MINUTES OF 29th RECONSTITUTED EXPERT APPRAISAL COMMITTEE (INDUSTRY) HELD ON 11th and 12th DECEMBER 2014

29.1 Opening Remarks of the Chairman

29.2 Confirmation of the Minutes of the 27th Reconstituted Expert Appraisal Committee (Industry) held during **13th-14th November 2014**.

The minutes of the 27th meeting were confirmed subject to corrections to Agenda Items given below:

27.9.4 The Committee also agreed for the use of baseline data and other data (sodar and hydrogeology) collected during the summer season (March-May 2014) for the proposed project of M/s Tata Metlaliks Ltd, whose boundary is adjoining the another expansion project of M/s Tata Metaliks for which a TOR No. J-11011/377/2013-IA.II(I) was granted by MOEF&CC on 19th May 2014 for "Proposed Capacity expansion from 3,45,000 TPA Pig Iron Production to 5,00,000 TPA hot metal production and 10 MW waste heat recovery power plant at Gokulpur village, PO Samraipur, Tehsil Kharagpur, District Pashchim Medinipur, West Bengal"

27.10.4 Existing land is 40 ha and not 41.48ha. The change in land area is from 40 ha to 51.48ha. The total extent of land of 51.48ha is for the Plant and for the Colony and is in two adjacent villages. The Plant is in Chintapalem village and the existing Colony is in Gudi Malkapuram village. The additional land available adjacent to existing colony has been already procured and the same is proposed to be added to the existing colony area. Further it is proposed to use imported coal along with indigenous coal.

27.7.1 In title as well as in para 1, CPP capacity is 85MW instead of 8MW.

THURSDAY, 11th DECEMBER 2014

29.3 Environmental Clearance

29.3.1 Proposed Expansion of Cement Plant (clinker from 3.30 to 4.5 MTPA and Cement from 4.48 to 6MTPA) of **M/s UltraTech Cement Ltd**, at vill. Awarpur, Taluka Korpana, Dist. Chandrapur, Maharashtra (**EC)** (J-11011/165/2013-IA.II(I) TOR dated 10.09.2013)

M/s UltraTech Cement Ltd and their consultants M/s JM EnviroNet Pvt. Ltd, Gurgaon made 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 by MoEF vide F.No. J-11011/165/2013-IA.II(I) dated 10th September, 2013 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report vide letter no. nil dated 1st December, 2014 after conducting Public Hearing on 16.06.2014 for grant of Environmental Clearance.

All cement plants with production capacity greater than 1 MTPA are listed at S.No. 3(b) under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

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 Ultra Tech Cement Limited (Unit: Awarpur Cement Works) have proposed to expand the clinker production from 3.3 MTPA to 4.5 MTPA and Cement from 4.48 to 6.0 MTPA at village : Awarpur, Taluka: Korpana, District: Chandrapur, Maharashtra. The latitude and longitude of the project site is 19^0 46' 32" N to 19^0 47' 53" N and 79^0 08'18.8" E to 79^0 09'20.6" E respectively. The proposed expansion will be carried out within the existing plant area of 307.35 Ha. Mine is adjacent to the Plant. No additional land is required for the proposed expansion. No Forest land is involved. No National Park, Wildlife Sanctuary is exists within 10 km radius of the project site. Manikgarh reserve forest is located at a distance of 6.1 km from the project site. The water bodies located within the study area are – Pengana river (7.5km in NW direction), Bop Nallah (3 km in N direction), Amal Nallah (2.5km in W direction), Amalnala Dam (8.5 km in S direction), Chandanvayl Nala (9.0 km in SE direction), Tutra Nala (8 km in SE direction) and Lokhandi Nala (2 km in ESE direction). No court cases/litigation is pending against the project. Total cost of the project is Rs.248.7 crores.

2. The existing and proposed product details are as below:-

Units	**Existing Capacity**	**Proposed expansion capacity**	**Total capacity after expansion**
Clinker (MTPA)	3.3 (EC obtained vide letter no.J-11011/146/2003-IA.II(I) dated 8.4.2005)	1.2 (Phase I – 0.3 & Phase II – 0.9)	4.5
Cement (MTPA)	4.48 (EC obtained vide letter no.J-11011/404/2009-IA.II(I) dated 2.8.2010)	1.52	6.0
Captive Power Plant (MW)	2x23 & 1x25 (EC obtained vide letter no.J-13011/12/1997-IA.II(T) dated 2.5.2012 (amended)	Nil	71(2x23 & 1x25)
Coal Washery (MTPA)	1.2 (EC obtained vide letter no.J-11015/132/2008-IA.II(I) dated 2.1.2009)	Nil	1.2

The detail of raw material requirement and its source for the existing and the proposed plant are given below:

S.N.	**Raw Material**	**Required Quantity (MTPA)**			**Source**	**Distance & Mode of Transportation**
		Existing	**Proposed expansion**	**Total after proposed expansion**		
1.	Limestone	4.62	1.68	6.3	Captive Mine	1 Km - Covered Conveyor Belt
2.	Shale	0.06	0.015	0.075	Captive Mine	1 Km - Covered Conveyor Belt

3.	Fly ash - Raw Mill	0.05	0.011	0.06	CPP	1 km- By Road
4.	Iron Ore	0.10	0.028	0.128	Purchased/ Near-by sponge iron plant	70-600 km - By Road
5.	Laterite	0.06	0.015	0.075	Purchased/ Nearby Mines	40-60 km - By Road
6.	Gypsum / Road	0.08	0.03	0.11	Purchase CFL, Vizag	1000 km - By Rail
7.	Fly ash - Cement Mill	1.19	0.78	1.97	Purchased, Near By Power Plants	100 km - By Road

It was informed that HW has not been consumed as Maharashtra SPCB has not given permission so far. Approval also is not being given for non HW as no condition was put in the EC letter. It was requested that an EC condition for both HW and Non-HW needs to be given.

The total water requirement for existing cement plant (including colony) is 4465 KLD. No additional water is required for the proposed expansion project; hence, the total water requirement after the Proposed Expansion Project will remain same. Water is being / will be sourced from Amal Nallah & River Wardha. Permission for the drawl of water from River Wardha & Amal Nallah has been obtained from the concerned authority.

The Plant has a CPP, CFBC boiler, AFBC boiler and WHRB. The existing power requirement for the Cement Plant is 54.9 MW and additional power required for the Proposed Expansion Project will be 5.1 MW. The total power requirement after proposed expansion will be around 60 MW.

Cumulative environmental baseline study for Plant & Mine was conducted during Post-Monsoon Season (Oct. to Dec., 2013). Ambient air quality monitoring has been carried out at 11 stations in the study area (considering Plant & Mine site) on a 24 hourly basis. The concentrations of PM_{10} and $PM_{2.5}$ at all the 11 AAQM stations ranges between 51.1 to 75.7µg/m^3 and 20.1 to 35.7µg/m^3, respectively. The concentrations of SO_2 and NO_2 were found to be in range of 5.0 to 8.7µg/m^3 and 12.5 to 20.3µg/m^3 respectively. It was clarified that the higher levels of SO2 in stack emissions could be due to higher % of S in coal (0.5%) from Gourideep and Pauni coal mines of M/s Western Coalfields Ltd. and also due tot eh fatc that the limestone in Chandrapur area has a higher percentage of Sulphur.

Public hearing for Proposed Expansion of Cement Plant by up-gradation in existing Line - I & II at Village - Awarpur, Taluka - Korpana, District - Chandrapur was conducted on 16th June, 2014 at 11:00 am at Project Site. The issues raised during the public hearing are employment for the local population, primary health center and regular visit of the doctors, opening of industrial training institute, conservation of ground water and water pollution, infrastructure development. An amount of Rs 12.62 crores has been earmarked towards the CSR activity over a period of 5years. Amount will be spent on education & literacy, health & family welfare, sustainable livelihood, infrastructure development and social causes.

The Committee after detailed deliberations 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 expansion project shall comply with the new MOEF&CC Standards vide GSR 612 (E) dated 25.08.2014 with respect to particulate matter, SO_2, NO_x for Cement sector.

ii. Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control system. Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill. Low NO_X burners shall be provided to control NO_X emissions. Regular calibration of the instruments must be ensured.

iii. All the pollution control devices/equipment in raw mill/kiln, kiln feeding system, clinker cooler, coal mill, cement mill, and cement silos, shall be interlocked so that in the event of the pollution control devices/systems not working, the respective unit(s) shut down automatically.

iv. Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report shall be prepared and submitted to the Ministry and its Regional Office at Bhopal within 3 months from the date of issue of the letter.

v. Efforts shall be made to achieve power consumption of 70 units/tonne for Portland Pozzolona Cement (PPC) and 95 units/tone for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.

vi. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.

vii. AAQ Modelling shall be carried out based on proposed expansion based on the specific mitigative measures proposed for the expansion project and mitigative measures taken to keep the emissions well below the standards.

viii. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.

ix. Arsenic and Mercury shall be monitored in emissions, ambient air and water.

x. The coal yard shall be lined and covered.

xi. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.

xii. Total fresh water requirement after the proposed expansion of the cement and captive power plant shall not exceed 2800 m^3/day which will be sourced from the Ground Water & Surface

Water. A five year water management plan shall be made so as to achieve reduction in ground water withdrawal.

xiii. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.

xiv. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

xv. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB.

xvi. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / reprocessors only.

xvii. The proponent shall implement a Plan for 100% utilisation the fly ash from the Power Plant in the Cement Plant. All the fly ash shall be utilized as per Fly ash Notification, 1999 subsequently amended in 2003 and 2008. Efforts shall be made to use fly ash maximum in making Pozzolona Portland Cement (PPC).

xviii. The proposed cement plant kiln shall be provided with a flexible fuel feeding system to enable use of hazardous wastes such as oil sludge, cut tyres, etc.

xix. The proponent shall examine and prepare a plan for utilisation of high calorific wastes such as chemical wastes, distillation residues, refuse derived fuels, etc as alternate fuels based on availability and composition. For this, the proponent shall identify suitable industries with such wastes and enter into an MOU for long-term utilisation of such wastes as per the E(P) A Rules, 1986 and with necessary approvals.

xx. Efforts shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly. The PP shall enter into an MOU with units with potential for generating HW. And in accordance with HW Regulations and prior approval of the MPPCB.

xxi. As proposed, green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

xxii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.

xxiii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 30.5.2013 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Bhopal.

xxiv. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.

xxv. The proponent shall prepare a detailed CSR Plan for every next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO, Bhopal. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

xxvi. A Risk Assessment Study and Disaster Preparedness and Management Plan along with the mitigation measures shall be prepared with a focus of Disaster Prevention and a copy submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB within 3 months of issue of environment clearance letter.

xxvii. To educate the workers, all the work places where dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.

xxviii. 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.

