.e. Hospet, Bellary, Sandur and Chitradurga. Transportation to various sites of finished products is easy and economical. The area is well connected by road and rail networks. Interstate boundary (Karnataka – Andhra Pradesh) is at a distance of 1.5 kms from the project site. Obalapuram railway station is the nearest railway station, which is located in the South East at a distance of 9.0 km and Somalapuram Railway station connecting Chikjajur Rayadurga, Bellary Section (South western Railway) is about 15.5 Kms (aerial distance) towards East from the project site. Nearest Forest Metriki Reserve Forest – 3.0 km – North direction, Krishnaraja State Forest – 2.5 km – South direction, Bandravi State Forest – 250 m – West direction, Hirehallu Reserve Forest – 5.0 km – East direction. Water requirement for the pellet plant is about 360 KLD. The Power requirement of 8 MW will be met through 33 KV substation of GESCOM. The estimated project cost is about Rs. 87.76 Crores.

Details of raw materials required for the project per annum;

(i) Iron Ore Concentrate	6,60,000
(ii) Bentonite	4,500
(iii) Dolomite/Lime	1,800
(iv) Furnace Oil	6,000 KL
(v) Coal	27,000

Additional Ambient air quality data was carried out at 8 locations for month of December 2014 and results are well within the CPCB standards. The data submitted indicated that PM₁₀ (27 to 56 µg/m³), PM_{2.5} (13 to 26 µg/m³), SO₂ (5 to 13 µg/m³) and NO_x (9 to 18 µg/m³). The maximum incremental GLC of PM is 2.4 µg/m³, SO₂ 0.65 µg/m³ and NO_x 0.67 µg/m³. Dust extraction and dust suppression systems will be installed at appropriate locations. All conveying and transfer point shall be covered with to control fugitive dust. Dust suppression system by water sprinkler at dump hopper of raw materials, will be fully covered during transportation to / from the project site. Environmental Monitoring will conducting on regular basis through approved laboratory as per statutory guidelines.

Public Consultation was exempted as per Terms of Reference issued vide J-11011/406/2012-IA-II (I) dated 23/04/2013.

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

- (i) 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.
- (ii) The project proponent should link CSR activity for the pellet plant with the earlier project on mini steel plant.
- (iii) The PP should take effective measures to reduce PM levels in the work environment.
- (iv) Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz., bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³.
- (v) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- (vi) 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.
- (vii) Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.
- (viii) Prior permission shall be obtained from the Competent Authority for water drawl.
- (ix) Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report shall be submitted to the Ministry's Regional Office, SPCB and CPCB.
- (x) The Project Proponent should develop green belt in 33 % of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- (xi) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on earlier Public Hearing Issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.

- (xii) The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- (xiii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xiv) Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.

37.4.2 Lather processing Unit (wet blue to finish) at Plot no.2319,2320,2321,2322,2342,2344,2345, MIE Part –B Bahadurgarh Jhajjar, Haryana-ToR by **M/s Unique Enterprises** - [J-11011/139/2010-IA.II(I)]

The matter was earlier considered in the 25th EAC meeting held on 13th -14th October, 2014 wherein the PP has applied vide application dated 11.09.2014 under 'A' category of 4 (f) for obtaining fresh ToR. PP has requested to appraise the case in 'B2' Category & exempt from conducting public Hearing for the Project to initiate the further Environmental Clearance process. The committee agreed for one-season baseline data collection from October-December 2014. After detailed deliberation, EAC has decided to refer the matter to Ministry regarding clarity on the conduct of Public hearing and requirement for preparation of an EC for a B2 category project.

It was decided during the meeting that since the project is located at a distance of 2 km E from the Delhi Haryana interstate boundary, the project falls under 'A' category of 4 (f). Therefore, considering the proposal as a B2 category project does not arise. Also, since the site falls in the notified Industrial area, the public hearing is exempted for the project.

The Committee further noted that ToR application was initially submitted in the Ministry on 04.01.2010 & subsequently the Terms of Reference (TOR) were granted vide letter no. J-11011/39/2010- IA-II (I) dated 22-06-2010 and the EIA report along-with TOR compliance was submitted in MoEF on 06-02-2012. Then case was appraised in EAC meeting held on 24-09-2012 in MOEFCC and as per the minutes of EAC meeting held on 24-09-2012 the reply of queries raised was submitted on 18-02-2013.

However, due to the issue related to the Industrial area and conduct of public hearing the matter was delayed and the PP were advised to apply afresh. The delay caused for taking decision on conduct of public hearing was not on the part of PP.

In view of the forgoing, the Committee decided to endorse the EIA/EMP report submitted by the PP in the year 2012 and appraise the proposal accordingly.

The total water requirement will be 28.2 KLD (15.6 KLD of fresh water & 12.6 KLD of treated water). The source of water is Municipal water Supply. The total waste water generation will be 24.8 KLD, out of which the Industrial Effluent of 24 KLD shall be treated in Effluent Treatment Plant (ETP) of 30 KLD & shall be further treated in R.O. of 25 KLD. The reject of 8.4 KLD from the R.O. shall be sent to Multi Effect Evaporator & 12.6 KLD of treated water generated shall be reused. It shall be a zero discharge complex. The treated effluent would be reused for Gardening, Cooling, and Process & Wash. The Domestic waste water generation of 0.8 KLD shall be disposed off at septic tank via soak pit. The cost of the project is 82 Lakhs. Capital cost toward environment protection measures is Rs. 21.7 lacs and recurring expenditure is Rs. 5.8 lacs/year.

The total power requirement for the unit is 120 KVA and shall be supplied from Uttar Haryana Bijli Vitran Nigam Ltd. There will be DG sets of capacity 2 x 75 KVA for power back up and shall run for 2-3 hrs/day. One Thermic Fluid Heater of 1 lac kilo calories/hr shall also be provided. For Air Pollution Control Measures Stack height of 12 m above ground level shall be provided to Thermic Fluid Heater & for D G Sets Stack height of 2 m above roof level i.e. 5 m above ground level shall be provided for each DG Set. Type of fuel used will be Low Sulphur Diesel and the fuel consumption of the DG set will be about 15 lt /hr.

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

- i. Permission for water drawl shall be obtained from the Competent Authority. All the wastewater generated shall be properly treated in ETP and after meeting the norms as notified in E(P)Act 1986, shall be sent to CETP for further treatment. The treated wastewater should be colour free and should be reused.
- ii. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- 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 should be followed.
- iv. The project proponent shall practice suitable rainwater harvesting measures on long term basis and work out a detailed scheme for rainwater harvesting in consultation with the Central Groundwater Authority and submit a copy of the same to the Ministry of Environment and Forests and its Regional Office.

- v. The Company shall provide stacks of adequate height to the D.G. Sets along with acoustic enclosures for noise control as per CPCB guidelines. The DG Sets should comply with the norms notified under Environment (Protection) Act, 1986.
- vi. The Project Proponent should develop green belt in 33 % of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- vii. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on earlier Public Hearing Issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.
- viii. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

37.4.3 Proposed expansion project "Manufacturing of Asbestos Cement Pipes" of **M/s Ambica Pipes** at village Vadagam, Tehsil Dhasura, Dist. Sabarkantha, Gujarat (TOR) – [J-11011-74/2014-IA.II(I)]

The matter was considered in the 31st EAC meeting held on 8th – 9th January, 2015 and the Committee decided to conduct a site visit and consideration of the Report of the Site visit of the sub-committee for further consideration of the TOR proposal.

The matter was re-examined in the Ministry and it was suggested by the Ministry that the site visit can be conducted after the grant of ToRs.

Committee agreed to the suggestions of the Ministry and prescribed following specific TORs for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2:**

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

The Committee also suggested that the site will be visited once the EIA/EMP report is submitted and before placing in the committee.

37.4.4 Proposed for expansion project "Manufacturing of Asbestos based Cement Pipes" of **M/s Ahmedabad Cement Pipes** at Ahmedabad, Gujarat (TOR) - [J-11011/81/2014-IA.II(I)]

The matter was considered in the 31st EAC meeting held on 8th – 9th January, 2015 and the Committee decided to conduct a site visit and consideration of the Report of the Site visit of the sub-committee for further consideration of the TOR proposal.

The matter was re-examined in the Ministry and it was suggested by the Ministry that the site visit can be conducted after the grant of ToRs.

Committee agreed to the suggestions of the Ministry and prescribed following specific TORs for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2:**

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

The Committee also suggested that the site will be visited once the EIA/EMP report is submitted and before placing in the committee.

37.4.5 Proposed Integrated Steel Plant of **M/s Raipur Iron & Steel Co. Private Limited** at Lakhanpur, Dist. Jharsuguda, Odisha (EC) – Considered in the 31st EAC meeting, held in January, 2015 - [J-11011/355/2009-IA.II(I)]

The matter was considered in the 31st EAC meeting held on 8th – 9th January, 2015. After detailed deliberations the Committee sought additional information for further consideration of the proposal. Further, the EAC(I) also noted that the TOR was granted on 07.08.2009. Moratorium was imposed in the region during 31.01.2010 to 05.07.2011. P.H. was conducted on 14.07.2010. The Committee observed that the PP had a window period between 05.07.2011 to 17.09.2013 when moratorium was lifted wherein the PP could have applied for EC. The Committee decided to refer the matter of validity of TOR to the Ministry before further consideration of the case.

PP vide letter dated 4.03.2015 submitted the requisite information along with the reason for not applying in the window period between 05.07.2011 to 17.09.2013. PP informed that CEPI Moratorium was imposed in the region during 31.01.2010 to 05.07.2011 and again re imposed on 17.09.2013. PP mentioned that though the moratorium was lifted, however, the industry sentiment was affected and they were not able to decide whether to go ahead with the investments for the projects or wait for some more time to review the policy changes in the government. The period between 05.07.2011 to 17.09.2013 when moratorium was lifted was a period of industrial recession wherein the investor sentiment was affected due to the imposed moratorium on account of which the project developer could not take any forward action on the project execution.

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

- i. The project proponent should install continuous air and water quality devices to monitor air emission and effluent discharge, and submit report to Ministry and its Regional Office.
- ii. The PP shall ensure that the Coal washery rejects should be used in power plants and no waste should be dumped anywhere inside or outside of the plant boundary.
- iii. Air pollution control devices viz. Electrostatic precipitator (ESP), and bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ from all major stacks.
- iv. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points, coal handling plant etc. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.
- v. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- vi. The project proponent shall practice suitable rainwater harvesting measures on long term basis and work out a detailed scheme for rainwater harvesting in consultation with the Central Groundwater Authority and submit a copy of the same to the Ministry of Environment and Forests and its Regional Office
- vii. Efforts shall also 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.
- viii. 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.
- ix. 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 Office, SPCB and CPCB.
- x. The PP shall obtain prior approval of this Ministry in case change of fuel.

- xii. 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.
- xiii. A time bound action plan shall be submitted to reduce solid waste generated in the plant and its proper utilization and disposal.
- xiv. All the slag shall be granulated and provided to cement manufacturers for further utilization. Slag generated shall be given for metal recovery or properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.
- xv. 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.
- xvi. 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 Regional Office of the Ministry. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xvii. The Company shall submit their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xviii. 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.
- xviiii. 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.

- xix. 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.
- xx. Trucks carrying coal and other raw material shall be covered with tarpaulin to prevent spreading of dust during transportation.
- xxi. 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 in consultation with local DFO.