29.3.2 Expansion of Integrated Steel Plant (Sponge Iron – 7,26,000TPA, Blast Furnace -318500 TPA, WHRB -60MW, CPP -135 MW, Ingot/Billet -6,24,000TPA from Electric Arc Furnace (4x30T), Rolling Mill -2,50,000TPA, producer Gas Plant (12000Nm3/h), Oxygen Plant (3000 Nm3/hr), Coal Washery (4MTPA), Sinter Plant (4,08,100TPA), Coke Oven (200,000TPA) and Air Separation Plant – Oxygen (3000Nm3/h), Nitrogen (12,000Nm3/h), Argon (70Nm3/h) of **M/s Nalwa Steel & Power Ltd.** at vill. Taraimar, Tehsil Gharghoda, Dist. Raigarh, Chhattisgarh – **(EC)** (No.J-11011/1108/2007-IA.II(I)

M/s Nalwa Steel & Power Ltd. and their consultants M/s EMTRC Consultants Pvt Ltd made 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 19th meeting of the Expert Appraisal Committee (Industry) held on 22nd – 23rd February, 2011 for preparation of EIA-EMP report. The TOR was awarded by MoEF vide F.No. J-11011/1108/2017-IA.II(I) dated 13th April, 2011 for preparation of EIA-EMP report. The validity of ToR was extended by MoEF vode letter dated 12th November, 2013. PP submitted the final EIA-EMP report vide letter no. nil dated May, 2014 after conducting Public Hearing for grant of Environmental Clearance. The proposed project activity is listed at S.No. 3(a) in primary metallurgical industry under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

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 Nalwa Steel and Power Limited (NSPL) is operating an Integrated steel plant near village Taraimal, Tehsil Gharghoda, District Raigarh in Chattisgarh. NSPL proposes to expand the iron and steel making facilities. Land required for the expansion unit is 119.022 ha out of which NSPL purchased 35.648 ha land and 65.963 ha Land is in advanced stage of acquisition. For balance 16 ha land, notice under section 4 of LAA to be issued. No forest land, no Human settlement on identified land. Nearest town is Raigarh more than 10 km away. Nearest highway Raigarh – Ghargoda passes adjacent to the site. Nearest River is Kelo river which is approximately 0.5 Km from the site. A nala passes outside the project area adjoining the boundary. No National park and wildlife sanctuary present within 10 km radius of project site. The capital cost of the project is Rs.3500 crores of which an amount of 125 crores is estimated for EMP. SH – Raigarh – Ghargoda passes close to the plant. Total project cost is Rs 3500 crores. Coal washery obtained an EC on 24.01.2007 – existing capcity is 13,20,000 TPA which proposes to expand by 4MTPA to a total capacity of 5.3MTPA.

3. Details of Existing Units and Proposed Expansion Units are presented in the following table:

S. No	**Name of Unit**	**Existing Capacity**	**Proposed Addition**	**Final Capacity**
1	Blast Furnace	Nil	318,500 TPA	318,500 TPA
2	Sponge Iron Plant	198,000 TPA	726,000 TPA	924,000 TPA
3	Sinter Plant	Nil	408,100 TPA	408,100 TPA
4	Coke Oven	Nil	200,000 TPA	200,000 TPA
5	Steel Making Shop(EAF)	—	624,000 TPA (EAF)	624,000 TPA
6	Steel Making Shop (Induction Furnaces)	140,000 TPA (4 x 12 tons Induction Furnaces)	269,500 TPA by replacing the 4x12 t IF with 3x30 t IF	409,500 TPA
	Total steel production			1033,500 TPA
7	Rolling Mill	250,000 TPA	200,000 TPA	450,000 TPA
8	Coal Washery	1320,000 TPA		1320,000 TPA
9	Captive Power Plant WHRB based using waste heat from DRI	8 MW	60 MW	68 MW
10	Captive Power Plant AFBC based using coal, rejects and char	16 MW	135 MW (CFBC)	151 MW
	Total power generation			219 MW
11	Producer Gas Plant	12000 Nm^/hr	12000 Nm^J/hr	24000 Nm^J/hr

12	Oxygen Plant	100 Nm"7hr	3000 Nm^a/hr	3100 NrrvVhr
	Nitrogen		12000 Nm3/hr	12000 Nm3/hr
	Argan		70 NM3/hr	70 NM3/hr

PP mentioned that the coal requirement will be 2.25 MTPA. Ministry of Coal (MoC), Govt. of India allocated Gare IV/6 coal block jointly to NSPL and JSPL Raigarh for use in steel making. Ministry of Coal de-allocated the Gare IV/6 coal block in Feb 2014. However, Hon'ble Supreme Court has later cancelled all the coal blocks. MoC will be e-auctioning all the de-allocated blocks by March, 2015 and NSPL will participate in the e-auction.

Iron ore will be purchased from mines located in Orissa. Limestone, quartzite, dolomite and manganese ore will be purchased from mines located in CG and MP. Raw materials shall be transported by rail and unloaded at Railway Siding of NSPL near Kirorimal Nagar railway station. Thereafter raw materials shall be transported to the plant site by road. Similarly the finished steel products shall be transported by road till Kirorimal Nagar rail way siding. The distance between NSPL plant and railway siding is approx. 20 km.

The total water requirement for the expansion project is 22680 kl/day (8.27 MCM). The source of water is Kalma Barrage on River Mahanadi. Permission has been obtained from Water Resource Department CG Govt. It was stated that the plant consumes 4.8L of water/Tonne of steel produced. Wastewater segregation from all sources, treatment and then reuse / recycling within plant premises. No discharge outside plant premises.

Ambient air quality monitoring has been carried out at 8 stations in the study area on 24 hourly basis. The concentrations of PM10 and PM2.5 at all the 8 AAQM stations ranges between 39.0 to 74.0 µg/m3 and 33.0 to 54.0 µg/m3, respectively. The concentrations of SO2 and NO2 were found to be in range of 5.0 to 11.6 µg/m3 and 9.0 to 22.4 µg/m3 respectively. Secondary de-dusting systems considered at all points to control fugitive dust emission ESP & Bag Filters considered to control point emissions. Waste gases generated from DRI kiln, blast furnace and coke oven gas will be used to produce steam through Waste Heat Recovery Boilers to generate 60 MW electricity.

An estimated 1MTPA of solid wastes and 4LTPA of flyash and 36,000 TPA of ash from the Producer Gas Plant are to be transported. Char is to be used in CFBC boiler. Coal tar produced is sold. Land is in possession of the PP. Certified compliance report has been furnished by RO, Bhopal dated 21.07.2014. NGT has banned dumping of flyash onto land. Raw gas from the Producer Gas Plant is sent directly for firing, no ETP or cleaning system.

It was stated that 33% land area of existing plant is already under greenbelt. A total 1,26,455 trees has been planted. Further, an additional 39 ha land shall be developed as greenbelt in proposed expansion. 1500 trees will be planted per ha of land. Native species shall be planted.

One litigation is pending at High Court of Chhattisgarh, Bilaspur against the project. Gita Devi Agrawal and others. Respondents, State of Chhattisgarh and others. Writ Petition No. 1700 of 2013. It is submitted by the petitioner that the Land Acquisition Officer, Gharghoda has initiated land acquisition proceedings for acquisition of Khasra Nos. 51 and 52 owned by the petitioners and registered a case bearing case no. 03-A-82/2012-2013 in which a declaration under section 6 of the Land Acquisition Act 1894 has been published in the newspaper on 18-10-2013. The litigation is in regard to acquisition vide Article 300A of the Constitution of India as well as various provisions of Land Acquisition Act 1894, the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 and the provisions of the Panchayats (Extension of the Scheduled Areas) Act 1996.

Public hearing for the proposed Project was conducted on 7th March 2014. The major issues raised during the public hearing are, Increase in the road accidents due to raw material transportation and increase in dust pollution, Fish dying due to discharge of wastewater and ash into Kelo river, availability of drinking water in nearby villages, expenditure earmarked under CSR is not being spent for the development of the villagers and surrounding area, decrease in agricultural yield due to heavy air pollution. PP mentioned that provision of Road Safety Committee, trauma centre, blood bank, ambulance, drinking water to nearby villagers, dug/tube-wells has been provided in CSR plan. PP has ermarked Rs. 175 Cr. for the CSR plan.

The Committee observed that the baseline data was collected in 2011. Plant was established in 2003. TOR granted in 2011 and TOR validity was extended by a year in Nov. 2013. P.H. was held in April 2014 and EC proposal submitted to MOEF in May 2014.

The Committee further observed that a village is exisitng adjacent to the Plant. The habitation is sandwiched between the existing and proposed projects. The EAC observed that AAQ values appeared very low as compared to CPCB data for Raipur located about 10km away and also keeping in view that the TPP of M/s Jindal Power Ltd is located upwind of the project site. Fresh one-month AAQ data to be generated. Transportation involves 800 trucks (to-and fro). The Committee desired that a Plan for minimising truck movement and feasibility of using railway line and siding of project of their sister concern – M/s Jindal Power Ltd. located adjacent to this project should be explored.

The EAC observed that A number of complaints have been received during Public Hearing in regard to poor air quality. The Committee after deliberations decided to send a team (sub-committee) of the EAC for a site visit to ascertain issues concerning the proposed expansion project.

<u>Further, the Committee also noted that there are a number of inconsistencies and shortcomings in the report and sought the following clarification:</u>

i. Baseline air data should be monitored for 1 month since the data presented is of 2011.
ii. Coal washery details including capacity and status of EC. A component of coal washery has been included in the existing and the proposed expansion project. A clarification may be provided whether coal washery is included as a part of expansion project.
ii. Water reservoir capacity.
iii. village population- whether 1800 or 597 persons residing in the villages adjoining the plant.

iv. Layout of the existing and proposed plant on a map as well as on a table along with land use break-up – existing and proposed in terms of agricultural land, forest land, habitation (settlements), water bodies, etc. Details of habitation of 597 persons in between existing and proposed expansion project areas.
v. Clarification on water consumption of the Plant per tonne of Steel Produced vis-à-vis CREP standards and the best available technologies in the world.
vi. Requirement of cleaning system for the effluents + Scrubber for the PGP.
vii. A specific plan for utilisation of solid waste management along with MOU from units for utilisation of the solid wastes. Plan for disposal of SMS slag.
viii. Disaster Management Plan in line with the district DMP and should be submitted including the population close to the industrial premises.
ix. Existing OHS details should be submitted
x. Decongestion plan for the existing roads should be submitted for the proposed 600-800 trucks per day and a Plan for utilising the existing railway line of M/s Jindal Power Ltd. adjoining the existing Steel Plant should be examined.

The Committee decided that the EIA-EMP report should be revised resubmitted.

29.3.3 Proposed Iron Ore Pelletisation Plant (1.2 MTPA), iron Ore Beneficiation Plant (3MTPA) and Producer Gas Plant (2x25,000Nm3/hr) of **M/s Gulf Ispat Ltd.** at village Ghughra, Tehsil Sihora, Dist. Jabalpur, Madhya Pradesh – **(EC)** (No.J-11011/256/2013-IA.II(I) TOR dated 13.01.2014)

M/s Gulf Ispat Ltd and their consultants M/s JM EnviroNet Pvt. Ltd, Gurgaon made 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 13th meeting of the Expert Appraisal Committee (Industry) held on 18th – 20th November, 2013 for preparation of EIA-EMP report. The TOR was awarded by MoEF vide F.No. J-11011/256/2013-IA.II(I) dated 13th January, 2014 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report vide letter no. nil dated 28.11.2014 after conducting Public Hearing for grant of Environmental Clearance.

The proposed project activity is listed at S.No. 3(a) in primary metallurgical industry under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF&CC.

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 Gulf Ispat Limited has proposed to set up 1.2 MTPA Iron Ore Pellet Plant, 3.0 MTPA Iron Ore Beneficiation plant and 2x25000 Nm^3/ hr Producer Gas Plant at Village Ghughra, Tehsil: Sihora, District-Jabalpur, Madhya Pradesh. The land requirement for the proposed project is 32.696 ha (Private – 30.270 ha and Govt. – 2.426 ha). The latitude and longitude of the project site is 23^0 29' 27.6" N to 23^0 29' 45.5" N and 80^0 11' 09.3" E to 80^0 11' 46.5" respectively. No Forestland is involved. No National Park, Wildlife Sanctuary exists within 10 km radius of the project site. River Heran is located at a distance of 1km from

the project site. Balkund Nadi and Barne Nadi flow at a distance of 0.5km and 9km distance respectively from the project site. Dundi railway station is located at a distance of 6.5 km from the project site. No court cases/litigation is pending against the project. The raw materials required are iron ore fines (30 LTPA), Coke Breeze (0.014 LTPA), limestone (0.014 LTPA) and bentonite (0.014 LTPA), FO/LDO (6000 KLtr.) and Coal (1.44 LTPA).The power requirement is 10 MW and will be met from MPPKVV Co. Ltd., Jabalpur. Project cost is Rs. 650 crores. Rs. 20 crores and Rs.200 lakhs per annum is earmarked towards the capital cost and recurring cost per annum towards the environmental pollution control measures.

The details of status of land acquisition is given below:

Village	**Land Acquired (Ha)**		**Land to be Acquired (Ha)**		**Total Land (Ha)**
Ghughra	Govt. Land	Private Land	Govt. Land	Private Land	
	--	4.23	2.426	26.04	32.69

Iron Ore is required for the Beneficiation plant, which will be sourced from local market as well as from GIL's Captive mines for which Company has already applied for PL.

S. No.	Proposed Facility	Raw Material Required	Quantity (Lakh Tonne/ Annum)	Source	Distance and Mode of Transportation
1.	Beneficiation Plant (3.0 MTPA)	Iron Ore Fines	30	Nearby area /GIL's Own Mines*	30 Km By Road
2.	Pelletisation Plant (1.20 MTPA)	Iron Ore Fines/ Concentrate	14.4	Captive	By Conveyor
		Coke Breeze	0.14	Jharkhand/Chhattisgarh	~300 km to 500 Km By Road/Rail
		Bentonite	0.14	Gujarat	~1000 to 1200 Km By Road/Rail
		Limestone	0.14	Local Mines in Katni	~100 Km By Road
		FO/LDO in KLtr.	6000	Nearest depot of the Petroleum companies	75 Km By Road
3.	Producer Gas Plant (2x25000 Nm^3/hr)	Coal	1.44	Imported coal / Indian Coal	By Port/Road

To control air emissions enclosures will be provided for unloading operations, water will be sprayed during unloading of materials, covered conveyer belt will be used for material transportation, all transfer point locations will be fully enclosed, bag filters will be provided at all the transfer points as per the requirement. The information on performance of Bag Filter in relation to the process/ product conditions will be collected to optimize the efficiency of Bag Filters.

The water requirement of 1500 KLD for the proposed project will be met by Heran River & Ground Water (only for domestic purpose) for which the company has already obtained the permission from Water Resource Department, Madhya Pradesh. There will be no industrial effluent generation from the

proposed project. However, domestic waste water generated from office area & canteen will be treated in STP. Treated water will be reused for green belt development, dust suppression, etc. An estimated 124642.2 cum of rainwater runoff is expected to be available with average rainfall. In order to meet the total water requirement (1500 cum/day) required by the industry, the industry can fulfil its water requirement of 83 days by doing direct rainwater harvesting by collecting the runoff in surface reservoir.

Ambient air quality monitoring (24 hourly samples) at 8 locations within the study area of 10km, twice a week during study period during December 2013 to February 2014. The concentration of PM_{10} & $PM_{2.5}$ for all the 8 AAQM stations ranges between 42.58 to 80.41µg/m^3 & 20.11 to 32.29µg/m^3 respectively. The SO_2 concentrations are in the range of 6.44 to 9.18µg/m^3 and the NO2 concentration in the range of 11.24 to 19.79µg/m^3 for all the 8 AAQM stations. The concentration of Carbon Monoxide detected are <0.50 mg/m^3 at all monitoring stations. PM_{10}- Peak GLC is found to be less than 0.50 µg/m^3 (0.277µg/m^3). SO_2- Peak GLC is found to be 0.833µg/m^3. NO_2- Peak GLC is found to be 0.55µg/m^3.

A Plan is to be prepared for tailings generated from Beneficiation Plant for use in cement plants of Jaypee Bela, Rewa. Amount of ash generated from PGP is 32,400MT. PGP has an ETP and a gas cleaning system. An ESP (dry cleaning system) and water spray system in stage-II for collection of dust and tar exits.

Public hearing was held on 7th July, 2014 at the proposed project site at village Ghugra, tehsil –Sihora , district –Jabalpur, Madhya Pradesh under the chairmanship of Shri Chote Singh, Addl. DM, Jabalpur. The issues raised during the Public Hearing are employment for the local population, animal living in the area may be affected due to pollution, pollution control measures, noise pollution, land price issue etc. CSR activities will be prioritized on local needs, which focus on Health, Education, Infrastructure Development and Environment Conservation. The company proposed 5% of the total project cost (Rs 650 crores) for the upliftment of the area and for the people living nearby. A CSR Plan has been prepared until year 2024-25. An amount of Rs 32.5 cr. has been earmarked towards the CSR activity over a period of 10 years.

3. After detailed deliberations the Committee recommended the proposal for environmental clearance subject to stipulation of the following conditions in addition to any other measures for environmental protection:

i. Specific Plan for solid waste utilisation with specific companies for use of rejects/solid wastes generated including Plan for the tailings and the final products in specific cement units along with MOUs shall be submitted
ii. Material balance for the raw material and the waste to be generated shall be submitted
iii. Detail plan for the disposal of clinker from the producer gas plant shall be submitted
iv. MoUs with the cement plant/brick kilns for ash and tailing shall be submitted
v. Revised layout plan showing water harvesting structures shall be submitted.
vi. Detailed CSR Plan for 5% of the total project cost (Rs 650 crores) for the upliftment of the area and for the people living nearby shall be submitted.

The PP shall submit the details of the present position on the WL Clearance for processing for grant of EC.

29.3.4 Proposed expansion of Ferro Alloys Plant with addition of 2x16.5 MVA SAF of **M/s T.S. Alloys Ltd**. at village Ananthapur, Tehsil Athagarh, Dist. Cuttack, Odhisa **(**EC**)** J-11011/43/2011.IA-II(I)

PP has requested that their case may be considered in the next EAC meeting.

29.4 Cases for Terms of Reference (TOR)

29.4.1 Replacement of Electric Arc Furnace (EAFs) of Steel Making Plant by Basic Oxygen Furnaces (BOFs) in Hazira Facility of **M/s Essar Steel India Ltd**., at Hazira Notified industrial area, village Hazira, Tehsil Choryasi, district Surat, Gujarat **(TOR)**

The project authorities and their Consultant (M/S En-vision Enviro Engineers Pvt. Ltd. Surat) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP.

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

M/s M/s Essar Steel India Ltd has proposed for replacement of Electric Arc Furnaces (EAF's) of Steel Making Plant – 1 (SMP-1) by Basic Oxygen Furnaces (BoF's) in Hazira Facility of M/s Essar Steel India Ltd., at survey nos. 262P,263P,310P,550P,561P,568P,569P,602P in Hazira Notified industrial area, village Hazira, tehsil Choryasi, district Surat, Gujarat. The total land requirement for plant is about 9.0 Ha. The additional land required for setting up facilities for BoF has been earmarked at different places within the steel complex. Capital Cost of the project is Rs. 1827 crores. Capital expenditure towards Environment protection measures is Rs. 334 crores and recurring cost is 77 crores per annum.

The application is for replacement of Electric Arc Furnace (EAF) with Basic Oxygen Furnace (BOF) and thereafter to SMS with no change in overall production capacity. It was informed that the project has recently obtained TOR for a DRI Unit which is 80% pellet based. The unit has a Pellet Plant for use in two exiting units and the remaining 20% of the pellets would be used in the BF. It was stated that in Phase-II, it is proposed to remove 2 mega modules (gas based) and introduce two gas based modules. However, a separate application would be made for this. The PP also sought permission for installation of a Granulation Unit as a stop-gap arrangement whenever the SMS has a problem. This would enable continued operation of the BF for the period when the problem in SMS unit is rectified.

Following are the details of proposed facilities and production capacities:

Sr. No.	Plant Facilities	Capacity(TPA)
1.	BOF facility for Liquid Steel Production	4,310,000
2.	Slag	517,100
3.	Sludge & Fines	64,600
4.	BoF Gas (Nm3/year)	487 10^6

Total water requirement is 502.5 (Raw water 496 m^3/hr and Domestic water 6.5m^3/hr). Source of water is River Tapi, approval of irrigation department is obtained for 45 MGD. This will cater to the need of the proposed waster requirement. Industrial Waste Water of approximately 46m^3/hr will be used in cooling Slag. Domestic Waste Water of approximately 6.5m^3/hr shall be treated in the Existing Sewage Treatment plant. BOF Gas Cleaning System with Electrostatic Precipitator and Secondary Fume Collection System with Bag Filters shall be installed for air pollution control measures.

PP mentioned that ESTIL has the facility to produce 9.6 MTPA plain carbon steel slabs/coils from its existing two different steel making facilities. EC was already obtained vide letter J-11011/74-III/2006-IA II(I) dated 29.5.2008. PP has already applied for replacing DRI Modules with Blast Furnace, and further to increase productivity, submitted the present application for replacing EAFs by Basic Oxygen Furnace (BOFs). This way process will become not only more efficient but also more environmentally friendly.

The Committee sought a specific plan for SMS slag utilisation. The Committee after deliberations recommended grant of specific TORs for this project and also recommended that the specific TORs be combined with the TOR granted dated for preparation of a single EIA-EMP Report and one P.H. for both the TORs as they are of the same unit within the same premises. The Committee was informed that baseline data for Nov. 2014 to Jan 2015 has begun and the Committee agreed for the same data for use for this project as well for preparation of the single EIA-EMP Report.

The Committee decided that since PP has already applied for replacing DRI Modules with Blast Furnace for which ToR letter was already granted, a single EIA report can be prepared for both the projects i.e. replacing DRI Modules with Blast Furnace and present proposal of replacing EAFs by Basic Oxygen Furnace (BOFs).

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

1. A single EIA report can be prepared for both the projects i.e. replacing DRI Modules with Blast Furnace and present proposal of replacing EAFs by Basic Oxygen Furnace (BOFs).
2. Detailed air quality data of air quality monitoring stations for every monitoring site for all days should be submitted in the form of annexure along with the EIA/EMP report.
3. Public Hearing is exempt for both projects as the projects are located within the notified Hazira Industrial Area.

29.4.2 EC for existing 1.2 MTPA Pellet Plant of **M/s Jindal Saw Ltd.**, installed and Commissioned at village Pur, Dist. Bhilwara, Rajasthan (**TOR vide NGT Judgement dated 27.05.2014)** (J-11011/371/2014-IA.II(I)

The proposal is for regularisation of the existing Pellet Plant of 1.2 MTPA capacity -cum- expansion to 1.4MTPA by operation of the unit for 340 days instead of 300 days. It was informed that the Pellet Plant

is located within the premises of Integrated Steel Plant for which a TOR was granted on 17.11.2014 for proposed **Integrated Steel Plant (Sinter plant: 18,50,000 TPA, blast furnace: 10,05,000 TPA, DRI plant: 6,50,000, SMS:10,00,000 TPA, Rolling Mill:7,25,000 TPA, CPP:75 MW, Supporting utilities like RMH yard, Oxygen Plant, DM Plant, Lab, HVAC, Air compressor, DG sets, etc)**.

The project authorities and their Consultant (M/s EMTRC Consultants Pvt. Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. The application is for regularization of their existing Pellet Plant by obtaining EC under the EIA Notification 2006, vide NGT Judgment dated 27.05.2014.

It is noted that JSL is operating 7 MTPA iron ore mines and 2.5 MTPA iron ore beneficiation plant at village Dhedwas and Pur, Bhilwara, Rajasthan. Environmental clearance for 7 MTPA iron ore mining and 2.5 MTPA beneficiation plant was obtained from MOEF on 09.08.2010. JSL commissioned 1.2 MTPA Pellet Plant after obtaining Consent to Establish dated 01/08/2012 and Operate dated 17.04.2013 from Rajasthan State Pollution Control Board. The pellet plant is located just adjoining the mining lease area. Iron ore concentrate from the beneficiation plant is transported to the pellet plant through belt conveyors. JSL also obtained TOR for conducting EIA Study of Integrated Steel Plant proposed to be located adjacent to Iron Ore Mines cum Beneficiation Plant and Pellet Plant in the 23rd EAC meeting held on 18th September 2014.