37.5 ANY OTHER ITEMS

37.5.1 Proposed Integrated Steel Plant (0.4 MTPA) with 43MW CPP of M/s Rashi Steel and Power Ltd, at vill. Paraghat and Beltukri, Tehsil Masturi, Dist. Bialspur, Chhattisgarh (Amendment in EC) (J-11011/466/2010-IA.II(I) dated 10.09.2013 of **M/s Rashi Steel & Power Ltd.**, Bilaspur, Chhattisgarh (EC)

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

37.5.2 Aluminium Refinery 1.5 MTPA Smelter Plant 2,50000 TPA along with captive Power Plant 90 MW at Mandal Makavarapattam dist. Vishakhapatnam Andhra Pradesh by **M/s Anrak Aluminum Ltd** - Amendment in EC – [J-11011/813/2007-IA.II(I)]

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

37.5.3 Expansion of Clinkerisation capacity from 1.98MTPA to 3.2 MTPA at vill. –Risda & Dhandhani, Tehsil Baloda Bazar, Dist. Baloda Bazar-Bhatapura, Chhatisgarh- Reg Amendment in ToR letter w.r.t change in the total water requirement i.e. 4571 KLD by **M/s Emami Cement** – [J-11011/309/2013-IA.II(I)]

The ToR for the above proposal was accorded by the Ministry vide letter No. J-11011/309/2013-IA.II(I) dated 31.01.2014.

M/s. Emami Cement Ltd. is proposing for amendment in the ToR Letter with respect to change in water requirement. ECL has been granted EC for the existing integrated cement plant wherein the total water requirement has been given 1822 m³/day (fresh water). However, based on the selection of Plant equipments/machineries & consultation with equipment supplier, the total water requirement after proposed enhancement is coming out to be 4571 m³/day. The total water requirement will be met by Ground Water/ Mine Pits & Recycled water. ECL has already obtained permission from CGWA for 1822 m³/day. The company will also apply for permission from CGWA for total water requirement. Rainwater Harvesting provision has been proposed within the plant.

The Committee after detailed deliberation recommended the proposal for amendment of ToR for the additional water requirement of 2119 m³/day with the following condition.

- i. The EIA should be prepared for total 3.2 million tonnes.

37.5.4 “Amendment of EC” for combining the individual production capacity of each of the three products (Si-Mn, Fe-Mn & Fe-Cr) in granted EC dtd. 28/02/2008 an area 9.6ha Plot no. 364, 365, 366, & 36 Industrial Growth Centre, Bobbili, Vizianagaram district, A.P. by **M/s Hira Electro Smelters** – [J-11011/1039/2007-IA.II(I)]

The Environmental Clearance for the above proposal was accorded by the Ministry vide its letter No. J-11011/1039/2007-IA.II(I) dated 28.02.2008. While granting the EC the quantity of Fe-Mn, Si-Mn and Fe-Cr was fixed as 18188 TPA, 25844 TPA and 56845 TPA respectively. PP vide letter dated 03.01.2015 requested for amendment in the environmental clearance letter by permitting to produce the Fe-Mn, Si-Mn and Fe-Cr as per the following table.

Quantity	Furnace As per our EC	Fe-Mn (TPA)	Si-Mn (TPA)	Fe-Cr (TPA)	Total Quantity(TPA)
Existing	3x6MVA 2x9 MVA 1 X 21 MVA	18188	25844	56845	100877
Proposed	Same as above configuration	100877	Nil	Nil	100877
		Nil	100877	Nil	100877
		44032	Nil	56845	100877
		Nil	44032	56845	100877
		44032		56845	100877

The Committee after the detailed deliberation recommended the proposal for amendment in the Environmental Clearance for the above configuration with the following condition:

- i. The total production capacity putting Fe-Mn, Si-Mn and Fe-Cr together should not exceed 100877 TPA and Fe-Cr should not exceed 56845 TPA.

37.5.5 Submitted request for change the name of project and extend the validity of EC with proposed Amendment by **M/s Arsh Iron & Steel Ltd.**– [J-11011/1154/2007-IA.II(I)]

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

37.5.6 Request for extension of target date for transfer from Wet to Dry Quenching of Coke in Coke Oven Plants by **M/s Bhushan Steel Limited**. Grant of EC for Expansion of Integrated Steel Plant (3.1MTPA to 5.6 MTPA) vide Letter Dt. 20.07.2012. - [J-1011/829/2008-IA.II(I)]

Ms Bhushan steel was given EC in July 2012 for expansion of steel plant from 3.1 MTPA to 5.6 MTPA. The expansion proposal included coke oven plant of capacity 1.25 MTPA. The already existing coke oven plant of capacity 0.85 MTPA expanded to 2.1 MTPA. While according approval one of the condition (xviii) the company was directed to change over from wet to dry quenching of coke for both the coke ovens i.e. the existing and the proposed coke oven. The target for completing the changeover was by 22.9.2014.

In view of non-compliance of this stipulation the PP has now requested to extend the date of commissioning of dry quenching by 3 years i.e. upto 22.9.2017. The reasons for delay in installing the dry quenching plant as explained by the PP include the long procedural approval for imported Boiler which is integral part of CDQ Plants, long time taken for detailed Engineering for civil works of CDQ Plant, long time taken for civil construction and financial crises through which the company is passing.

So far as progress of work is concerned the committee was informed that the technical contracts for both coke oven were signed in Feb 2012 and June 2012. The equipment for CDQ 2 is already ready for dispatch and is stored at Warehouse of Nippon Steel Engineering, Japan. The delivery will be taken as soon as funds are available from the bank.

The delivery for CDQ – 1 was envisaged for October, 2014 but delayed due to lack of funds. According to the PP they have already made payments of 36.6 Cr to Ms Nippon Steels till date. They have submitted copies of the supply order for both the CDQs.

In view of the above, the PP has requested for extension of time for commissioning of CDQ- 2 by May, 2017 and August, 2017 for CDQ – 1.

After presentation by the PP the committee had detailed deliberation. Although the committee was not fully convinced with all the reasons given by the PP for such a long delay in completing the change over, the Committee took note of the progress and the payment already made by the PP for both the CDQs to the suppliers. The committee felt that the request of the company should be considered favourably. Taking all factors into consideration, the Committee therefore, recommended extension of time for commissioning of CDQs as given below:

CDQ – 2 by May, 2017 and CDQ – 1 by August, 2017. The Committee, however, stipulated that while using wet quenching, no partially treated effluent/treated effluent shall be used for quenching purpose. The Coke Oven by product (COBP), effluent treatment plant should be updated to meet cyanide, phenol, NH₄-N and other standards notified under EP Act, 1986.

The Committee also recommends that no further extension beyond this dated should be considered.

37.6 CASES FOR TERMS OF REFERENCE (TOR)

37.6.1 Proposed Coke Oven plant (1,44,00 Ferro Alloys Plant) Fe-SI 14,0400 TPA along with captive power plant 2x9 MW at plot no. C-Industrial Growth Centre, Matia Goal Para, Assam by **M/s Anjaney Coke & Alloys Pvt. Ltd** – TOR - [J-11011/53/2015-IA.II(I)]

The PP along with their EIA-EMP consultant M/s. Envision Enviro Technologies Pvt. Ltd, Surat, gave a detail presentation on the salient features of the project and proposed Environmental protection measures to be undertaken along with draft Term of Reference for the preparation of EIC-EMP report. The proposed project activities are listed at 3(a) under category “A” of the schedule of EIA Notification, 2006 and appraised at the central level.

M/s. Anjaney Coke & Alloys Pvt. Ltd has proposed to establish Coke Oven plant (1,44,000 TPA), Ferro Alloy plant (14,400 TPA) consist of two submerge arc furnace of 2 x 9 MVA and power plant (2x9 MW) consist of waste heat recovery boiler (2 X 36 TPH) at Plot no. C, Industrial Growth Centre, Matia, Goalpara, Assam. No Defense Installation, Biosphere Reserve, National Park/Wild Life Sanctuary, Ecologically Sensitive Area within 10 KM radius. However Shilabari RF, Dabli Hill RF and Upartala RF are located at distance of 7.5 km, 9 km and 9.6 km respectively from the project site. Nearest River is Brahmaputra/Dudhnai River which is at a distance of 1.3 km. Nearest railway station is Krishnai at a distance of 5 km. Nearest airport is Guwahati at 85 km. The cost of the proposed project would be Rs. 307.97 Cr. Total capital cost for environmental pollution control measures would be Rs. 20 Cr. and recurring cost per annum would be Rs. 0.5 Cr.

The main raw materials required for the project is Coal 2,90,880 TPA, Quartz 25,920 TPA, Lam Coke 2,160 TPA, Mill scale 6,192 TPA. Coal will be sourced from Assam, Bihar, Meghalaya, U.P, Jharkhand West Bengal, Quartz will be from Assam, Jharkhand, Bihar and LAM Coke From Andhra Pradesh & Tamil Nadu.

Around 18.2 ha (45 Acre) Industrial land has been Allotted (Prov.) by AIDC for the project. About 6 ha area i.e. 33 % of total plant area shall be developed as green belt at plant boundary, road side, around offices & buildings and Stretch of open land. There shall be no any rehabilitation and resettlements are involved.

The Committee noted that the component of coal washery has been included at the time of presentation, however, it is not mentioned in the Form – 1 and pre-feasibility report. The Committee advised PP to to submit the revised form – 1 along with the pre-feasibility report including all the component to the Ministry. The Committee recommended to defer the proposal and the same shall be considered once the revised application is received in the Ministry.

PP mentioned that they have already started collecting the baseline data for the pre-monsoon season for the year 2015. The Committee agreed for collection of data.

37.6.2 Expansion of the existing (24 000 TPA Pig Iron, 45000 TPA sponge Iron and 100000 TPA ore briquetting Plant) unit located in the village Borpali, Post Kesramal, Tehsil Rajgangpur, Dist. Sundargarh (Orissa) by **M/s Suraj Product Ltd**- ToR – [J-11011/226/2007-IA.II(I)]

The PP along with their EIA-EMP consultant M/s Anacon Laboratory Pvt. Ltd. gave a detail presentation on the salient features of the project and proposed Environmental protection measures to be undertaken along with draft Term of Reference for the preparation of EIC-EMP report. The proposed project activities are listed at 3(a) under category “A” of the schedule of EIA Notification, 2006 and appraised at the central level.

The Company in its existing production facility has 3 Nos. DRI Kilns each with 50 TPD Sponge Iron Production and 2 Nos. of 23 m³ Mini Blast Furnace to produce 24000 TPA Pig Iron and Cold Briquetting plant of capacity 100000 TPA. Environment clearance for the existing project has already been granted vide File No. J-11011 /226 / 2007-IA II (I) dated 27/06/2007.

The company has proposed to add the following production/generation capacity as expansion of the existing plant:

Mini Blast Furnace Modernization (increasing the volume from 23 m³ to 40 m³ thus additional pig iron production capacity shall increase by 36000 TPA, thus the total pig iron production capacity become 60000 TPA), Iron Ore and Other Mineral Ore (Like Manganese; Chrome; Nickel Ore; etc.) Beneficiation Plant input basis (throughput) 264000 TPA, Coal Washery 185000 TPA, Iron (Metal) Powder (through Tunnel Kiln process) {and reduction of other metal ores on trial basis such as nickel ore etc.; for the present calculation the Iron Ore fines is considered) 60000 MTPA, Mineral Briquetting Plant (Proposed capacity addition) (100000 TPA existing + 100000 TPA proposed = Total 200000 TPA); Ferro Alloys from Submerged Arc Furnace (7.5 MVA X 2 Nos.) such as Ferro Manganese/ Ferro Nickel/ Silico Manganese 25000 TPA Or Pig Iron - 50000TPA, Steel Melting Shop (Through Induction Furnaces) 110000 TPA Mild Steel Billet, Rolling Mill (Structure / Rolled product: Such as TMT) 100000 TPA Rerolled Steel, 8 MW CFBC Power Plant based on washery reject, 200 TPD Fly Ash Brick making from waste like Fly Ash; Bottom Ash; ABC dust etc.), Producer Gas plants for producer gas for firing all these Kilns.

The project is located at Barpali (Panchayat Laing), Post Kesramal, Teshil- Rajgangpur, District- Sundargarh (Orissa) having khasara No. 2482/3528, 2497/3529, 2509/3530, 2510/3531, 2496, 2482, 2494, 2481/3080, 376 (P), 2456, 2459, 2451, 2479, 2480, 368, 2524(P), 2493, 2454(P), 374, 3491, 2492, 2500, 2457,2470, 2460,375, 394, 395, 2484, 2485, 2486, 2489, 25490, 2501, 2488, 2487, 2523(P), 2483, 2458 to 45.260 Acres.

Nearest Airport Ranchi is about 180 km, Nearest Railway Station Rajgangpur is about 10 km.

At 100% operating total 750 KL/day water will be required for industry, which is obtained from own bore well. Industry has already obtained water withdrawal permission up to 600 m³/day. The proposed project is likely to operate at 80% capacity utilization thus the permission sought by the unit to draw groundwater looks to be adequate.

Power requirement will be around 32.73 MW out of which 8 MW captive power plant will be built-up within the project balance power will be drawn from electricity board (WESCO).

The project is expansion project for existing facility; the land is already acquired and diverted to industrial use.

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

- i. Public Hearing shall be conducted by Odisha Pollution Control Board

37.7 Environmental Clearance

37.7.1 Proposed 1.5 MTPA Clinker Grinding Unit of **M/s Modern Building Material Pvt. Ltd.** at Melamaruthur Village, Ottapidarm Taluk, Tuticorin District, Tamil Nadu – Environmental Clearance – [F. No. J-11011/152/2013-IA-II (I)]

Modern Building Materials Private Limited (MBMPL) and their EIA-EMP consultant M/s B.S.Envi Tech Pvt.Ltd.- Secunderabad 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 37th Meeting of the Expert Appraisal Committee (Industry) held on 30th April – 1st May, 2015 for preparation of EIA-EMP report. The TOR was awarded by MoEF vide F.No. J-11011/152/2013-IA.II (I) dated 19.05.2014 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report vide letter dated 19.02.2015 after conducting Public Hearing for grant of Environmental Clearance. The proposal was placed before the EAC for consideration.

Since the site was within 10 km from Gulf of Mannar, the project was considered as category A and PP was asked to conduct PH. Later Ministry vide OM dated 25th June, 2014 reduced the distance of 10 km to 5 km. Therefore the project now become category B project. However, the Committee decided that since the PP has already prepared the report considering it as a category A project and also Public Hearing was conducted, the matter may be appraised at the central level.

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:

MBMPL Grinding Unit is situated at Malamaruthur Village, Ottapidaram Taluk, Tuticorin District of Tamil Nadu. The site falls between 8^o 53' 21.46"- 8^o 53' 43.79" E Longitude and between 78^o 08' 5.05"- 78^o 08' 20.13" N Latitude. The nearest village is Anainjamadan Pacheri at 0.7km. Nearest town is Tuticorin which is 10.5 km. The National Highway (NH- 45B) connecting Madurai – Thoothukudi is located at a distance of about 2.9 km. Nearest river is Kallar River at a distance of 7.6 km. Bay of Bengal is at 3.8 km. the nearest Reserved Forest is Chalikulam at 12.9 km. The nearest Marine Sanctuaries i.e., Islands of Gulf of Mannar is located at a distance of 8.8 km. MBMPL submitted application for obtaining necessary recommendation from National Board of Wildlife. No migratory corridor of wildlife comes

within 10 km radius. The total capital requirement for the proposed project has been estimated at Rs. 220 Crores. Rs.1200 Lakhs has been kept for environment management plan.

The proposed plant is a standalone Grinding Unit to produce 1.5 MTPA of Cement (Portland Pozzolana Cement & Ordinary Portland Cement Portland) along with packing unit. MBMPL has existing land of 40 Ac. The Grinding Unit along with packing plant is proposed to be located adjacent to the Thermal Power plant set-up by M/s. Coastal Energen Pvt. Ltd. Details of the raw material required for the project are :

S.No.	Raw Material	Quantity MTPA	Source	Mode of Transport
1	Clinker	0.975	Cement plants located in Telangana & Andhra Pradesh	Rail
2	Flyash	0.525	M/s.Coastal Energen Pvt Ltd., Thermal power Plant	Pneumatic conveying system / bulk tankers
3	Gypsum	0.08	SPIC, Tuticorin	Road

Ambient air quality monitoring has been carried out at 8 locations during March '14 to May '14 and the data (98th percentile) submitted indicated: PM10 (63 – 71 $\mu\text{g}/\text{m}^3$), PM2.5 (24 -33 $\mu\text{g}/\text{m}^3$), SO₂ (9.1 - 12.3 $\mu\text{g}/\text{m}^3$) and NOx (10.3 -13.6 $\mu\text{g}/\text{m}^3$). The results of the cumulative modeling study carried considering subject Grinding Unit and 2 x 600 MW adjacent thermal power plant indicates that the maximum increase of GLC is 0.50 $\mu\text{g}/\text{m}^3$ with respect to the PM10.

7 nos of bag filter systems for the main equipment along with ventilation systems to control the fugitive dust generated from the material handling areas will be installed. All the flue gas outlets will be provided with state of art air pollution control equipment to maintain the particulate emission level below 30 mg/Nm³. The cement mill will be provided with a Bag filter with an outlet emission of less than 30 mg/Nm³. To control the dust emissions from dropping/transfer points of the belt and bucket conveyors, Bag filters will be provided at various locations of the transfer points. Fly ash and cement will be stored in RCC Silos and Clinker will be stored in Clinker Tank with bag filters for control of fugitive dust emissions.

Power requirement is estimated to be about 9 MW and the same will met from Tamilnadu state electricity board / M/s. Coastal Energen Pvt Ltd., Power Plant. The water requirement of the plant is 100 m³/day. This requirement will be met from desalination plant of the adjacent M/s Coastal Energen Private Limited. MBMPL has entered into an MOU with M/s.Coastal Energen Private Limited for supply of desalinated water.

Of a total area of 40 acres, an area of about 13.0 acre has been earmarked for green belt development/plantation within the premises. Plantation has been carried over an area of 13.0 Acres @1500 trees per ha and the width of the greenbelt around the plant premises shall be minimum 15m.

Public Hearing was conducted on 30-12-2014 at 4.00 pm at District Collectorate, Tuticorin. Sri Thiru. M. Ravi Kumar, District Collector, Thoothukudi District presided over the public

hearing process. The major issues raised during the Public Hearing were to know the promoter name, employment to locals, and pollution control aspects.’

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

- (i) Prior clearance from the Standing Committee of the National Board for Wildlife shall be obtained due to location of the plant at a distance of 8.8 Km from Gulf of Mannar (as prior clearance of NBWL is required for a project if it is located in 10 km of a Protected Area/Sanctuary or Eco Sensitive Zone as per the Hon’ble Supreme Court order dated 4.12.2006 in W.P. 460/2004), before commencing any activity relating to the project at site. All the conditions stipulated by the Standing Committee shall be effectively implemented in the project. It shall be noted that this clearance does not necessarily imply that wildlife clearance shall be granted to the project and that your proposal for wildlife clearance shall be considered by the competent authorities on its merit and decision taken. The investment made in the project, if any based on environmental clearance granted to the project, in anticipation of the clearance from wildlife clearance shall be entirely at the cost and risk of the project proponent and Ministry of Environment, Forest and Climate Change shall not be responsible in this regard, in any manner.
- (ii) The project proponent should install continuous Air monitoring devices to monitor air emission and effluent discharge, and submit report to Ministry and its Regional Office.
- (iii) 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.
- (iv) Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM shall be controlled to prescribed standards by installing adequate air pollution control system. Low NO_x burners shall be provided to control NO_x emissions. Regular calibration of the instruments shall be ensured.
- (v) All the pollution control devices/equipment in the plant shall be interlocked so that in the event of the pollution control devices/systems not working, the respective unit(s) shut down automatically.
- (vi) 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.
- (vii) Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash should be transported in the closed containers only and shall not be overloaded. The company shall have separate truck parking area. Vehicular emissions should be regularly monitored.

- (viii) Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge should be adopted.
- (ix) The project proponent shall practice suitable rainwater harvesting measures on long term basis and work out a detailed scheme for rainwater harvesting in consultation with the Central Groundwater Authority and submit a copy of the same to the Ministry of Environment and Forests and its Regional Office.
- (x) 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.
- (xi) Green belt shall be developed in at least 33 % area in and around the cement plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO.
- (xii) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants should be implemented.
- (xiii) 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
- (xiv) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing Issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore. The proponent shall prepare a detailed CSR Plan for every next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO, Bangalore. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- (xv) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe

drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

37.7.2 Proposed expansion of Steel manufacturing unit at village Talwara, Tehsil Mandi Gobindgarh, District Fategarh Sahib, Punjab by **M/s Rasik Industries** - Environmental Clearance – [F. No. J-11011/04/2013-IA-II (I)]

M/s Rasik Industries (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 6th meeting of the Expert Appraisal Committee (Industry) held on 5-7th March, 2013 for preparation of EIA-EMP report. The TOR was awarded by MoEF vide F. No. J-11011/4/2013-IA II (I) dated 25.04.2013 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report vide letter dated 27.02.2015 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 proposed capacity of the unit after expansion will be 400 MTD of Billets, Steel Ingots & Blooms and 335 MTD of TMT Bars, flats, round. The Unit falls in Category B as per schedule; but being situated within the Critically Polluted Area of Mandigobindgarh (Item No. ii of GC), the proposal is considered at the 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 Rasik Industries is a Steel manufacturing Unit which is already manufacturing 335 MTD of TMT Bars, Angles, round etc. behind Uttam Steel Mills, Talwara Road, Mandi Gobindgarh, District- Fatehgarh Sahib, Punjab. The Industry now proposes to enhance the capacity of the unit by addition of four no. Induction furnaces of capacities 8 TPH each. The capacity of the unit after expansion will be 1, 20,000 MTA of Billets, Steel Ingots & Blooms and 1, 00,500 MTA of TMT Bars, flats, round. The total area of the plot is about 3, 0351.4 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 8 kms from Fatehgarh Sahib and about 50 kms from Chandigarh. Total cost of the Project is 60 crores and 98 lakhs have been provided for pollution control Measures. About 14.5 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 water requirement for domestic purpose will be 12 KLD and evaporation loss will be 25 KLD. There is no use of water in the process. So the total water requirement will be 37 KLD. The total power demand for the unit is about 16.5 MW. This demand will be met by sourcing power from Punjab State Power Corporation Limited from the nearby Sub-station. There will be about 350 persons working in the unit.