The latitude and longitude of the project site are 25^0 18' 56.3" to 25^0 19' 13.7" N and 74^0 32'16.7" to 74^0 32' 29.9" E. PP mentioned that 40.76 acres of Industrial land has been purchased from Govt of Rajasthan. The nearest highway is NH-79: 2.0 km East. Nearest Railway Station is Bhilwara which is 9 Km from the site. Nearest town is Bhilwara. Karba reserve forest (RF) is 8.2 Km SW and Pansal RF is 1 km NE. River Kothari flows at a distance of 7 km N, Right Main Canal 4.2 km NE and Kothari River Reservoir at 5.2 km N. No National Park, Wildlife Sanctuary; Migratory corridor exists in 10 km area of the project site.

Water requirement for the 1.2 MTPA Pellet Plant is 250m^3/day; 225m^3/day for mixing the raw materials as nodules , equipment cooling and 25m^3/day water for domestic purpose. Permission of 25m^3/day ground water for drinking purpose given in CTO. JSL installed 10 MLD STP for Bhilwara City sewage water treatment at Kewara, near Bhilwara Town. Treated sewage water is transported to site using 23 km long pipeline. The power requirement will be 5.6 MW sourced from grid. The cost of the project is 322.63 cr.

PP mentioned during the meeting that since they are using magnetite ore and the no of days will also be increased from 300 to 330 days, they are suppose to get enhanced output. Therefore the EC should be granted for 1.5 MTPA instead of 1.2 MTPA. PP requested that they may be permitted to se the same baseline data which is being collected for the TOR granted on 17.11.2014 for proposed Integrated Steel Plant (Sinter plant: 18,50,000 TPA, blast furnace: 10,05,000 TPA, DRI plant: 6,50,000, SMS:10,00,000 TPA, Rolling Mill:7,25,000 TPA, CPP:75 MW, Supporting utilities like RMH yard, Oxygen Plant, DM Plant, Lab, HVAC, Air compressor, DG sets, etc) within the same plot and for preparation of a combined EIA-EMP study for both.

After deliberations, the Committee recommended TOR for the project and also recommended that one single EIA-EMP Report could be prepared along with conduct of one P.H. as the project(s) are within the

same Project of PP within the same premises since the pellet plant is situated in the same premises of proposed integrated Steel Plant for which ToR was already granted, common public hearing can be conducted for the combined project of Steel Plant and pellet plant (1.5 MTPA). The Committee prescribed following specific TORs for undertaking detailed combined EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2**:

1. After preparation of combined EIA-EMP report, a common public hearing to be conducted for the combined project of Integrated Steel Plant and 1.5 MTPA pellet plant. P.H. shall be conducted by the Rajasthan Pollution Control Board as per the generic TOR.

2. EC shall be obtained within one year of grant of TOR as the project is for regularisation of the existing Pellet Plant vide NGT Judgement dated 27.05.2014.

29.4.3 EC for existing and proposed expansion of Pellet Plant of **M/s G.R.Metaliks and Industries Pvt. Ltd**. at Ph.#2, Siltara Industrial Growth Centre, vill. Siltara, Tehsil & Dist. Raipur, Chhattisgarh **(TOR** vide NGT Judgement dated 27.05.2014) (J-11011/379/2014-IA.II(I))

The project authorities and their Consultant (M/s Pollution and Ecology Control Services (PECS), Nagpur) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. The application is for regularization of their existing Pellet Plant by obtaining EC under the EIA Notification 2006, vide NGT Judgment dated 27.05.2014 and expansion of the existing plant from 90000 TPA to 3,00,000 TPA.

M/s G.R.Metaliks and Industries Pvt. Ltd. has proposed to regularize the existing plant of capacity 90000 TPA and expand it to 300,000 TPA. The project is located at Khasra no. 98/1-2,99,100,101/1-2, 102/2, 106/5-6, 107, 108, 109, 110/1,2,3,4, Siltara village, Near Phase # 2, Siltara Industrial Growth Centre, Raipur (Tehsil & District), Chhattisgarh. The proposed project area falls in Raipur area which is severely polluted area as categorised by CPCB with CEPI of - 65.45. River Kharun and Kulhan nala flow at distance of 3kms and9kms respectively from the plant. National Highway (NH # 200) passes at a distance of 1Km from the plant. Nearest Railway Station is Mandar situated at distance of 6.3 Kms from the plant. Nearest village is Sondra situated at a distance of 1kms from the plant. No forestland is involved in the site. There are no National Parks/Sanctuaries/Reserve Forests within 10 Km radius of the plant.

The existing pellet plant is of 90000 TPA capacity and the proposed expansion proposal is of 3,00,000 TPA. 14.0 acres of land is in possession of management and proposed expansion will be taken up the existing plant premises. The cost of the proposed project is 48.27 cr.

S.No.	Unit	Existing plant*	Proposed Expansion	After Expansion
1	Pellet plant	90,000 TPA	3,00,000 TPA	3,90,000 TPA

2	Gasifier (for Producer gas)	2000 Nm^3/hr	13000 Nm^3/hr	15000 Nm^3/hr

The details of raw material requirement are given below:

For Pelletisation units (3,90,000 TPA)				
S.No.	**Raw Material**	**Quantity (TPA)**	**Source**	**Mode of Transport**
1	Iron ore fines	4,90,000	Local / Orissa Sector	By Rail & Road through covered trucks
2	Coke breeze	10,800	Chhattisgarh/Vizag.	Rail route / by road
3	Limestone	12,350	Chhattisgarh / Madhya Pradesh	By Rail & Road through covered trucks
4	Bentonite	6,110	Gujarat	By Rail & Road through covered trucks

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

1. P.H. will be exempt if Siltara Industrial Growth Centre is a notified Industrial Area, details of which should be furnished.
2. EC shall be obtained within one year of grant of TOR as the project is for regularisation of the existing Plant vide NGT Judgement dated 27.05.2014.

29.4.4 Expansion of Ferro-Alloy Unit (from Low Carbon Ferro Alloys manufacturing Unit with a production capacity of 8000 TPA to FeSi 3700 TPA SiMn 8350 TPA FeMn in 12500 TPA ha of **M/s The Metallic Alloys** at Plot No. 29, Phase II, Siltara Industrial Growth Centre, Siltara Village, Tehsil & District Raipur, Chhattisgarh (TOR)

The project authorities and their Consultant (M/s Pioneer Enviro Lab & Consultancy Pvt Ltd) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP.

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

The proposed project is situated in Siltara Industrial Growth Centre. The project area falls in Raipur which is severely polluted area as categorized by CPCB with CEPI of - 65.45. There are no National Parks/Sanctuaries/Reserve Forest within 10km radius of the plant. River Kharun and Chhokhara Nallah flow at distance of 4kms and 2.8kms respectively from the plant. National Highway (NH # 200) is passing at a distance of 0.8 Kms. from the plant. Nearest Railway Station is Mandar situated at distance of 5.8kms. from the plant. Nearest village is Siltara situated at a distance of 1.2kms from the plant. No forestland is involved in the site.

Existing plant of Submerged Electric Arc Furnace (6 mVA) for the production of Low carbon Ferro Alloys - 8000 TPA was established prior to EIA notification 2006, Consent for Establishment was taken from

CECB. The present proposal is for enhancement of proposed production capacities which will be taken up by modernization of existing Furnace only. PP mentioned that no additional furnaces are proposed. The PP has requested for the production capacity of Fe-Si – 3700 TPA **or** Si-Mn - 8350 TPA **or** Fe-Mn – 12500 TPA. The estimated cost of the project is Rs. 160 lakhs. No additional land is envisaged as it is only increase in production capacity through modernization of existing 6 MVA furnace. The existing unit is operating on a CTO from CECB. CTE was obtained on 19.05.2006.

Raw material requirement is as per the following table:

S.N.	Raw material	Requirement
1.	**For Ferro Silicon (Fe-Si)**	
a.	Quartz	4500 Tons/ Year
b.	Pet Coke	550 Tons/ Year
c.	M.S. Rounds	110 Tons/ Year
d.	Electrode Paste	220 Tons/ Year
2.	**For Silico- Manganese (Si-Mn)**	
a.	Mn Ore	8400 Tons/ Year
b.	Mn slag	9700 Tons/ Year
c.	Quartz	260 Tons/ Year
d.	Pet Coke	880 Tons/ Year
3.	**For Ferro Manganese (Fe-Mn)**	
a.	Mn Ore	13050 Tons/ Year
b.	Pet coke	7500 Tons/ Year
c.	MS Rounds	550 Tons/ Year
d.	Electrode paste	1500 Tons/ Year

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

1. P.H. is exempt if Siltara Industrial Growth Centre is a notified Industrial Area, detailes of which shall be furnished for grant of TOR.

The Committee recommended TOR to be granted after ascertaining whether the unit has been operating in violation of the EIA Notification or not. Details of CTE and CTO are to be furnished for grant of TOR.

29.4.5 Capacity expansion of production to 1.5 MTPA Crude Steel of **M/s Nova Iron & Steel** at village Dagori, Ameri Akbari, Satighat, Tehsil Bilha, Dist. Bilaspur, Chhattisgarh (**TOR**) (J-11011/379/2014-IA.II(I)

The project authorities and their Consultant (M/s M. N. Dastur & Co. (P) Ltd.) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP.

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

The existing unit Nova Iron & Steel Limited includes one 500 TPD DR Kiln and three 15 ton Induction Furnaces capable of producing 30,000 TPA liquid steel. Nova Iron & Steel Limited intends to augment the existing facilities at Bilaspur District of Chhattisgarh to produce 1.5 MTPA crude steel along with CPP generating 260 MW of power.

Nova Iron and Steel Limited (NISL) is located in Belha Tehsil of Bilaspur district, Chhattisgarh, between latitudes 22°53'N to 22° 55' N and longitudes 82° 00' E to 82° 05' E and 268m above mean sea level (MSL). The site is approximately 40 km from Bilaspur town. The site is located on the eastern side of national highway NH-130 and connected with the bypass road from NH-130. The bypass road is connecting NH-130 and village Belha at the northern side of proposed plant. The NH-130 is about 9 km away from the site. The nearest railway station is Dagori, situated about 6 km. on the north-east side of the plant.

NISL has obtained Consent to Establish (NOC) for 0.15 MTPA sponge iron production from Madhya Pradesh Pollution Control Board vide letter number 6461/TS/Ez/Bla.-57/MPPCB/92 dated 15.05.1992. Consent to Establish (NOC) for 12 MW Waste Heat Recovery based Power Plant from Chhattisgarh Environment Conservation Board on 04.08.2012 vide letter no. 2527/TS/CECB/2012. Consent to Establish (NOC) for 3 nos. Induction Furnaces of total production capacity 30000 TPA liquid steel from Chhattisgarh Environment Conservation Board on 15.04.2014 vide letter no. 296/TS/CECB/2014. Consent to Operate for the plant from Chhattisgarh Environment Conservation Board vide letter nos. 1184/TS/CECB/2014 & 1186/TS/CECB/2014 dated 26.05.2014. NISL has, in principal, obtained water withdrawal permission from State Water resource Dept.

It was informed that the unit was taken over from M/s Bhushan Steel in 2011. The existing unit is a 500TPD DRI kiln established in 1992. An Induction Furnace of 30,000TPA with a CTE and CTO from the CECB is under installation. The present proposal is for setting up a unit of 1.5 MTPA crude steel production along with 260MW CPP. Estimated cost of the project is Rs10, 834 crores. The unit will be installed in an area of 480 acres (194.25ha) of a total project area of 803 acres which is in possession. There is no habitation nearby.

The water is available from River Sheonath located adjacent, to the south of the Project site. The total water requirement will be 10.77 MGD (2040 cum/hr). Power requirement will be 260 MW. Source of power will be captive generation and grid power. Residential colony has been developed by the company. It is envisaged to be developed further. Schools, medical facilities and civil amenities exist within 15 km from the Project site. The total available with the PP is 325 ha. Land to be utilised for Steel Plant and CPP will be 194.25 ha. PP mentioned that out of 325 Ha, 130.75 ha will be used for green belt development.

The expansion is proposed within existing area of Integrated Steel Plant located at village Dagori, Tehsil - Belha, district - Bilaspur, Chhattisgarh. The cost of the project is Rs. 10,834 crores.

S. N.	Materials	Total Quantity (in '000 TPA)	Source	Mode of Transportation
1	Iron Ore (Pellet)	1,471.6	Indigenous	Rail
2	Iron Ore (Fines)	1,653.5	Local market	Rail
3	DRI	213.5	Local market	Rail/Road
4	Coke	606.2	Imported	Rail
5	Raw Coal	1,500	SECL	Rail
6	PCI Coal	175.7	Imported	Rail
7	Non Coking Coal	1,232.6	Indigenous	Rail/Road
8	Limestone	734.4	Local market	Rail/Road
9	Dolomite	114.7	Local market	Rail
10	Ferro Alloys	20.5	Open market	Rail

It was stated that the entire requirement of iron ore and coal would be obtained by e-auction.

The Committee desired that a water harvesting structure with a water storing capcity of 90 days should be established within the premises. The Committee also desired that the PP examine the feasibility of linking PP's railway siding by a rail line for about 2km to minimise road transportation. The Committee also desired that a Plan for utilisation of solid wastes (BF slag, IF slag, EAF slag and flue dust from various dust catching units and sludge from gas cleaning plants, bag houses, mill scale and sludge from rolling mills, etc).

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

1. P.H. shall be conducted by the Chattisgarh Pollution Control Board as per the generic TOR.
2. Layout of the site showing the acquired land along with the green belt all along the periphery of the plant should be submitted
3. Commitment that all slag will be used and nothing will be disposed on the land should be submitted

29.4.6 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 of **M/s Ghankun Steel Private Limited** at Phase 2 Siltara Industrial Area & Sondra Village Tehsil & District Raipur, Chhattisgarh (**TOR)**

The project authorities and their Consultant (M/s Pioneer Enviro Laboratories and Consultants Pvt Ltd) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. All Metallurgical industries (ferrous & non ferrous) is listed at S.No. 3(a) under Category 'A' of

the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MOEF.

The project is located at 78 (P), Phase – II, Siltara Industrial Area, and Khasara Nos.: 464/4, 464/5, 465/1, 466/1, 466/2, 464/2, 464/3, 522, 470/1-2-3, 469/1-2, 467/1-8, 465/2, 468/2, 468 of Sondra Village, Raipur Tehsil & District, Chhattisgarh. PP mentioned that existing plant of DRI Kilns, Induction Furnace & Power (WHRB & FBC)]is operational for which CTE has been accorded (Prior to EIA Notification, 2006). The present propsoal is for Pellet Plant, Ferro alloys, Induction Furnace & Rolling mill. 27.19 acres of land is in possession of management and proposed expansion will be taken up the existing plant premises (out which 2.71 acres of land is in Industrial area and 24.48 acres of land is in Private land). The cost of the expension project is Rs. 130 Crores.

The proposed project is situated in partly in Siltara Industrial Growth Centre and partly in private land. The proposed project area falls in Raipur area which is severely polluted area as categorized by CPCB with CEPI of - 65.45. There are no National Parks/Sanctuaries/Reserve Forests within 10km radius of the plant. River Kharun and Kulhan nala flow at distance of 3kms and 9kms respectively from the plant. National Highway (NH # 200) passes at a distance of 1.30km from the plant. Nearest Railway Station is Mandar situated at distance of 6.2kms from the plant. Nearest village is Sondra situated at a distance of 0.3 Kms. from the plant. No Forest land is involved in the site.

Following table present the existing facilities and the proposed expansion:

S.N.	**Unit**	**Existing CTE awarded**		**Proposed Expansion**	**After Expansion**
		Implemented	**To be commissioned**		
1.	Pelletization unit	---	---	0.3 MTPA (1 x 1000 TPD)	0.3 MTPA (1 x 1000 TPD)
2.	Gasifier (for Producer gas)	---	---	7200 Nm^3/ hr	7200 Nm^3/ hr
3.	DRI Kilns (Sponge Iron)	2 x 50 TPD & 1 x 150 TPD **= (75,000 TPA)**	--	--	2 x 50 TPD & 1 x 150 TPD **= (75,000 TPA)**
4.	Induction Furnace with concast (Billets / Ingots)	1 x 6 MT **= (30,000 TPA)**	1 x 6 MT **= (30,000 TPA**)	3 x 10 MT **= (90,000 TPA)**	2 x 6 MT & 3 x 10 MT **= (150000 TPA)**
5.	Rolling Mill	---	---	1 x 500 TPD **= (150000 TPA)**	1 x 500 TPD **= (150000 TPA)**
6.	Gasifier for Rolling Mill	---	---	**12000 Nm^3/ hr**	**12000 Nm^3/ hr**
7.	Ferro alloys [2 x 9 MVA]				
	i. Ferro – Silicon	---	---	12600 TPA	12600 TPA
	or			or	or
	ii. Silico–Manganese	---	---	28400 TPA	28400 TPA
	or			or	or
	iii. Ferro–Manganese	---	---	37000 TPA	37000 TPA
8.	Power WHRB	1 MW	5 MW	---	6 MW

		based				
		FBC based	---	2 MW	---	2 MW

Total water required for the proposed expansion project will be supplied by C.G. Ispat Bhumi Ltd. Total water requirement for the expansion Project will be 850 KLD.

After deliberations, the Committee prescribed following specific TORs for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2** with exemption of conduct of P.H. in view of the fact that the unit is located in a notified Industrial area.

29.4.7 Expansion of Fe-Mn Plant from 0.0504MTPA to 0.06 MTPA and setting up of 0.06 MTPA Si-Mn Plant & 0.05 MTPA Sinter Plant of **M/s Tata Steel Ltd.** at Joda, Tehsil Barbil, Dist. Keonjhar, Odisha (**Extension of validity of TOR** No.J-11011/3/2012-IA.II(I) dated 14.02.2012)

The aforesaid project was granted a TOR dated 14.02.2012 for Expansion of Ferro-Manganese Plant from 50,400 TPA to 76,000 TPA with addition of 1x19MVA of Submerged Arc Furnace along with setting up of a new Sinter Plant of 30,000 TPA at Joda, Tehsil Barbil, Dist. Keojhar, Odisha. Subsequently PP vide letter dated 11.09.2012 submitted a fresh TOR appl. for expansion of a Fe-Mn Plant of 0.0504 MTPA to 0.06 MTPA, setting up (new facility) of a Si-Mn Plant of 0.06MTPA and for setting up 0.05MTPA Sinter Plant. The revised TOR with these revised proposed configuration was granted vide MOEF letter dated 14.03.2013. PP has sought extension of validity of TOR as the draft EIA report has been submitted to Odisha PCB for conduct of Public Hearing.

The EAC after deliberations recommended for extension of validity of TOR vide MOEF O.M. No. J-11013/41/2006-IA.II(I) (Part) dated 22.08.2014.

29.5 Any Other Items

29.5.1 Expansion of Sponge iron Plant (350TPD to 700TPD) and setting up of Coal Washery (0.35MTPA), Power Plant (36MW), Induction Furnace (8 No. x12T), Ladle Refining Furnace (2 No. x30T), VOD/AOD (2x30T) and Continuous Casting machine (2x16/11 Double Strand) of **M/s Times Steel & Power Ltd**. at Plot No. Kalunga Industrial Estate, Kalunga, Dist. Sundergarh, Odisha (Letter dated 12.11.2014 for Extension of validity of EC No.J-11011/520/2008-IA.II(I) dated 01.12.2009 to **M/s Nixon Steel & Power Ltd.**)

Terms of References (TORs) for the above awarded during the 86th Meeting of the Expert Appraisal Committee (Industry) held during 20th to 22nd October, 2008 for preparation of EIA/EMP. Public hearing was exempted as per Para 7(i), III Stage (3)(b) of the EIA Notification 2006. The proposal was considered in the 4th meeting of the Reconstituted EAC (I) held during 26th -27th October, 2009. The EC was issued by MoEF vide letter no. J-111011/520/2008-IA II (I) dated 1st December, 2009.

PP mentioned that during the period since August 2010 due to the inquiry of Shah Commission in various mining activities in Odisha State, maximum numbers of mines had to stop their operation. This in turn affected the production of Ore. As a result, there was acute shortage of iron ore which is the main raw material for plant. TSPL could not operate the existing unit in full load. Thus, suffered a huge financial loss and could not able to continue in full swing new construction of facilities for which the company obtained the EC. In view of the above PP has requested for extension of validity of EC for a further period of 5 years. PP further requested to issue the EC in the name of M/s Times Steel & Power Ltd.

The Committee after deliberations recommended extension of validity of EC for a period of 5 years with effect from 1st December, 2014. Regarding change of name, the Committee suggested to submit necessary documents to the Ministry for change of name of the company. The validity extension letter will be issued once the name change document is submitted and approved in the Ministry.

29.5.2 Integrated Steel Plant (1.5 MTPA) and WHRB-CPP (100MW) of **M/s VISA Steel Ltd**. at Kalinga Nagar Industrial Complex, Jakhpura, Sukinda, Jajpur, Odisha – Letter dated 29.09.2014 seeking extension of validity of EC and Amendment in EC No.J-11011/33/2007-IA.II(I) dated 12.06.2007 and EC No.J-11011/1000/2007-IA.II(I) dated 03.07.2014 for enhancing production)

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

29.5.3 Ferro Alloys and Steel Plant of **M/s Sarda Metals & Alloys Ltd.** at Sy.No. 179, 181-183, 185-203 of APIIC Industrial Area, vill. Kantakapalli, Mandal Kothavalasa, Dist. Vizianagaram, A.P. (Letter dated 07.10.2014 seeking **Extension of validity of EC** No.J-11011/164/2009-IA.II(I) dated 26.11.2009)

It was stated that an environmental clearance for the above proposal was granted on 26.11.2009 for the following three phases of implementation. PP has implemented phase – I of the project however phase – II and phase – III of the project is yet to be implemented. It has been mentioned by PP that phase – II shall be completed by 2017 and phase – III by December, 2019

S.No.	Facilities	Phase-I	Phase-II	Phase-III
	Unit-I			
1	Ferro Alloys	1 x 33 MVA (75,000 MTPA)	1 x 33 MVA (75,000 MTPA)	—
2	Sinter Plant	1 x 24 m^2 (1,25,000 MTPA)	—	—
	Unit-II			
3	Thermal Power Plant	1 x 60 MW	1 x 60 MW	2 x 60 MW
	As per revised configuration of Power Plant MEF Letter dtd.04.05.2010	1 x 80 MW	1 x 80 MW	1 x 80 MW

	Unit - III			
4	Coke Oven with Stamp charging	2,00,000 MTPA	---	.2,00,000 MTPA
5	Spong Iron Plant		2 x 500 TPD (3,00,000 MTPA)	
6	Blast Furnace (1 x 350 m^3)			2,50,000 MTPA
7	Steel Melting Shop Induction furnace (5x15 T) Arc Furnace (1x40 MT)			2,50,000 TPA 2,50,000 TPA
8	Rolling Mills			4,50,000 MTPA
9	Iron Ore crushing Plant			6,00,000 MTPA
10	Pellet Plant			6,00,000 MTPA
11	Railway Siding			

Phase-III is proposed in the next 5 years. PP has sought extension of EC for completion of Ph.III of the project. It was informed that 100% of the land is in possession. Cost of the project is Rs 1000 crores.

The Committee after deliberations recommended for extension of validity of EC for a period of 5 years with effect from 26.11.20014; however copies of CTO for Ph-I and Ph-II should be provided. The Committee also recommended for calibration of AAQ stack emission analyser to be checked and data to be furnished. The Committee observed that green belt has not been adequately developed and a green belt of 15-20 meters wide should be developed all along the periphery of the plant. The Committee desired that 2.5% (Rs 50 crores) of the total cost of the project be implemented for Ph.II and III of the project and a detailed CSR Plan be prepared in consultation with the villagers and the district administration for the Phase-II and III of the project.