About 23 TPD slag received from the manufacturing process shall be given to cement plant or road making for further use. 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. as such these will be collected separately in a dumping pit and sent to TSDF site for disposal. Slag from the furnace (about 23 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 (81.1 $\mu\text{g}/\text{m}^3$ to 96.4 $\mu\text{g}/\text{m}^3$), PM2.5 (28.8 to 45.4 $\mu\text{g}/\text{m}^3$), SO₂ (12.0 to 12.2 $\mu\text{g}/\text{m}^3$) and NO_x (21.1 to 39.3 $\mu\text{g}/\text{m}^3$). 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 10.04.2014 under the Chairmanship of Additional Deputy Commissioner, Fatehgarh Sahib. Major issues raised during the public hearing are about the litigation regarding ownership of the land, CSR and road in the village in very bad.

The committee observed that a court case regarding ownership of land is pending before Hon'ble Punjab & Haryana High Court and High Court has passed interim orders to maintain status-quo at the site. As such, no construction/ expansion activity can be allowed at the site. In case any expansion is carried out in the premises, a contempt of court will be filed against all the responsible persons.

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

- i. The Environmental Clearance is subject to the final outcome of the order of Hon'ble Punjab & Haryana High Court.
- ii. Secondary emission should be controlled by installing proper ducting system and the exhaust gases should be pass through the bag filter.
- iii. Air pollution control devices viz. Electrostatic precipitator (ESP), and bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³.
- iv. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points, coal handling plant etc. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.
- v. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide

G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.

- vi. Multi stage scrubber, cyclone and bag filters etc. to control particulate emissions within the prescribed limits 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.
- vii. The water consumption shall not exceed as per the standard prescribed for the steel plants.
- viii. 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.
- ix. 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.
- x. 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 Office, SPCB and CPCB.
- xi. 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.
- xii. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- 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. 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 being into focus any infringement/deviation/violation of environmental

or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

- 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
- 37.7.3 Proposed 10 MTPA Integrated Steel Plant, 900 MW Captive Power Plant and Township, Near Barendra, Sonahatu Block, Ranchi Dist. Jharkhand by **M/s JSW Jharkhand Steel Ltd** – Environmental Clearance – [J-11011/377/2012-IA-II(I)]

M/s JSW Jharkhand Steel Ltd (herein after Project Proponent –PP) and their EIA-EMP consultant Vimta Labs Ltd. gave a detailed presentation on the salient features of the project. The TOR for the proposal was granted vide letter no. F.No.J-11011/377/2012-IA-II(I) dated 24th June, 2013. The proposal was placed before the EAC for consideration. 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.

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:

JSW Jharkhand Steel Limited proposes to establish 10.0 Million Ton Per Annum (MTPA) capacity Integrated Steel Plant (ISP) along with 900 MW Captive Power Plant (CPP) and Township near Barendra village, Sonahatu block in Ranchi district of Jharkhand state. The total

project cost will be about Rs. 35,000 Crores. For this project, JSW has signed a MoU with the Government of Jharkhand.

PP mentioned that the State Government, after getting the site assessment and feasibility report from MECON (A Government of India Enterprise) approved the project site vide order dated 22.05.2008. The proposed project site falls in latitude 23° 08' 45.2" N to 23° 11' 2.3" N and longitudes 85° 47' 30.2" E to 85° 50' 09.2" E at an elevation of about 220 m - 240 m above Mean Sea Level (aMSL). There are no ecologically sensitive areas, national parks or wildlife sanctuary within 10 km radius study area. Eleven protected forests and one reserved forest exist within the study area.

The proposed project will be developed in an area of 3800 acres (1538 ha) in 7 villages. The project area includes adequate area allocation for all technological and service units, dump area, raw water reservoir and greenbelt development as per statutory requirements. The estimated power requirement of the plant is proposed to be met by 900 MW captive power plant (CPP) to be located within the proposed plant complex.

The drainage network in the proposed plant site initiates from the hill range about 1.50 km towards north of the proposed plant site and have up to 3rd order streams joining Domra nadi running west-east along the southern boundary and joining Subarnarekha River. It is proposed to divert the flow safely in the development area of the plant site and leave natural course as it is in the open/green belt area maintaining the natural flow along the boundaries of development within proposed plant site.

The total water requirement for the proposed plant will be about 80 Million Gallons per day (MGD), i.e. about 15150 m³/hr including water requirement for the proposed CPP. About 46.7 MGD of the required water will be sourced from Subarnarekha river, which flows at a distance of about 2.4 km from the plant site in north direction and remaining 33.3 MGD of required water will be drawn from Chandil dam (downstream).

It is proposed to invest about Rs. 1750 Crores on pollution control, treatment and monitoring systems, which includes Rs. 14 Crores for greenbelt development. The recurring cost of environmental measures will be Rs 105 Crores. The greenbelt will be developed along the periphery of the plant and all open spaces within the plant area covering an area of 1150 acres (465 ha) and vegetation density of about 2500 trees/ha.

The requirement of total manpower works out to about 5000 in phase-I and about 10,000 in final phase at 10.0 MTPA production level. The proposed 10.0 MTPA integrated steel plant will additionally generate more than 20,000 to 30,000 indirect secondary and tertiary employment. It is expected that a number of ancillary industries will develop near the proposed site, which will be mutually beneficial.

The project will help in improving the basic facilities like medical facilities, educational, transport etc. The roads will be constructed and improved in the area under community development program of the project. A total budget of Rs. 175 crores with capital cost of Rs. 93.28 crores and recurring cost of Rs 81.72 crores is proposed for CSR activities.

The baseline environment quality has been monitored during pre-monsoon season (summer) 2014. With regard to the air quality in the study area, the concentrations of particulate matter (PM₁₀ and PM_{2.5}), sulphur dioxide (SO₂) and oxides of nitrogen (NO_x) and other pollutants levels are within the stipulated standards as per 16th November, 2009 Notification. The observed concentrations can be attributed to rural and residential activities and rural and semi urban activities. There are no operating industries in the region.

Public Hearing for the proposed project was conducted on 21.09.2014 by Jharkhand State Pollution Control Board (JSPCB) in the presence of Additional District Magistrate, Ranchi district. Most of the issues raised by public were on CSR activities, environment pollution and employment.

After detailed deliberations the Committee sought following additional information for further consideration of the proposal:-

- i. Land details provided in the EAI report at page C2-10 should be resubmitted clearly indicating the type of land and actual land in possession. The unit should be in Ha.
- ii. Detailed plan should be submitted for the storage of raw material with emission mitigation measures.
- iii. Complete details for the proposed ETP for the Blast Furnace and Coke oven plant, including design of ETP to meet the cyanide standards stipulated by MoEF under EPA Act 1986 should be provided.
- iv. Details regarding use of SMS and BF slag / flyash in cement manufacturing should be provided.
- v. Revise ash balance and ash equalization plan should be submitted
- vi. Trace element report should be corrected and submitted
- vii. Iron ore analysis to be rechecked and submitted
- viii. Stamp charging + HPLA commitment in coke oven plant to be provided
- ix. Commitment for the use of CDQ to be submitted
- x. Details regarding Poly aromatic hydro carbon monitoring should be submitted
- xi. SMS slag utilization scheme to be submitted
- xii. SMS plant - dog house details for fugitive emission centres should be submitted
- xiii. SMS – dry system to be adopted and details should be submitted
- xiv. Sinter plant – secondary emission mitigation detail should be provided.
- xv. Advanced CO monitoring system should be established and details should be provided
- xvi. Specific water consumption and water balance should be submitted
- xvii. SO_x, NO_x line emission data used for all the units, including flow rate taken should be submitted
- xviii. Revised table for pollution control measures should be submitted
- xix. Details on benzol plant as Tar utilisation should be provided
- xx. Action plan for waste management for each component should be submitted
- xxi. The Committee prescribed an amount of Rs. 700 cr over a period of 10 years for the CSR related activity. A detailed plan in this regard should be submitted.
- xxii. Town plan detail should be submitted including the layout of the buildings, green belt, internal roads, STP, parking plan etc,
- xxiii. Details regarding the proposed captive thermal power plant should be submitted.
- xxiv. Commitment to achieve zero effluent discharge in coke oven as BF to be provided.

37.7.4 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)

M/s Kiswok Industries Pvt. Ltd (herein after Project Proponent –PP) and their EIA-EMP consultant Grass Roots Research & Creation India (P) Ltd. gave a detailed presentation on the salient features of the project. TOR for the proposal was granted by EAC on 9th August 2012. The project site is located at Jalan Industrial Complex of Howrah which was declared as a critically polluted area. However, vide OM No. J-11013/5/2010-IA.II(I) dated 17th September, 2013 the moratorium was lifted. The final EIA was submitted to MoEF dated 07th April, 2014 as the TOR was issued by MoEFCC. However, MoEFCC transferred the file to SEIAA West Bengal since the project was a ‘B’ category project and out of Critically Polluted Area. It was informed by PP that a presentation was made to SEIAA as desired by them on dated 26th September, 2014. However, it was mentioned that for such areas, the OM’s issued by MoEF mentions that “The EACs/SEACs will take extra precaution during appraisal of projects to be located in these areas and prescribe the requisite stringent safeguard measures, so that the environmental quality is not deteriorated further in these areas”. Therefore, the file was again transferred by SEIAA to MoEFCC.

M/s. Kiswok Industries Pvt. Ltd having its existing unit manufacturing of capacity 50,000 TPA Cast Iron and proposed for expansion project to manufacture of Casting Iron Plant for 1,00,800 TPA. The proposed expansion project is to be located within the existing unit under Begri Gram Panchayat at Jalan Industrial Complex JL: 27, Vill-Biprannapara, P.S-Domjur, Dist-Howrah, State- West Bengal. Plant site coordinates are Latitude: 22°35'56"N and Longitude: 88°13'28"E. The expansion of the existing Plant will not require any additional land. The project site is at a distance of 4.20 km from Hoogly river. Site elevation is about 43.89 m. EIA/EMP Studies have been done for the proposed capacity enhancement after expansion 50,000 tons per annum (TPA) to 1,00,800 tons per annum (TPA) of cast metal. There is no Ecologically Sensitive locations, archaeological monuments, places of tourist interests and defense installations existing within 15-km radius. No Reserved Forest & Protected Forest exists within 10-km radius. There are no national parks / wildlife sanctuary / biosphere reserve / reserve forests within 10 km. Total capital cost and recurring Cost/annum for environmental pollution control measures are Rs 832.00 lacs and Rs 376.00 lacs/year respectively. The proposed expansion project will provide direct employment to about 100 persons in the expanded plant and a minimum of 50 persons in the downstream projects. Besides the above there will be indirect employment opportunities for about 100 persons in the informal sector.