29.5.4 Expansion of Integrated Steel Plant (from 1.5MTPA to 3 MTPA along with CPP from 2x50MW to 3x50MW) of **M/s Shree Uttam Steel & Power Ltd.** at vill. Satrda, Taluka Sawantwadi, dist. Sindhudurg, Maharashtra **(EC)** (TOR J-11011/158/2008-IA.II(I) dated 18.11.2010)

The Committee deferred consideration of the proposal to Jan. 2015 EAC meeting as documents have not been received.

29.5.5 Integrated Steel Plant (1.5 MTPA) along with CPP (100MW; 2x50MW) of **M/s Shree Uttam Steel & Power Ltd.** at vill. Satarda, Taluka Sawantwadi, Dist. **Sindhudurg,** Maharashtra – **Extension of validity of EC** and Amendment of EC No. J-11011/467/2010-IA.II(I) dated 20.01.2010)

Shree Uttam Steel & Power Ltd. (SUSPL) is in the process of implementation of 1.5 MTPA Integrated Steel Plant along with 2 x 50 MW Captive Power Plant for which EC has been granted by the Ministry vide Letter No. F. No. J- 11011/158/2008-1A 11(1) dated 20th January, 2010.

It was stated that the PP had immediately applied for capacity expansion in the year 2010. Accordingly TOR has been granted for 3.0 MTPA along with CPP 3 x 50 MW vide letter F. No. J-11011/467/2010-IA.II (I) dated November 18, 2010. As per said TOR, EIA/EMP has been submitted to MoEF on June 21, 2012. However, moratorium was imposed in Western Ghats Region, further process of implementation of 1.50 MTPA steel project was held. After lifting of moratorium PP applied for extension of validity of EC for 1.5 MTPA plant.

Since the PP is halfway through the process of getting EC for Integrated Steel plant from 1.50 MTPA to 3.0 MTPA with CPP from 2 x 50 MW to 3 x 50 MW they wanted to extend the validity period of EC which was granted vide letter F. No. J-11011/158/2008-IA (I) dated 20th January 2010 for further period of 5 years. It was clarified that amendment of EC is not required.

After deliberations, the Committee extended the validity of EC for the period of 5 years with effect from 20.01.2015.

29.5.6 Expansion of Steel Plant (Sponge Iron Plant 99,000 TPA Ingots/Billets 75,000 TPA; MS Structures/Bars 49,500TPA and Captive Power Plant 10MW) of **M/s Bihar Foundry and Castings Ltd.,** in Ramgarh Industrial Area, vill. Marar, Dist. Hazaribagh, Jharkhand (Letter dated 24.11.2014 for Extn of validity of EC No. J-11011/310/2009-IA.II(I) dated 28.01.2010)

M/s. Bihar Foundry and Casting Ltd. has obtained existing EC for the following units (File. No: F. No. J-11 011/310/2009-IA-II (I)) dated 28.01.2010.

It was informed that sponge Iron Rotary Kilns 3 numbers with Waste Heat Recovery Boiler have bene installed on the 3 Rotary Kilns which may produce about 5 MW of power, since 5 MW common Turbine for generation of Power has been installed. However, the project of 10 MW Captive Power generations from AFBC Boiler is pending as the PP requires coal along with the char generated from the Sponge Iron unit. Further, PP mentioned that they are facing financial constraints from bankers, hence they are unable to establish this 10 MW power plant.

PP further mentioned that the Company may be permitted to send coal char generated in all the three 100 TPD Sponge Kilns to Inland Power Ltd. till its 10 MW power plant of the Company is commissioned. The implementation status of the EC which was granted earlier is as per the following table:

S. N.	**Details**	**Capacity (TPA)**		Established Units for operation as per EC	Pending Units As per EC
		Existing Before EC	**Proposed EC Granted For Units**		
1	Sponge Iron Plant (3x100 TPD)	NIL	99,000 TPA	3 X 100TPD sponge iron 99000 TPA	NIL
2	Induction Furnace	33,660 (1x6 TPC & 2x3 TPC)	75,000 (1x10 TPH)	75000 TPA Ingots 1 X10TPH	NIL
3	Rolling Mill	16,500 (50 TPD)	49,500 (150 TPD)	NIL	under establishment

4	Captive Thermal Power Plant WHRB AFBC	NIL	15 MW 5 MW 10 MW	3 X WHRB Captive Power Generation 5 MW	10MW AFBC captive Power Plant requires Three Year Duration

In view of the above, it has been requested by PP to extend the validity of EC for the period of 3 years for establishment of 10 MW power plant from FBC Boiler.

After deliberation, the Committee extended the validity of EC for the period of 3 years with effect from 28.01.2015. Regarding request of the PP to send char generated in all the three 100 TPD Sponge Kilns to Inland Power Ltd. till its 10 MW power plant of the Company is commissioned the Committee decided that this could be agreed to and a condition stipulated in the EC letter for this interim arrangement.

29.5.10 Proposed 0.1MTPA Tunnel Kiln DRI, 4x8T IF, 0.05 MTPA TMT Bar and 3x4500 Nm3/h Producer Gas Plant of **M/s Kashvi Power & Steel Pvt. Ltd.**, at village Badapokhari, Tehsil Tangi, Dist. Cuttack, Odisha (Letters dated 13.03.2014 and May 2014 seeking Extn. of TOR No. J-11011/125/2012-IA.II(I) dated 22.02.2012)

ToR for the proposal of 0.1MTPA Tunnel Kiln DRI, 4x8T IF, 0.05 MTPA TMT Bar and 3x4500 Nm3/h Producer Gas Plant of M/s Kashvi Power & Steel Pvt. Ltd., at village Badapokhari, Tehsil Tangi, Dist. Cuttack, Odisha was granted on 22nd May, 2012. PP mentioned that the Public Hearing was delayed due to General Elections of 2014. PP vide letter dated 13.03.2014 has requested to extend the validity of ToR for further period of 1 year for conducting Public Hearing

After deliberations, the committee recommended extension of validity of ToR for a period of 1 year with effect from 22nd May, 2014.

FRIDAY, 12th DECEMBER 2014

29.6 Environmental Clearance

29.6.1 Proposed 0.8 MTPA Iron ore Pellet Plant and 1MTPA Iron ore Beneficiation Plant of **M/s Srijan Steel and Power Industries Pvt. Ltd**. at vill. Kamalpur, P.O. Sini, P.S. Saraikela, Dist. Sarikela-Kharsawan, Jharkhand **(EC**) (J-11011/218/2013-IA.II(I)

M/s Srijan Steel and Power Industries Pvt. Ltd and their consultants M/s Envirotech East Pvt. Limited. made 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 12th meeting of the Expert Appraisal Committee (Industry) held on 30th September, 2013 to 1st October, 2013 for preparation of EIA-EMP report. The TOR was awarded by MoEF vide F.No. J-11011/218/2013-IA.II(I) dated 2nd December, 2013 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report vide letter no. nil dated 26th November, 2014 after conducting Public Hearing for grant of Environmental Clearance. The proposed project activity is listed at S.No. 3(a) in primary metallurgical industry under

Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF&CC.

M/s Srijan Steel & Power Industries (P) Limited has proposed a green field project at Kamalpur, P.O. Sini, Block: Saraikela, District of Saraikela–Kharsawan, Jharkhand to produce 0.8 MTPA Iron ore Pellet and 1MTPA Iron ore Beneficiation Plant using travelling grate type Pellet Plant and matching conventional Iron ore Beneficiation (Fe-up-gradation) plant. The proposed project site is located between latitude 22˚46'25.82"N and longitude 85˚57'13.34"E with mean sea level 181 m. the project to be established on 16.3 acres of barren land. Closest habitation is 750m and railway station is 1km. There is no national park, biosphere reserve, sanctuary, habitat for migratory birds, archeological site, defence installation etc. within 10 km of the periphery of the project boundary. The cost of the project is Rs. 256.04 crores. Total Capital Cost for Environmental Pollution Control Measures will be Rs. 9 crores. Recurring cost / annum for Environmental Pollution Control Measures will be Rs. 2.1 crores.

Details of the raw material and Mode of Transportation:

S. N.	Raw Material	Total (in TPA)	Source	Mode of Transport
1.	Iron Ore Fines	10,40,000	Mines in west Singhbhum	Rail + Road Transport
2.	Anthrasite coal Fines	14,400	Import	Road Transport
3.	Limestone	12,000	Sundergarh	Road
4.	Bentonite	8,000	Kutch, Gujurat	Road
5.	Steam Coal	11,520	Purchased from Dhanbad	Road

Iron Ore (1MTPA) will be obtained from mines located at West Singhbhum, the ore will be brought to Kandra railway siding by railway rakes. From Kandra railway siding, iron ore will be brought to the plant site by trucks through the road covering a distance of about 19.1 kms. Other raw materials will be received either by railway & road transport or only by road transport. Iron content in effluents of the Beneficiation Plant will be concentrated to 48%. An estimated 48,000TPA of fines will be used in production of low-grade pellets for use in Blast Furnace.

The raw water will be sourced from River Sanjay. As per an initial estimate, water to the tune of 48.6 cu.m/hr will be required for the proposed project. The estimated power requirement for the proposed project is 7.5 MW, which will be sourced from State Electricity Board. To be designed as a zero discharge plant. There will be no effluent discharge outside the plant boundary. Domestic wastewater will be treated in Septic tank- Soak pit system. Tailings from Beneficiation unit will be disposed off in a designated location within the project premises. Dust as collected in the de-dusting system from Pellet Plant will be used in the pelletising mix.

Ambient air quality monitoring has been carried out at 8 locations to assess the existing air quality of the area for three months' period (December, 2013 – February, 2014). Average values of PM_{10} varied station-wise between 48.17μg/m^3 (at near Project Site) and 56.17μg/m^3 (at Chaitanpur). $PM_{2.5}$ varied

station-wise between 19.70 μg/m^3 (at near project site) and 22.79μg/m^3 (at Chaitanpur). Values of SO_2 over the study area at the 8 stations between 5.71μg/m^3 (near Project site) and 8.08μg/m^3 (at Banksai). average values of NO_x over the entire area was 13.38 μg/m^3. Adequate control measures like installation of Electrostatic Precipitator (ESP), Bag Filters, Dry Fog Dust Suppression System, Dust Extraction System and stacks of adequate height at relevant points.

Public hearing was held on 20/07/2014 at Utkramit Middle School, Ukri, PO Sini, Distt. Saraikela – Kharsawan under the chairmanship of Shri Sandeep Kumar Doraiburu, Addl Dy. Commissioner. The points raised during the public hearing were local employment opportunities, health, electricity & Drinking water. Employment for village women, assistance to support the farmers, effective pollution control. PP mentioned that priority will be given to the local people for employment as per their skill & capability, better education, healthcare, drinking water through our CSR Wing, measures shall be taken for the effective prevention of pollution, high quality pollution control equipments will be installed. Annuities for the vulnerable and abandoned (especially women and old persons) could be considered.