Following table shows the raw material requirement and mode of transportation

Sl. No.	Description of raw material	Specific consumption per MT of cast Iron	Existing Quantity (TPA) 50000	Additional Quantity (TPA) 50800	Total Quantity (TPA) 100800	Mode of Transportation	Source of raw material
1.	Pig Iron -	0.337857	16892.857	17163.143	34056.000	Truck	Tata Metaliks

2.	Steel Scrap	0.580000	29000.000	29464.000	58464.000	Truck	Kedar Ram & Sons
	Additives						
3.	Boring	0.150000	7500.000	7620.000	15120.000	Truck	Kiswok Unit 1
4.	Copper	0.002500	125.000	127.000	252.000	Small Truck	Mescab India Pvt. Ltd.
5.	FeCr	0.002500	125.000	127.000	252.000	Truck	Vedika Metals Private Limited
6	Silico Managanese	0.004500	225.000	228.600	453.600		Impex Ferro Tech Ltd.
7.	FeSi (Lump)	0.004000	200.000	203.200	403.200	Truck	Premium Ferromet
8.	FeSi (Ino)	0.004487	224.350	227.940	452.290	Truck	MPM Pvt. Ltd.
9.	Fe.Si. (Ino) Dust	0.000750	37.500	38.100	75.600	Truck	Premium Ferromet
10.	FeSi Mg	0.012000	600.000	609.600	1209.600	Truck	Snam Alloys Pvt. Ltd.
11.	Sn	0.000600	30.000	30.480	60.480	Small Truck	Mescab India Pvt. Ltd.
12.	Fe.Sulphur	0.001000	50.000	50.800	100.800	Small Truck	Oswal Minerals Ltd.
13.	Fdy. Ret	0.397145	19857.250	20174.966	40032.216		Self Generation

Non Metal Part							
14.	Acid Ramming Mass		225.000	140.000	365.000	Small truck	Mortex
15.	C.P.C.		504.000	482.000	986.000	Truck	RSM Mineral & Metal
16.	C.S.C.		2394.000	2500.000	4894.000	Truck	Graphite & Mineral
17.	Slag Coagulator		350.000	206.500	556.500	Truck	Graphite & Mineral
18.	T-90		350.000	206.500	556.500	Truck	Premium

							Ferromet
19.	T-60		72.000	69.000	141.000	Truck	Premium Ferromet
20.	Sodium Silicate		3.600	3.400	7.000	Small Truck	Hindcon Chemicals Pvt. LTd.

No additional land is required for the proposed expansion. Power (8,900 KVA) will be required and sourced from West Bengal State Electricity Distribution Company Limited (WBSEDCL). Total water requirement will be 198 m³/day. All the linked infrastructural facilities like rail network, road network, Telecommunications and residential colony already exist and will be used for the proposed expansion of plant.

The study area represents mostly rural/residential environment. Eight AAQM stations were selected based on secondary meteorological data in and around project site covering upwind, downwind and crosswind directions and PM_{2.5}, PM₁₀, SO₂, NO₂, and CO was monitored in the ambient air. The data submitted indicated: PM₁₀ (75.2 µg/m³ to 124.6 µg/m³), PM_{2.5} (31.6 to 54.2 µg/m³), SO₂ (6.3 to 14.3 µg/m³), NO_x (18.1 to 31.8 µg/m³) and CO(640 to 1120). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs would be 18 and 8 µg/m³ with respect to PM₁₀.

Water shall be sprayed on the material prior and during loading & unloading. All transfer points shall be fully enclosed and provided with dust suppression systems. All roads shall be paved on which movement of raw materials or products will take place. Preventive measures shall be employed to minimize dust build up on road. Conveyors shall be provided with conveyor cover. Maintenance of air pollution control equipment shall be done regularly. All the workers shall be provided with disposable dust mask. Green belt will be developed around the plant to arrest the fugitive emissions.

Public hearing was conducted through West Bengal State Pollution Control Board, Kolkata on 26.02.2014 at the site. The major points raised during the Public Hearing are employment & CSR to be followed as per the existing practice, adequate plantation to be done as per CPCB guidelines, local youth to be preferred for employment for the proposed project.

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

- i. The project proponent should install continuous and water monitoring devices to monitor air emission and effluent discharge and submit report to Ministry and its Regional Office.
- ii. Air pollution control devices viz. Electrostatic precipitator (ESP), and bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³.

- iii. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points, coal handling plant etc. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.
- iv. 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.
- v. The water consumption shall not exceed as per the standard prescribed for the steel plants.
- vi. Efforts shall further be made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. 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.
- vii. 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.
- viii. 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 Office, SPCB and CPCB.
- ix. Prior approval of this Ministry shall be obtained in case change of fuel.
- x. 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.
- xi. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xii. All the slag shall be granulated and provided to cement manufacturers for further utilization. Slag generated shall be given for metal recovery or properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.
- xiii. 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.

- xiv. 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.
- xv. 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. Implementation of such program shall be ensured accordingly in a time bound manner.
- xvi. The Company shall submit their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xvii. All the commitments made to the public during the Public Hearing / Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office.
- xviii. 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.
- xix. 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.
- xx. Trucks carrying coal and other raw material shall be covered with tarpaulin to prevent spreading of dust during transportation.
- xxi. 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

37.8 Further Consideration Cases

- 37.8.1 Expansion of existing Steel Alloys manufacturing unit of **M/s R.L. Steels Energy Ltd.** at Dist. Aurangabad, Maharashtra (EC) [J-11011/578/2011.IA-II(I)]

The matter was considered in the 31st EAC meeting held on 8th – 9th January, 2015. The committee after deliberations requested the PP to submit Consent to Establish (CTE/CTO) of 2004 (when the unit was established for the first time) for further consideration of the matter.

The PP vide letter dated 10.02.2015 submitted the requisite information and the same was presented during the meeting.

The proposal is for expansion of Alloy steel, Special Alloy Steel and "Rolled Products "by R.L. Steel & Energy Ltd. The Proposed production shall be at existing unit having Gut nos. 71,73,78 to 81,85,86 & 90 at village -Pangara shivar, chitegaon, Paithan road, District Aurangabad (MS) M/s R.L. Steel & Energy Ltd. (RLSTL) is proposing expansion for existing production of Alloy Steel Billets- 25000 MT/Month and Rolled Products 24000/MT/Month. The geographical location of this industry is 19°44'37.52 N Latitude and 75°17'46.39 E Longitude with an elevation of 506.5 m above mean sea level (MSL). The site is about 18.44 km from Aurangabad in NE direction. Approximately 67 acres and 10 guntha of land is already in the possession of existing unit. The premises have a gentle terrain and no prime agricultural land is sacrificed. There is no sensitive establishment in the vicinity. The river, city, railway line, national highway are sufficiently at a safe distance. The Cost of the project is 38.99 crores for expansion unit. A manpower of 465 people will be required.

The basic raw materials for the key product are Mild Steel Scrap (MS Scrap 60%) along with Ferrous Alloys and Fluxes (10%) Sponge Iron (40%), Lime, Petroleum Coke (4%), Ferrous, Silicon, Aluminum, Manganese, Ferro nickel, Ferro Molybdenum (1%).

Following table shows the list of raw material

Description	% production of 100 Ton of Steel	Quantity MT/day	in Mode of Transport
MS Scrap	60 %	576.9	By Road
Sponge iron	40%	386.6	
Others (Ferrous alloy + Fluxes)	10%	96.2	
Lime, Calcinated petroleum coke	4%	38.2	
Ferrous , Silicon , Aluminum manganese, Ferro Nickel, Ferro Molybdenum.	1%	9.6	
Fuels Required Furnace Oil Coal		5.0 10.0	By Road

The material movement the basket will be lifted by magnetic crane and due to assured supply at 132 Kv chances of demagnetization is chances are remote. The Molten Billets are lifted and lower down number of times through magnet cranes. Falling of Molten billet will be avoided due to robust checking of lifting cables as well as Demagnetization is practically not possible as power supply is never cut off due the Express Feeder at 132 Kv Slag Removal for Arc / Induction Furnace. The Slag will be partly manual or also mechanically removed . The slag will be transported through vehicle to dedicated storage place. Transfer will be through magnet crane

and dedicated arrangement is provided. Method of addition of Ferro alloys and Fluxes for the refining of alloy steels is mostly mechanical. The robust full proof Machine Guarding is provided with required Inter locking will be required at various points where people may come in contact with molten metal as well as rotating parts. The guarding will be design based on the requirement and as mentioned in The British standard Code of Practice for Machinery Safety

Ambient air quality monitoring has been carried out at 8 locations during 2011-2012 and the data submitted indicated: PM10 (70.7 $\mu\text{g}/\text{m}^3$ to 28.1 $\mu\text{g}/\text{m}^3$), PM2.5 (13.8 to 9.1 $\mu\text{g}/\text{m}^3$), SO₂ (20.4 to 4.7 $\mu\text{g}/\text{m}^3$) and NO_x (21.7 to 11.2 $\mu\text{g}/\text{m}^3$).

The public hearing was held on 11.07.2012 at the project site. The major issued raised during the public hearing are support to Near By villages by way of assistance for school, tree plantation, making roads, employment to youths from villages around

The Committee after detailed deliberation found the documents submitted by the PP are in order and recommended the project for environmental clearance subject to stipulation of the following specific conditions and any other mitigative measures and conditions for environmental protection:

- i. The project proponent should install continuous air and water monitoring devices to monitor air emission and effluent discharge and submit report to Ministry and its Regional Office.
- ii. No change of products or capacity shall be undertaken without prior approval of this Ministry.
- iii. Continuous monitoring facilities for the process stacks and sufficient air pollution control equipments viz. fume extraction system with bag filters, ID fan and stack of adequate height to furnace shall be provided to control emissions below 50 mg/Nm³.
- iv. Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- v. 'Zero' effluent discharge shall be strictly followed and no wastewater should be discharged outside the premises.
- vi. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources.
- vii. Green belt over 33 % of the total project area should be developed within plant premises with at least 10-15 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.

- viii. 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.
- ix. Occupational health surveillance of the workers including regular analysis for respiratory and audiometric parameters shall be done on a regular basis and records shall be maintained as per the Factories Act.
- x. Proper housekeeping should be maintained within the plant premises. Process machinery, exhaust and ventilation systems shall be laid in accordance with Factories Act. Better housekeeping practices should be adopted for improvement of the environment within the work environment.
- xi. At least 5% of the total cost of the project shall be earmarked towards Enterprise Social Commitment (ESC) based on locals' needs and the activity-wise details and village-wise details along with time-schedule for implementation shall be prepared in consultation with village panchayats and district administration and submitted to the Ministry's Regional Office. Implementation of such programme shall be ensured accordingly in a time-bound manner.
- xii. Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of Environmental Clearance letter.
- xiii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

37.8.2 Proposed capacity expansion of Kraft Paper of **M/s Siddeshwari Paper Udyog Ltd.** at Dist. Udham Singh Nagar, Uttarakhand (EC) J-11011/407/2012.IA-II(I)

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 25th meeting held during 13th -14th October, 2014 and again in the 31st EAC meeting held on 8th – 9th January, 2015 for grant of Environmental Clearance.

The Committee in the 31st EAC meeting noted that the analysis report for water quality of River Dhela submitted by the PP requires to be rechecked. The Committee desired that the PP resubmit the analysis report for the river water from 2km upstream and 1 km downstream of discharge point from institutions such as the Pollution Control Research Institute, Haridwar or CPPRI, Saharanpur and a fresh analysis report should be submitted.

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

- i. The project proponent should install continuous air and water monitoring devices to monitor air emission and effluent discharge and submit report to Ministry and its Regional Office.
- ii. The Industry should strictly comply the Charter issued by CPCB for paper and pulp industry located in Ganga basin.
- iii. Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Government shall be ensured and regular reports submitted to the Ministry and its Regional Office.
- iv. The project authority shall install multi cyclones, wet scrubbers with the boilers to achieve the particulate emission below 50 mg/Nm³. The emissions from chemical recovery section shall be controlled through primary and secondary venturi scrubbers.
- v. In case of treatment process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- vi. The industry shall ensure the compliance of the standards for discharge of the treated effluent from the unit as stipulated under the EPA rules or SPCB whichever is more stringent. The company shall make efforts to limit the water consumption upto 60 m³/tonne of product. Adequate steps including use of modern RO/UF based technologies shall be used to increase recycling and reduce water consumption.
- vii. Ground water quality study in and around the project area shall be conducted and report submitted to Ministry's Regional Office, SPCB and CPCB.
- viii. The company shall submit the comprehensive water management plan along with monitoring plan for the ground water quality and the level, within three months from date of issue of this letter.
- ix. The project authority shall dispose of hazardous waste as per the provision of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
- x. The company shall develop green belt in 33% of the total land as per the CPCB guidelines to mitigate the effect of fugitive emissions.
- xi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xii. The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.

- xiii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the pulp and paper sector shall be strictly implemented.
- xiv. All the commitments made to the public during the Public Hearing/Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office.
- xv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- xvi. At least 5% of the total cost of the project shall be earmarked towards Enterprise Social Commitment (ESC) based on locals' needs and the activity-wise details and village-wise details along with time-schedule for implementation shall be prepared in consultation with village panchayats and district administration and submitted to the Ministry's Regional Office. Implementation of such programme shall be ensured accordingly in a time-bound manner.

37.8.3 Production capacity enhancement of writing & Printing grades of paper of **M/s Naini Tissues Ltd.** at Tehsil Kashipur, Dist. Udham Singh Nagar, Uttarakhand (EC) J-11011/58/2013.IAII(1)

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 25th meeting held during 13th -14th October, 2014 and again in the 31st EAC meeting held on 8th – 9th January, 2015 for grant of Environmental Clearance.

The Committee in the 31st EAC meeting noted that the analysis report for water quality of River Dhela submitted by the PP requires to be rechecked. The Committee desired that the PP resubmit the analysis report for the river water from 2km upstream and 1 km downstream of discharge point from institutions such as the Pollution Control Research Institute, Haridwar or CPPRI, Saharanpur and a fresh analysis report should be submitted.

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

- i. The project proponent should install continuous air and water monitoring devices to monitor air emission and effluent discharge and submit report to Ministry and its Regional Office.
- ii. The Industry should strictly comply the Charter issued by CPCB for paper and pulp industry located in Ganga basin.

- iii. Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Government shall be ensured and regular reports submitted to the Ministry and its Regional Office.
- iv. The project authority shall install multi cyclones, wet scrubbers with the boilers to achieve the particulate emission below 50 mg/Nm³. The emissions from chemical recovery section shall be controlled through primary and secondary venturi scrubbers.
- v. In case of treatment process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- vi. The industry shall ensure the compliance of the standards for discharge of the treated effluent from the unit as stipulated under the EPA rules or SPCB whichever is more stringent. The company shall make efforts to limit the water consumption upto 75 m³/tonne of product. Adequate steps including use of modern RO/UF based technologies shall be used to increase recycling and reduce water consumption.
- vii. Ground water quality study in and around the project area shall be conducted and report submitted to Ministry's Regional Office, SPCB and CPCB.
- viii. The company shall submit the comprehensive water management plan along with monitoring plan for the ground water quality and the level, within three months from date of issue of this letter.
- ix. The project authority shall dispose of hazardous waste as per the provision of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
- x. The company shall develop green belt in 33% of the total land as per the CPCB guidelines to mitigate the effect of fugitive emissions.
- xi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xii. The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
- xiii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the pulp and paper sector shall be strictly implemented.
- xiv. All the commitments made to the public during the Public Hearing/Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office.
- xv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile

STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

- xvi. At least 5% of the total cost of the project shall be earmarked towards Enterprise Social Commitment (ESC) based on locals' needs and the activity-wise details and village-wise details along with time-schedule for implementation shall be prepared in consultation with village panchayats and district administration and submitted to the Ministry's Regional Office. Implementation of such programme shall be ensured accordingly in a time-bound manner.

37.8.4 Expansion of Steel Plant by Installation of Iron Ore Beneficiation Plant (1MTPA), along with Rolling Mill (0.3 MTPA), Arc Furnace (5000TPA), and Biomass based Power Plant (20MW) of **M/s Godavari Power & Ispat Ltd.**, at Siltara Industrial Estate, Siltara, Dist. Raipur, Chhattisgarh (Letter dated 23.12.2014 seeking Amendment of EC No.J-11011/179/2009-IA.II(I) dated 25.08.2009) – PP need not have to attend the meeting

The aforesaid proposal was considered by the Expert Appraisal Committee (EAC) in its 31st EAC meeting held on 8th – 9th January, 2015 for grant of Environmental Clearance. After detailed deliberations the Committee recommended the project for amendment in environmental clearance, however, the Committee advised PP to submit the following information.

- i. Report on how the use of furnace oil use will improve ambient air quality in the area
- ii. Green belt in the area along with the photographs

PP vide letter dated 30/01/2015 submitted the requisite information and photographs of the green belt. PP mentioned that there is fuel saving of 9000 KL due to elimination of fuel consumption in direct hot charging process of rolling mill. Thus, there will be no SO₂ & CO₂ emission. PP mentioned that there will be overall reduction of 835.16 Ton/annum of SO₂ and 6669 Ton/annum of Carbon content by employing direct hot charging process of rolling mill.

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

- i. The project proponent should continuous air and water monitoring devices to monitor air emission and effluent discharge, as provided by CPCB and submit report to Ministry and its Regional Office.
- ii. Chimney height should be as per CPCB formula $H = 14(q)^{0.3}$ (q = SO₂ Emission load in Kg/Hr)

37.9 Any Other Items

37.9.1 Extension of validity of EC granted to the proposal of Coke Oven Plant (1.22 MMTPA, Recovery Type) of **M/s ESSAR Steel (Hazira) Ltd**, Surat Dist, Gujarat - Extension of validity of EC [F. No – J-11011/313/2009 – IA-II(I)]

The Environmental Clearance for the above proposal was accorded by the Ministry vide letter No. J-11011/313/2009 – IA-II(I) dated 28/07/2010. However, Ministry vide its amendment Notification dated 29/04/2015 has extended the validity period of the Environmental Clearance from 5 years to 7 years.

In view of the above, the EC letter No. J-11011/313/2009 – IA-II(I) dated 28/07/2010 is valid till 26/07/2017.

The period of validity may be extended for by the regulatory authority concerned by a maximum period of three years if an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form – I.

37.9.2 Proposed Expansion of Steel Plant - Pellet plant 0.3 MTPA Induction Furnace 90000 MTPA, Rolling Mill 150000 MTPA, FeSi 12600 MTPA, SiMn 28400 TPA, FeMn 37000 MTPA at Phase 2 Siltara Industrial Area & Sondra Village Tehsil & District Raipur, Chhattisgarh **M/s Gankun Steel Pvt. Ltd.** - (TOR) – [J-11011/382/2014-IA.II(I)]

The above proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 29th EAC meeting held during 11th -12th December, 2014 for prescribing TORs for undertaking detailed EIA/EMP study. The Committee recommended the grant of ToRs with exemption of Public Hearing. However, while examining the proposal in the Ministry it was observed that 27.19 acres of land is in possession of management and proposed expansion will be taken up in the existing plant premises. However, out of total available land of 27.19 acres, only 2.71 acres of land is in Industrial area and 24.48 acres of land is in Private land.

Since majority of land was a private land, the matter was referred back to the EAC by the Ministry to take a view on the exemption of Public Hearing.

The Committee after detailed deliberation decided that since the majority of the land falls outside the industrial area, the PP has to conduct Public Hearing.

37.9.3 Extension of Validity of EC accorded for the proposal of ‘Extansion of Steel Plant (0.3 to 1.0 MTPA) at village Jumbulapadu, Mandal Tadipatri, Dist Amantpur, AP by **M/s Kalyani Gerdau Steels Ltd** (Formerly – M/s SJK Steel Plant Ltd) – [J-11011/322/2008-IA-II(I)]

The Environmental Clearance for the above proposal was accorded by the Ministry vide letter No. J-11011/322/2008-IA-II(I) dated 29.05.2010. However, Ministry vide its amendment Notification dated 29/04/2015 has extended the validity period of the Environmental Clearance from 5 years to 7 years.

In view of the above, the EC letter No. J-11011/322/2008-IA-II(I) dated 29.05.2010 is valied till 28.05.2017.

The period of validity may be extended for by the regulatory authority concerned by a maximum period of three years if an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form – I.

37.9.4 Extension of Validity of EC granted for the proposal of ‘Integrated Steel Plant at Bharatpur, Bakulahi & Dhourabhata Village, Bhatapara, Baloda Bazar Bhatapara District, Chhatisgarh by **M/s Real Ispat & Power Ltd** – [J-11011/170/2009-IA-II(I)]

The Environmental Clearance for the above proposal was accorded by the Ministry vide letter No. J-11011/170/2009-IA-II(I) dated 25.03.2010. However, Ministry vide its amendment Notification dated 29/04/2015 has extended the validity period of the Environmental Clearance from 5 years to 7 years.

In view of the above, the EC letter No. J-11011/170/2009-IA-II(I) dated 25.03.2010 is valid till 24.03.2017.

The period of validity may be extended for by the regulatory authority concerned by a maximum period of three years if an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form – I.

37.9.5 Extension of validity of EC for integrated Steel Plant (1.9 MTPA) at Village Jharkhand , Galapdu and Taraka bedu, District Dhenkanal, Odisha by **M/s Rungta Mines Ltd.** –J-11011/241/2009-IA.II(I)

The Environmental Clearance for the above proposal was accorded by the Ministry vide letter No. J-11011/241/2009-IA.II(I) dated 02.08.2010. However, Ministry vide its amendment Notification dated 29/4/2015 has extended the validity period of the Environmental Clearance from 5 years to 7 years.

In view of the above, the EC letter No. J-11011/241/2009-IA.II(I) dated 02.08.2010 is valid till 01.08.2017.

The period of validity may be extended for by the regulatory authority concerned by a maximum period of three years if an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form – I.

37.9.6 Expansion of Cement Plant (2.0 MTPA to 2.6 MTPA clinker) at village Suli, Tehsil Arki, District Solan, Himachal Pradesh by **M/s Ambuja Cements Limited** – Amendment in EC (Installation of Ball Race Mill (BRM) in place of existing coal mill for grinding of coal and pet coke. Use of pet coke as additional fuel with coal instead of coal only in cement kiln.) – [J-11011/792/2007-IA II (I)]

Environmental clearance for the expansion of Cement Plant (2.0 MTPA to 2.6 MTPA clinker) was accorded by the Ministry vide letter no. J-11011/792/2007-IA.II(I) dated February 29, 2008. PP has now proposed an amendment in Environmental Clearance for installation of Ball Race Mill (BRM) in place of existing coal mill and use of pet coke as additional fuel with coal in

cement rotary kiln in Existing Cement Plant 2.0 - 2.6MTPA Clinker production according to the table given below.

S. No	Category	Existing	After Proposed Amendment
1	Fuel mix (Pet coke and Coal) for Cement Plant (Kiln)		
	Fuel	Coal	Coal : Pet coke
	Proportion in mix fuel	100%	Proportion to be designed for “S” content not exceeding 7.5 % in fuel mix
	Fuel Consumption (MTPA)	0.351	As per proportion 0.247 MTPA (Max)
2	Installation of Ball Race Mill		
	Grinding Unit	Coal Mill	Ball Race Mill (BRM)
	Capacity	50 TPH	55 TPH
	APCE	Conventional Bag Filter installed to maintain the dust emission < 50 mg/Nm ³	State of the Art technology based Pulse Jet Bag filter to maintain the dust emission < 30 mg/Nm ³

The Existing Coal mill is not designed for grinding of pet coke. No additional land is required. No change in plant capacity. No change in manufacturing process. No additional water & power requirement. No waste water generation. No change in other utilities etc. (in case of pet coke).