The Committee after deliberations recommended the project for environmental clearance subject to the following specific conditions:

i. Annuities shall be provided to the needy and vulnerable persons in and around project area.

ii. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), and bag filters etc. shall be provided to keep the emission levels below prescribed standards by installing energy efficient technology.

iii. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.

iv. Efforts shall 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.

v. All the effluents shall be treated and used for dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Domestic wastewater will be treated in the Sewage Treatment Plant.

vi. 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.

vii. All stockpiles of raw materials shall be stored in covered shed and with paved flooring.

viii. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Ranchi, SPCB and CPCB.

ix. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.

x. Proper utilization of fly ash, if generated, shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office at Ranchi.

xi. Green belt shall be developed in 33 % of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

xii. Recommendations, which are applicable, made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.

xiii. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Ranchi. Implementation of such program shall be ensured accordingly in a time bound manner.

xiv. 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, Ranchi. 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. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall *inter-alia* address (i) Standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

xvi. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 21.01.2014 shall be satisfactorily implemented and a separate budget for implementing

the same shall be allocated and information submitted to the Ministry's Regional Office at Ranchi.

xvii. A Risk Assessment Study and Emergency Preparedness and Disaster Management Plan with focus on Disaster prevention along with the mitigation measures shall be prepared with a focus of Disaster Prevention and a copy submitted to the Ministry's Regional Office at Ranchi, SPCB and CPCB within 3 months of issue of environment clearance letter.

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.

29.6.2 Expansion of Tannery Unit (Raw hide to finished leather) of **M/s A.K.I India Pvt. Ltd** at Tehsil & Dist. Unnao, Uttarakhand (**EC)** (J-11011/128/2013-IA-II (I)

M/s A.K.I India Pvt. Ltd and their consultants M/s Perfect Enviro Colutions Pvt. Ltd. made 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). The TOR was awarded by MoEF vide F.No. J-11011/128/2013-IA.II(I) dated 10th September 2013 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report vide letter no. nil dated 3rd December, 2014 after conducting Public Hearing for grant of Environmental Clearance. The proposed project activity is listed at S.No. 4 (f). i.e expansion of existing units outside the industrial area, under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

M/s A.K.I India Pvt. Ltd has proposed a project of 'Expansion of Tannery Unit (Raw hide to Finish Leather)' at 415/4, Khasra no. 657, 658, 725, 726, 727, 728, 729, 730, 732, 1006 & 1008, Akrampur village, Andar Nagar Palika, Unnao District, Uttar Pradesh on a land admeasuring plot area of 1.6159 Ha. The proponent M/s AKI India Pvt. Ltd. wishes to expand the plant from capacity of 60 hides/day (raw hide to wet blue leather) to 1000 hides/day (raw hide to finished leather). The Tannery Industry for capacity of 60 hides/day is already in operation before 2003. The geographical location of the site is 26°31'38.62"N and 80°27'35.49"E. The site is well connected with road and railways route all major cities in the Northern region of the country and the Nearest Town is Unnao - 2.0 km from project Site. Nearest railway station is Magarwara Railway station - 4.0 km W, nearest airport is KanpurAirport – 13.5 Km, SW and nearest highway id NH-2 (Lucknow to Shivpuri) at 1.8 Km from site in SE direction. The elevation of the site is about 127 m with respect to mean sea level. Following table shows raw material requirement for the existing and the proposed project. The source of raw material will be local market and nearby slaughter houses.

Sr. No.	Item	Consumption/day for Existing	Consumption/day for proposed
1	Raw Hides	1440 Kg or 1.44 Ton	24000 kg or 24 Ton
2	Hydrated lime	72 Kg	1200 kg
3	Sodium sulphide	32.4 Kg	540 Kg

4	Basic chrome sulphate	86.4 Kg	1440 kg
5	Sulphuric acid	32.4 Kg	540 kg
6	Common salt	100.8 Kg	1680 kg
7	Sodium Bicarbonate	32.4 Kg	540 Kg
8	Ammonium Sulphate	43.2 Kg	720 kg
9	Sodium Formate	14.4 Kg	240 Kg

Product Detail

Type of Plot	Hides/Skins per day	weight of Hides/Skins in Kg per day	Weight of Hides/Skins in Tons per day
Current capacity	60 hides/skins per day (raw hide to wet blue leather) (Average weight 20 Kg/hide)	1200 kg/day	1.2 TPD
Proposed capacity	1000 hides/skins per day (raw hide to finished leather) (Average weight 20 Kg/hide)	20000 kg/day	20.0 TPD

In existing tannery unit approx. 0.9 TPD of process waste (Fleshing, Shavings & Trimmings) is being generated and due to commercial value of the waste it is sold to end users. After expansion approx. 15.6 TPD process waste (Fleshing, Shavings & Trimmings) will be generated and it will be given to secondary user.

The total power requirement for the tannery unit in existing plant is 500 KVA & after expansion it will be 1500 KVA which will be provided by Uttar Pradesh State Electricity Board. In existing unit there is 1 no. of D.G. set of capacity 500 KVA & after expansion there will be DG sets of capacity 3 x 500 KVA for power back up. TPH shall be provided. In existing tannery unit there is no Boiler and after expansion 1 no. of Boiler of capacity 5.0 TPH shall be provided.

The water will be required mainly for Domestic, process & wash, D.G. cooling, Boiler, Gardening and misc. purpose. Existing Total water requirement is 38 KLD (fresh water- 38 KLD & treated water-Nil) and the waste water discharge is 24 KLD which is being treated in ETP of 50 KLD. Total water requirement after expansion will be 820 KLD. Fresh water requirement will be 511 KLD (62.3% of total Water). The water requirement will be met from Ground water supply after getting permission from CGWA. The total waste water generation after expansion will be 570 KLD including 106 KLD chrome liquor generation. The domestic waste water shall be disposed off to septic tank & the Industrial Effluent shall be treated in Effluent Treatment Plant (ETP) of 600 KLD and chrome shall be recovered from Chrome recovery unit of 110 KLD.

Ambient air quality monitoring has been carried out at 8 locations to assess the existing air quality of the area for three months' period (October, 2013 – December, 2013). Average values of PM10 varied station-wise between 87.3 μg/m3 and 119.6 μg/m3. PM2.5 varied station-wise between 33.7 μg/m3 and 61.8 μg/m3. Values of SO2 over the study area at the 8 stations between 4.6 μg/m3 and 10.2 μg/m3. Average values of NOx over the entire area was 15.9 – 39.9 μg/m3.

No toxic chemicals used in the preservation of hides. Salt will be recovered and reused by installation of a desalting machine. The Unit would also have a chrome recovery Plant. TDS will be removed by 3-stage evaporation in an Evaporator. Low TDS water and low chromium water would be treated in an ETP and the treated water will be recycled and reused several times. Over a period of time, the unit is aiming to become zero-discharge; however this would depend on the economics. The unit will follow and implement measures outlined in CREP Guidelines for Tannery sector.

Public hearing was held on 28.06.2014 at Akrampur village, Andar Nagar Palika, Unnao Dist, Unnao Tehsil U.P. under the Chairmanship of Shri Shivendra Kumar Singh, Upper Collector, Unnao. The major concerns raised during the public hearing are medical facility, green belt development, training of the workers of the industry, air pollution, treatment to the waste water generated from the industry. PP mentioned that mitigation of impacts of air pollution from the Boiler, Multi cyclone dust collector will be provided and it shall be replaced after every 5 years and bag filters are replaced after every 3 years. 37.6 % of the total water requirement 309 KLD shall be met by treated water. The treated water shall be reused for Boiler, Gardening, Cooling, Process & wash & Misc. purposes & excess treated water of 225 KLD shall be disposed off in the drain of the area. The company will spend at least 5% of project cost i.e Rs. 15 lakhs for Corporate Social Responsibility.

The Committee after deliberations, recommended the project for environmental clearance subject to the following specific conditions:

i. 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.

ii. The total water requirement shall not exceed 820 KLD and 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 shall be sent to CETP for further treatment. The treated wastewater shall be made colour free to the extent feasible.

iii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

iv. 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 shall comply with the norms notified under Environment (Protection) Act, 1986.

v. As proposed, green belt of adequate width shall be developed in 33 % of the plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

vi. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at

Chandigarh. Implementation of such program shall be ensured accordingly in a time bound manner.

vii. Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Chandigarh, SPCB and CPCB within 3 months of issue of environment clearance letter.

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 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.

29.6.3 Proposed Titanium Dioxide Slag Plant (100,000 TPA) of **M/s Satyavathi Minerals and Metals Ltd**. at Ramannapeta (Gudimetla), Chandarlapadu (M), Dist. Krishna, A.P. (**EC**) (J-11011/272/2012-IA.II(I)

M/s Satyavathi Minerals and Metals Limited (SMML) and their consultants M/s Bhagavati Ana Labs Ltd made 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 4th meeting of the Expert Appraisal Committee (Industry) held on 8th -9th January, 2013 for preparation of EIA-EMP report. The TOR was awarded by MoEF vide F.No. J-11011/272/2012-IA.II(I) dated 20th February, 2013 for preparation of EIA-EMP report. PP submitted the final EIA-EMP report after conducting Public Hearing for grant of Environmental Clearance. The proposed project activity is listed at S.No. 3(a) in primary metallurgical industry under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

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 Satyavathi Minerals and Metals Limited (SMML) stated that the project is pertaining to use of titanium slag for manufacture of pigments which is currently being imported on a large scale for the paint industry. M/s SMML has proposed to set up a Titanium dioxide Manufacturing plant at Gudimetla (V), Chandarlapadu (M), Nandigama (T), Krishna (D), Andhra Pradesh, using an eco-friendly technology. The Land Area acquired for the project is 40.58 ha (100.27 Acre). The Pre-processed Ilmenite fines purchased from IRE Chatrapur (OSCOM) in Ganjam distict, Orissa is the main raw material. The production capacity of the project is Titanium dioxide slag 100,000 TPA [Titanium Dioxide slag (TiO2 purity +85.4%) 32200 TPA; Synthetic Rutile (TiO2 purity +95.5%) 30000 TPA and Pigment grade Titanium Dioxide (TiO2 purity +99.5%) 30000 TPA]. The process activities consist of the Ilmenite pre-treatment, ilmenite up-gradation and further processing to pigment grade via hydrothermal process. The captive power plant of 20 MW is proposed. The Capital Cost of the Project is Rs.1179 crores.

The PP gave a presentation on the process, technology in the processing of titanium slag. Mass balance for the raw material and products are given as under:

I. Material Balance – TiO_2, Slag Plant – TPA

Inputs	Qty	Outputs	Qty
llmenite Ore	183400	Ti02 Slag	32200
Dolomite	1764	To Pigment Plant	34200
		To Leaching plant	33600
		Pig Iron	49474
		Water	18333
		Furnace Gases losses	17357
Sub Total	185164	Sub Total	185164
Coal	61272	Char	6788
		Losses	54484
Total	246436	Total	246436

II. Material Balance - $Ti0_2$ Pigment Plant – TPA

Inputs	Qty	Outputs	Qty
Ti02 Slag to Pigment Plant	34200	Ti02 (99.5%)	30000
Sodium Hydroxide	20580	Sodium Sulphate	40245
Sulphuric Acid	21973	Water	6508
Sub Total	76753	Sub Total	70245

III. Material Balance - $Ti0_2$ Rutile Plant – TPA

Inputs	Qty	Outputs	Qty
Ti02 Slag to Pigment Plant	33600	Ti02 (95.5%)	30000
Hydrochloric acid (20%)	30229	$FeCl_2$	8024
Water	694	Losses	26499
Sub Total	64523	Sub Total	38024

The one time water is 11650m^3/day and fresh water requirement is 273m^3/h, the source of water is River Krishna, the wastewater generation is 240m^3/h will be treated in ETP and treated water reused from greenbelt development and slag cooling. The power requirement is 20 MW will be taken from AP Transco and Captive power plant and form emergency required 3X1000 KVA is provided.

Municipal solid waste generated during construction/operation phase will be segregated into biodegradable and non bio degradable and will be disposed off as per the local norms. The Manufacturing process is relatively cleaner technology, iron and other metal sulphates as bye product (Pig iron 55000 TPA, and Na_2SO_4 and other salts 39000 TPA) which are sold in the market. In the leaching

plant the bye product obtained is $FeCl_2$ 7000 TPA and is recovered fully and sold as it is in the market. The STP sludge will be used as manure for greenbelt development and ETP Sludge will be sent to HWMP / TSDF. It was clarified that Red Mud from alumina refinery which has titanium cannot be used for the pigment production.