PP mentioned that there are several benefits of using Pet coke, since it is a byproduct from the petroleum refinery thereby helps conserving conventional fuel i.e. coal. Use of low grade limestone helps in conserving high grade limestone thereby enhancing the life of mines (due to high calorific value and low ash content in pet coke). Reduction in mineral gypsum consumption (due to absorption of ‘S’ in clinker). Reduction in fossil fuel consumption to produce the same amount of energy as pet coke has higher calorific value. Low particulate matter & fugitive emission, as the ash content in the pet coke is negligible and less running hours of mill. Due to change in fuel mix, as limestone is the main component of the kiln feed and sulphur in fuel gets absorbed in the process and continue to meet SO₂ norms.

The Committee after detailed deliberation recommended the project for above amendment in the environmental clearance letter no. J-11011/792/2007-IA.II(I) dated February 29, 2008.

37.9.7 Fuel change by using Pet Coke in Existing Clinker Plant at village-Rauri, PO Darlaghat, Tehsil-Arki, District-Solan, HP by **M/s Ambuja Cements Limited** - Amendment in EC – [J-11011/203/2005 IA-II (I)]

Environmental clearance for the Clinker Plant was accorded by the Ministry vide J-11011/203/2005-IA.II(I) dated January 27, 2006. PP has now proposed an amendment in Environmental Clearance use of Fuel mix (Coal, and Petcoke) instead of only coal, in the kiln of Existing Cement Plant according to the table given below.

Category	Existing	After Proposed Amendment
Fuel for Cement Plant (Kiln)		
Fuel	Coal	Coal : Pet coke
Proportion in mix fuel	100%	Proportion to be designed for “S” content not exceeding 7.50 % in fuel mix
Fuel Consumption (MTPA)	0.243	As per proportion (Max. 0.17 MTPA Petcoke)

The Existing Coal mill is not designed for grinding of pet coke. No additional land is required. No change in plant capacity. No change in manufacturing process. No additional water & power requirement. No waste water generation. No change in other utilities etc. (in case of pet coke).

PP mentioned that there are several benefits of using Pet coke, since it is a byproduct from the petroleum refinery thereby helps conserving conventional fuel i.e. coal. Use of low grade limestone helps in conserving high grade limestone thereby enhancing the life of mines (due to high calorific value and low ash content in pet coke). Reduction in mineral gypsum consumption (due to absorption of ‘S’ in clinker). Reduction in fossil fuel consumption to produce the same amount of energy as pet coke has higher calorific value. Low particulate matter & fugitive emission, as the ash content in the pet coke is negligible and less running hours of mill. Due to change in fuel mix, as limestone is the main component of the kiln feed and sulphur in fuel gets absorbed in the process and continue to meet SO₂ norms.

The Committee after detailed deliberation recommended the project for above amendment in the environmental clearance letter no. J-11011/203/2005-IA.II(I) dated January 27, 2006.

37.10 CASES FOR TERMS OF REFERENCE (TOR)

37.10.1 Proposed 39.000 TPA plant for manufacturing of Manganese Oxide, Manganese di Oxide, Zinc Supleide, Manganese Supleide at Plot No.B-1, Saoner Industrial Area. Tal-Saoner. Distt. Nagpur by **M/s Goodearth Agrochem Pvt. Ltd.** – ToR – [J-11011/39/2015-IA-II(I)]

The PP along with their EIA-EMP consultant M/s Pollution and Ecology Control Services (PECS), Nagpur gave a detail presentation on the salient features of the project and proposed Environmental protection measures to be undertaken along with draft Term of Reference for the preparation of EIC-EMP report. The proposed project activities are listed at 3(a) under category “A” of the schedule of EIA Notification, 2006 and appraised at the central level.

M/s GoodEarth Agrochem Pvt. Ltd., Saoner proposed project to install Manufacturing unit of Manganese Oxide, Manganese Dioxide, Zinc Oxide, Zinc Sulphate, Manganese Sulphate at Plot No. B-1, Saoner Growth Center, MIDC, Village- Hetisurla, Tehsil- Saoner, District-Nagpur. Project is proposed in notified Industrial Area. Industrial plot of an area of 20108 m² MIDC is available with the PP. No Rehabilitation/Resettlement required. No National Park, Biosphere Reserve and Wildlife Sanctuary including Notified Eco- Sensitive Areas within 10 km radius. No archaeological monument and defense installation within 10 km radius. Capital investment of the project is Rs. 5 cr.

The water will be available from the MIDC and power will be supplied from Maharashtra State Electricity Board. The raw material required for the project and its source and mode of transportation is tabulated below:

Raw Material	Annual Consumption (MT)	Sources of Supply	Method of Transportation
Zinc ore	3600	Bhandara Kothari Industries	In Tarpaulin covered Dumper by road.
Manganese ore	12000	MOIL and Imported	In Tarpaulin covered Dumper by road.
Sulphuric acid	6000	Gujarat	In Tankers by road
Coal	6000	Local Traders	In Tarpaulin covered Dumper by road.

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

ii. Public Hearing is exempted as the project is located within the Notified Industrial Area.

37.10.2 Sponge Iron 330000 TPA Sinter 1008000 TPA Pig Iron 756000 TPA Power Plant WHRB 30 MW Power Plant utilising Blast furnace gases 30 MW Power plant CFBC 330 MW Oxygen plant 400 TPD ha at Sirupuzhalpet and New Gummidipoondi Village Gummidipoondi Taluk Tiruvollur District Tamil Nadu, by **M/s Suryadev Alloys & Power Pvt. Ltd** ToR – [J-11011/595/2011-IA-II(I)]

The PP along with their EIA-EMP consultant M/s Pioneer Enviro gave a detail presentation on the salient features of the project and proposed Environmental protection measures to be undertaken along with draft Term of Reference for the preparation of EIC-EMP report. The proposed project activities are listed at 3(a) under category “A” of the schedule of EIA Notification, 2006 and appraised at the central level.

M/s. Suryadev Alloys & Power Pvt. Ltd. is operating steel plant at Sirupuzhalpet & New Gummidipoondi, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu. The matter was earlier considered in the 27th EAC meeting held on 13th & 14th November 2014 and the ToR letter was also issued vide letter No. J-11011/595/2011-IA-II(I), however, the ToR was withdrawn by the PP. Now as part of expansion, they are proposing to expand the steel plant in the same plant premises with below mentioned plant configuration and production capacity:

S.No.	Products/ Units	EC obtained in 2011	Present proposal	Total after expansion
1	Sponge Iron through DRI Kilns	2,31,000 TPA (4 x 175 TPD) [This unit is yet to be implemented. Now it is proposed to be	3,30,000 TPA (2 x 500 TPD) [Instead of 4 x 175 TPD, 2 x 500 TPD is	3,30,000 TPA

		dropped]	proposed]	
2	Sinter through Sinter plant	---	10,08,000 TPA (1 x 2880 TPD)	10,08,000 TPA
3	Pig Iron through Blast Furnace	---	7,56,000 TPA (1 x 2160 TPD)	7,56,000 TPA
4	Billets through Induction Furnace and Arc Furnace	12,50,000 TPA	Billets through IF/ Converter (BOF) / Arc Furnace	12,50,000 TPA
5	Rolled Products (Wire Rods & Bars)	12,00,000 TPA	---	12,00,000 TPA
6	Power Plant (WHRB)	1 x 15 MW	2 x 15 MW	30 MW
7	Power Plant (utilising Blast furnace gases)	-	1 x 30 MW	30 MW
8	Power Plant	2 x 80 MW (CFBC based)	1x 330 MW (PCF based)	490 MW
9	Ferro Manganese	12000 TPA	----	12,000 TPA
10	Silico Manganese	24000 TPA	----	24,000 TPA
11	Oxygen plant	-----	1 x 400 TPD	400 TPD

PP explained that there is change in the configuration of Sponge Iron configuration for which EC has been accorded vide letter F. No. J-11011/11/2010-IA-II (I) dated. 20th May 2011. Change in Sponge Iron configuration is from **2,31,000 TPA (4 x 175 TPD) to 3,30,000 TPA (2 x 500 TPD)**. For production of Billets through Induction Furnace & Arc Furnace, now they also want go through IF/ Converter (BOF) / Arc Furnace.

The project site is located in Sirupuzhalpet & New Gummidipoondi Villages, Gummidipoondi Taluk, Tiruvollur District, Tamil Nadu. Proposed expansion will be taken up partly in the existing plant of 119.01 acres for which EC has been obtained and the remaining in the land adjacent to the existing plant (45 acres). Total land envisaged for the entire project is 164.01 acres (119.01 acres + 45 acres). Entire land is in possession of the company.

Baseline data collection for the proposed activity covering a study area of 10 Km radius has already been collected from 1st December 2013 to 28th February 2014. The same has been informed to MoEF during the meeting and the EAC has accepted the same.

Tandalacheri is the Nearest habitation at a distance of 1.0 Km. from the plant. There are no National Parks, Wild life Sanctuaries and Bird Sanctuaries within 10 Km. radius of the plant. No forest land is involved in the plant site. Arani river flows at distance of 3.4 Kms. from the plant. Gumadipoondi Railway Station is at a distance of 3.0 Kms. from the plant. Palavakkam RF exists within 4.5 Kms. radius of the plant. Gumadipoondi Industrial area is present within 10 Km. radius of the plant. Total cost of the expansion project is Rs. 2100 Crores.

Iron ore, coal, dolomite for sponge iron plant, Indian Coal / Imported Coal for power plant will be used as raw materials in the proposed expansion. Sponge Iron will be manufactured in coal based Direct Reduction (DR) kilns. Sinter will be generated through Sinter plant and Liquid metal will be generated from Blast Furnace. Billets will be manufactured by melting in Induction furnace & casting in continuous casting machine and Converter (BOF) & Arc Furnace. Rolled products (i.e. Wire rods & TMT Bars) will be manufactured in rolling mill. Waste heat recovery boiler (WHRB) and PCF boiler will be installed to generate Power.

Water required for the proposed expansion project will be sourced from Ground water & as well as water reservoirs being set up within the land acquired for the purpose. Total water requirement for expansion project will be 5770 cum/day.

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

- i. Public hearing to be conducted Tamil Nadu Pollution Control Board
- ii. Old data collected for the expansion project can be used, however, one month fresh data to be collected and should be compared with the old data
- iii. Cumulative impact of old EC and the Expansion project should be presented in the EIA report.

37.10.3 Expansion of Metallurgical Unit at MIDC, Ph-II, Aurangabad, Dargaon, Jalna Maharashtra by **M/s Om Sairam Steel and Alloys Pvt. Ltd** – ToR – [J-11011/57/2015-IA.II(I)]

The PP along with their EIA-EMP consultant M/s Ultra Tech, Pune gave a detail presentation on the salient features of the project and proposed Environmental protection measures to be undertaken along with draft Term of Reference for the preparation of EIC-EMP report. The proposed project activities are listed at 3(a) and 1(d) under category “A” of the schedule of EIA Notification, 2006 and appraised at the central level.

M/s Om Sairam Steel and Alloys Pvt. Ltd; is proposed to install unit to manufacture Sponge Iron, Power Generation, Billet/Ingot and TMT Bar, Channel and Angles at Plot No. F-1,2,3,8,9,10 and Survey No. 46 & 63, Village Dargaon, Teh & Dist Jalna, Maharashtra. The raw material will be sourced from Chandrapur, Raipur, Bellary and Bhilwada. Total 16 acre of land is in possession of M/s Om Sairam Steel and Alloys Pvt. Ltd. No rehabilitation/resettlement required. Nearest Highway is 1.4 km. Nearest Railway station Jalna 10km, nearest town Jalna 6km, nearest water body Kundalika River 4.5km. Investment incurred on this project is Rs.510 cr. Out of which Rs.13 cr. is earmarked for environmental protection measures. Latitude 19°53’N, Longitude 75° 48’ E. Electricity requirement for this project will be 50MW & which will be fulfilled by our own generation.

No National Park, Biosphere Reserve and Wildlife Sanctuary including notified Eco-sensitive area exists within 10km radius. There is no archaeological monument, interstate boundary and

defense installation found in the 10km radius of study area. No nallah/water body, public highway, forest within the project site.

The list of products to be manufactured is given below:

#	Product	Existing	Proposed	Total
1	Sponge Iron (500x2DRI) (TPD)	-	1000	1000
2	Power Generation (MW)	-	50	50 (24 WHRB 26 FBC)
3	Billet/ Ingot (TPD)	528	472	1000
4	TMT Bar, Channel & Angles (TPD)	1000	-	1000

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

- i. P.H. shall be conducted by the Maharashtra Pollution Control Board.
- ii. Photo graphs of green area and existing plant should be provided

37.10.4 Modification cum Expansion of existing project at Badtumkela dist. Sundargarh odisha by **M/s Bhaskar Steel and Ferro Alloys** –ToR – [J-11011/491/2008-IA.II(I)]

Wanted deferment

37.10.5 Establishment of I/O beneficiation unit, Pellet Plant, Wire Rod Mill & captive Power Plant in the existing Integrated Steel Plant Premises situated at Joratarai Vill. Mangatta (P.O) Rajnandgaon Tehsil & District, Chhattisgarh by **M/s Crest Steel & Power ltd** – ToR – [J-11011/743/2008-IA.II(I)]

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

M/s. Crest Steel & Power Pvt. Ltd. is operating steel plant at Joratarai Village, Mangatta (P.O.) Rajnandgaon Tehsil & District, Chhattisgarh. Now as part of expansion, they are proposing to expand the steel plant in the same plant premises with below mentioned plant configuration and production capacity:

S.No.	Products	Existing	Expansion for which EC has been obtained	Proposed Expansion	Total
1	Iron Ore Crushing	---	17,95,200 TPA	---	17,95,200 TPA

	Plant				
2	DRI Plant (Sponge Iron)	1,15,500 TPA	8,08,500 TPA	---	9,24,000 TPA
3	Induction Furnace with LRF (Billets)	33600 TPA	5,44,500 TPA	---	5,78,100 TPA
4	Electric Arc Furnace (Billets)	---	3,30,000 TPA	---	3,30,000 TPA
5	Rolling Mill (TMT Bars & Str. Steel)	---	5,61,000 TPA	---	5,61,000 TPA
6	Wire Rod Mill	---	2,06,250 TPA	1,00,000 TPA	3,06,250 TPA
7	Generation of Power (WHRB)	8 MW	56 MW		64 MW
8	Generation of Power (FBC)	8 MW	34 MW	12 MW	54 MW
9	Submerged EAF (Ferro Alloys)		3 x 12 MVA	---	---
	Ferro Manganese	32,850 TPA	59400 TPA	---	92,250 TPA
	Ferro Silicon	10,500 TPA	19,000 TPA	---	29,500 TPA
	Silico Manganese	23,750 TPA	42,750 TPA	---	66,500 TPA
10	Coal Washery	---	3.20 MTPA	---	3.20 MTPA
11	I/O Beneficiation	---	---	16,00,000 TPA	16,00,000 TPA
12	# Pellet Plant	---	---	12,00,000 TPA	12,00,000 TPA

CTE obtained from CECB for 1.2 MTPA pellet plant in March 2012 and subsequently construction work has been started, accordingly CECB has issued a letter to obtained EC from MoEF (Construction work is stopped).

The project site is located in Joratarai Village, Mangatta (P.O.) Rajnandgaon Tehsil & District, Chhattisgarh. Total land in possession is 285.15 acres. The present use of the land is industrial. The proposed Iron Ore beneficiation, Pellet plant, Wire Rod Mill & Captive Power plant will be taken up in the existing plant premises only.

Baseline data collection for the proposed activity covering a study area of 10 Km. radius is being collected from 1st March 2015 to 31st May 2015 and the EAC has accepted the same.

The proposed project area does not fall under the industrial areas / cluster, which are listed in MoEF office memorandum dated 13th January 2010 & its subsequent amendments. Joratarai village is the nearest habitation at a distance of 0.6 Km. from the plant. Canal is passing through the plant site. Culverts have been constructed where ever crossing of canal is involved. There are

no National Parks, Wild life Sanctuaries and Bird Sanctuaries within 10 Km. radius of the plant. No forest land is involved in the plant site. Shivanth river flows at distance of 2.8 Kms. from the plant. Rasmada Railway Station is at a distance of 3.1 Kms. from the plant. Mangata RF exists within 2.3 Kms. radius of the plant. Total cost of the expansion project is Rs. 740 Crores.

Iron ore fines will be used as Raw material for I/O beneficiation unit to produce Iron ore concentrate and same will be sourced from NMDC, Bastar. Then these Iron ore concentrate will be utilized in Pellet plant to manufacture Pellets. Entire pellets generated will be consumed captively in the sponge iron production. Billets / Blooms / Ingots will be utilized in the Wire rod mill to manufacture Wire rods. FBC power plant will be installed to generate power.

Water required for the proposed expansion project will be supplied by CSIDC, Govt. of C.G. Total water requirement for expansion project will be 6130 KLD.

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

iii. P.H. shall be conducted by the Chhattisgarh Pollution Control Board.

37.10.6 Proposal of Jaypee Cement Products (A unit of **Jaiprakash Associates Ltd.**) for production of 100,000 TPY of AC sheets at Jaypee Nagar, Vill. Chhijwar, Tehsil Huzur, dist Rewa (M.P.) - [J-11011/56/2015-IA.II(I)]

The PP along with their EIA-EMP consultant M/s Vimta Labs Limited gave a detail presentation on the salient features of the project and proposed Environmental protection measures to be undertaken along with draft Term of Reference for the preparation of EIC-EMP report. The proposed project activities are listed at 3(b) under category “A” of the schedule of EIA Notification, 2006 and appraised at the central level.

Jaypee Cement Products, a unit of Jaiprakash Associates Ltd (JAL), to further consolidate Jaypee Group’s position in the Building Products Industry, is intending to increase capacity of production of Asbestos Sheeting by setting up another AC Sheet plant at Jaypee Nagar, Village Chhijwar, Tehsil Huzur, Distt. – Rewa, M.P. The project site is located within the geographical co-ordinates: Latitude – 24⁰ 32’49.6” N – 24⁰ 32’56.4”N and Longitude – 81⁰ 09’48.9” E – 81⁰ 09’44.4” E respectively. Total area required for proposed plant is 12.33 Acres, which has already been acquired and is under possession of JAL and the same is falling within Cement Manufacturing Complex of Jaypee Group with all the requisite infrastructure. No additional land will be procured for proposed plant.

Following table shows the requirement of raw material for the plant.

Raw Material	Quantity (TPA)	Source	Mode of transportation
Asbestos fibre	6,000	Brazil (Sama) and Poland (Konimex)	By Ship and by surface transports

Cement	48,000	JAL cement manufacturing facility at Rewa	Road
Fly ash	28,000	Captive Power Plant	Road
Pulp	1,000	Chennai and Kalpi	Road

Water required for the proposed project will be about 100 m³ /day which is sourced from the mine pit artificial reservoir developed in cement complex mined out area. The power demand will be 950 KW which will be met from the Grid Power. Manpower required during the construction phase will be 200 nos. and during operational phase 75 nos. The estimated cost of the proposed project is about Rs.57 crores approximately. The Kariari Nala and Dahi Nala are the water bodies in 10 km radial distance located at a distance of 0.2 km, W and 7.5 km, NNW respectively. Ton river is located at a distance of 15.5 km in NW direction. Two RFs exists in study area: Sathari RF (7.0 km, WNW), and Sathari RF (9.4 km, NW). No national parks, wildlife sanctuaries and eco- sensitive zones in the study area. The area is not known for these natural hazards.

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

- ii. P.H. shall be conducted by the M. P. Pollution Control Board.
- iii. Data related to the Asbestos fibre in the old plant should be provided.

Next Meeting:

It was decided that the next meeting will be held on 1-2June,2015.

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

Executive Summary

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

- i. Project name and location (Village, Dist, State, Industrial Estate (if applicable))
- ii. Products and capacities. If expansion proposal then existing products with capacities and reference to earlier EC.
- iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.
- v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
- vi. Capital cost of the project, estimated time of completion
- vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of its acquisition, nearby (in 2-3 km.) water body, population, within 10km other industries, forest, eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
- viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
- ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- x. Likely impact of the project on air, water, land, flora-fauna and nearby population
- xi. Emergency preparedness plan in case of natural or in plant emergencies
- xii. Issues raised during public hearing (if applicable) and response given
- xiii. CSR plan with proposed expenditure.
- xiv. Occupational Health Measures
- xv. Post project monitoring plan

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

1. Executive Summary
2. Introduction
 - i. Details of the EIA Consultant including NABET accreditation
 - ii. Information about the project proponent
 - iii. Importance and benefits of the project
3. Project Description
 - i. Cost of project and time of completion.
 - ii. Products with capacities for the proposed project.
 - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
 - iv. List of raw materials required and their source along with mode of transportation.
 - v. Other chemicals and materials required with quantities and storage capacities
 - vi. Details of Emission, effluents, hazardous waste generation and their management.
 - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
 - viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
 - ix. Hazard identification and details of proposed safety systems.
 - x. Expansion/modernization proposals:
 - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB shall be attached with the EIA-EMP report.
 - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.
4. Site Details
 - i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

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

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

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

6. Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

7. Impact Assessment and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modeling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.

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

8. Occupational health

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

9. Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
 - iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
 - iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. Enterprise Social Commitment (ESC)
- i. Adequate funds (atleast 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
13. ‘A tabular chart with index for point wise compliance of above TORs.
14. The TORs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material in Regional languages shall be provided.
- iv. The letter/application for environmental clearance shall quote the MOEF file No. and also attach a copy of the letter.
- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report

- vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
- viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.
- ix. TORs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

ADDITIONAL TORS FOR INTEGRATED STEEL PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. PM(PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material especially slag.
13. Trace metals in water

ADDITIONAL TORS FOR PELLET PLANT

14. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
 15. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
 16. 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.
 17. PM(PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ to be carried over.
 18. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
 19. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
 20. Plan for slag utilization
 21. Plan for utilization of energy in off gases (coke oven, blast furnace)
 22. System of coke quenching adopted with justification.
 23. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
 24. Trace metals in waste material especially slag.
 25. Trace metals in water
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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 production of coal and limestone from coal & limestone mines and the projects they cater to;
 3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
 4. If the raw materials used have trace elements, an environment management plan shall also be included.
 5. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
 6. Energy consumption per ton of clinker and cement grinding
 7. Provision of waste heat recovery boiler
 8. Arrangement for co-processing of hazardous waste in cement plant.
 9. Trace metals in waste material especially slag.
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ADDITIONAL TORs FOR PULP AND PAPER INDUSTRY

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

LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

Coke oven plant

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

Asbestos milling and asbestos based products

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

Induction/arc furnaces/cupola furnaces 5TPH or more

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

Metallurgical industry (ferrous and non-ferrous)

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

LIST OF PARTICIPANTS OF EAC (I) IN 37th MEETING OF EAC (INDUSTRY-I)
HELD ON 30th April – 1st May, 2015

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