Ambient air quality monitoring has been carried out at 10 locations during March 2013 – May 2013 and the data submitted indicated: PM_{10} (36.5µg/m^3 to 58.3µg/m^3), $PM_{2.5}$ (16.8 to 38.9µg/m^3), SO_2 (8.9 to 21.2µg/m^3) and NO_x (10.8 to 24.1µg/m^3). Fugitive dust arising due to construction work and vehicle movement will be controlled using Water spraying. During operation period the dust generated would be due to drying and pre-reduction of the ilmenite ore fines in reducing furnace are controlled using multi-cyclone and bag filters.

For greenbelt development, an area of 13.39 Ha (33%) of the land area is proposed to be developed as greenbelt using local species, for carrying out environmental management measures a capital cost of Rs 88 crores and recurring cost of Rs.90 lakhs are proposed. For undertaking up CSR activities during construction period 1% of the capital cost and during operation period 2% of the previous year profit will be used.

Public hearing was held at proposed project site at Gudimetla (V), Chandarlapadu (M), Krishna district, AP on 6th August, 2014. The issues raised during the public hearing are employment for the local population, impact of raw material transportation on the local public, pollution control measures, pollution of River Krishna river due to acidic waste etc. an amount of Rs 1200 lakhs has been earmarked towards the CSR activity over a period of 4 years.

The Committee observed that the processes explained appeared to be unconventional and not used on a commercial scale. The Committee was of the view that the PP was unable to comprehensively explain the processes intended to be used. Further, the materials and chemicals used have significant impacts on environment and the environmental impacts are not clear from the presentation. The Committee desired that the flow chart of the plant processes should be presented along with the technical experts/technology supplier. The Committee further sought the trace metal analysis of the titanium slag by ICPMS.

The Committee desired that details of raw materials, quantity, MOUs with supplier along with source/producer in case the minerals are obtained from mining companies.

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

i. Whether the technologies proposed to be used for various products are being used elsewhere and if so, the details thereof.
ii. Revised process flow sheet should be submitted with the detailed description of each and every step for the smelter (Arc Furnace), Synthetic Rutile Plant and pigment plant
iii. Trace metal analysis of the slag/ore by ICPMS
iv. Detailed plans for management of liquid waste, solid waste, highly acidic wastes, and problems of acid mist of SO_2, SO_3 acid mist should be submitted

29.6.4 Steel Plant at Village Kirarama, Tehsil Lakhanpur, District Jharsuguda, Orissa by **M/s Raipur Iron and Steel Co. Pvt. Ltd.** at Lakhanpur, Dist. Jharsuguda, Odisha **(EC)** J-11011/355/2009-IA.II(I)

PP did not attend. The project proposal was not taken up. It was decided to seek clarification on the validity of TOR for the proposal.

29.7 Cases for Terms of Reference (TOR)

29.7.1 Revised Proposal for establishment of Industrial unit consisting of sponge iron (1000 TPD), Pellet plant (1500 TPD), MS Ingots/Billets (1000 TPD), structural TMT bar (1000 TPD) along with power generation (50 MW) of **M/s Kapila Metals Pvt. Ltd.** at B-102 to 105, Addl. MIDC Area, Phase III, Jalna, District Jalna, Maharashtra **(Revised TOR application)**

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

M/s Kapila Metals Pvt. Ltd. (KMPL) has proposed to establish metallurgical industry of large size in an industrial land in the Government industrial estate, namely Maharashtra Industrial Development Corporation (MIDC). This is an integrated project mainly for standard product of MS billet/ingot and MS structural TMT bars, angle & channels at Plot No. B-102 to 105, Addl. MIDC, Phase – III, Tehsil: Jalna, Dist: Jalna, Maharashtra.

This project will be with an aim to produce mild steel billets and mild steel structural TMT bars. The required water, power and workforce are available. The total cost of the project is Rs. 540 crores. PP has purchased land in the already existing MIDC and infrastructure is available. This unit will have a capacity to produce the following:

1. Sponge (500x2 DRI Plant) 1000TPD
2. Power Generation 50MW
3. Billet/Ingot 1000TPD
4. TMT Bar, Angle & Channels 1000TPD

List and quantity of raw material required for the project is given below:

S. No	Name	Quantity
For Sponge Iron		
1	Iron Ore Pellet	1450MT
2	Coal B Grade	1200MT
3	Dolomite	30MT
For Power Plant (Fbc Boiler 24MW & WHR 26MW)		

4	Dolochar	48MT
5	Coal	75MT
6	Flue Gas From Dri Kiln	104 MT
Billets		
7	Sponge Iron	920MT
8	Scrap	100MT
9	Pig Iron	100MT
Rolling Mills		
10	Ingot/ Billets	1015MT

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

1. The site is situated within the MIDC which is a Notified Industrial Area therefore Public Hearing for the project is exempted
2. Management plan for Waste water treatment from rolling mill should be submitted
3. Size and numbers of the bag filters should be submitted

29.7.2 Proposed Ferro Alloys Manufacturing Unit (4x9 MVA), Submerged Electric Arc Furnaces to manufacture Fe-MN -77,890TPA/Si-Mn – 57,400 TPA/Fe-Si -27,264 TPA of **M/s Refulgent Alloys N Steel Ltd.,** at Vill. Sancham, Mandal Ranastalam, Dist. Srikakulam, A.P. (Letter dated 10.11.2014 seeking change of project configuration in EC No. J-11011/42/2011-IA.II(I) (**TOR)**

PP made a presentation. Have sought amendment of EC as it was not found viable and the proposed change in configuration is less polluting and with decreased emission load. The Committee sought a small report on the proposed change and its likely impacts in terms of – emissions, solid waste generation and overall pollution load for further consideration.

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

M/s. Refulgent Alloys N Steels Limited has obtained Environmental Clearance vide F. No. J-11011/42/2011-IA.II(I) dated 20 may , 2014 to manufacture Ferro alloys by installing 4x9 MVA submerged electric arc furnace at Sy. No. 191 & 192, Sancham Village, Ranastalam Mandal, Srikakulam District, Andhra Pradesh in an area of 11.42 acres. It is now proposed ot seek EC amendment to install 2x9 MVA submerged Electric ARC Furnace instead of 4x9 MVA SEAFs for Ferro alloy manufacturing and proposes to install induction Furnace for MS Billets. Ingots manufacturing and also Rolling mill for TMT Bars manufacturing. The cost estimated for the proposed amendment cum expansion is Rs. 84 crores.

The site is located at Sy. No. 191 & 192, village Sancham, Mandal Ranastalam, Dist. Srikakulam, Andhra Pradesh with a longitude 83^0 36'47.67" E and latitude 180 10' 11.30" N. The land area of the project is

11.42 Acres. The land available with the plant is agricultural dry and wet land converted for industrial use.

The committee after deliberations decided that since there will be reduction in emission levels due to change in project scenario, as proposed by the pp, the existing EC can be amended to include installation of 2x9 MVA submerged Electric ARC Furnace instead of 4x9 MVA SEAFs for Ferro alloy manufacturing and proposals to install induction Furnace for MS Billets/ingots manufacturing and also Rolling Mill for TMT Bars manufacturing.

The Committee recommended the proposal for amendment of EC as mentioned above subject to the following:

i. Proponent may submit a revised layout plan showing the existing units and the proposed plant in the same map with different colour combination.
ii. Report on the pollution load for air, water and solid wastes for the existing clearance given Vs the proposed amendment should be submitted.

29.7.3 Regularisation of Existing 600,000 TPA Iron Ore Pelletisation Plant and Proposed Expansion by adding 10 Nos. Coal Gasifier Plant (Fuel Replacement of Pellet Plant) – 27,46Nm3/h and Expansion of iron ore Grinding Unit to iron Ore Grinding & Beneficiation Plant – 10, 00, 000 TPA of **M/s Sarda Energy and Minerals Ltd.** at Phase 1, Siltara Industrial Growth Center, Village - Mandhar, Tehsil - Dharsiwa, District –Raipur, Chhattisgarh (TOR)

PP did not attend. It was decided that the proposal will be considered as and when requested for by the PP.

29.7.4 Proposed expansion of existing steel plant from 22,556 TPA (Ingot) to 1,24,800 TPA (Ingot) to produce 96,000 TPA of TMT Bar, Angle & Channel of **M/s Kamadhenu Ispat Ltd** at A-1112 & 1114, RIICO Industrial Area, Phase 3 Tehsil: Tijara Dist. Alwar, State: Rajasthan **(TOR)** (J-11011/378/2014-IA.II(I)

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

The project is located in Tehsil Tijara, District Alwar, Rajasthan within the RIICO Industrial Area (Gazette Notified), Phase 3, Bhiwadi. The first NOC was granted on 19th November, 1994 vide letter RPCB/BHD/347 to produce Hot Rolled Bars, Angles, Rounds etc 30,000 TPA. After that Consent to Establish (CTE) under the provisions of Air and Water Acts was issued on 15th October, 2004 vide letter F.12(2-1255)RPCB/Gr.1/1967 to produce 22,556 TPA M.S. Ingots through Induction Furnace. Existing unit is operating on a CTE of October 2004.

Nearest Settlement to the project is Belahari at 1.2 km in South direction. Nearest Town is Bhiwadi at 3 km in West direction. Patandi Road railway station is at a distance of 19.5 km in NNW direction and the nearest airport is IGI New Delhi Airport 50 km in NNW direction. The approach road is 1.23 km North from NH71B, 3.60 km West from SH25 and 6.50 km in NW from NH8. The existing plant site is situated at latitude and longitude A: 28°12'3.195"N to 76°51'43.050"E B: 28°12'0.883"N to 76°51'45.733"E, C: 28°11'56.157"N to 76°51'42.432"E, D: 28°11'56.641"N to 76°51'39.067"E. There is no National Park/Wildlife Sanctuary/Tiger Reserve/Elephant Reserve/Core Zone of Biosphere Reserve/ Habitat for migratory birds within 10 km radius from the project boundary. River Sahibi flows at a distance of 10.8 km(W), Indori nala is 5.2km (E) and Sare Khurd Canal is 6km (SE). Gondhan, Banvan, Khori Kalan, Chaupanki Protected Forest and Rangala Reserve Forest are within the 10 km of the study area.

Kamdhenu Ispat Ltd. has proposed capacity enhancement from 22,556 TPA (Ingot) for producing 48,000 TPA TMT Bar, Angle & Channel to 1,24,800 TPA (Ingot) for producing 96,000 TPA of TMT Bar, Angle & Channel. The expansion will be carried out within the existing plant premises of 17,534 m^2. The cost of the project will be about Rs. 18.80 crores. PP mentioned that the existing 8 Ton induction furnace will be dismantled after expansion.

Existing Units:

i. Induction Furnace (1 x 8 T),
ii. 1 Reheating Furnace based on coal gas produced from coal gasifier
iii. Rolling Mill of 48,000 TPA.

The proposed configuration is as under:

i. Induction Furnace (2 x 13.5 T),
ii. 1 Continuous Casting Machine (CCM)
iii. 1 Reheating Furnace based on coal gas produced from coal gasifier (Standby to avoid the mismatch in synchronization)
iv. Rolling Mill of 96,000 TPA.

The total water requirement for the project will be 24m^3/day after expansion. The water supply would be sourced from bore wells inside the plant premises, permission for the same is already granted from RIICO. On request of PP, the Committee agreed for monitoring period starts from December, 2014 to cover December, 2014 to February, 2015 months (winter season)

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

1. P.H. is exempt as the unit is located within RIICO Industrial Area which is a notified industrial area.
2. Zinc vapours management plan should be submitted for disposal/recovery along with the EIA EMP report
3. Fly ash management plan should be submitted
4. Documents regarding site within the Notified industrial area may be submitted

29.7.5 Establishment of a new Clinker Grinding Unit (capacity 300,000TPA or 1000TPD) of **M/s RLJ Cement Products Ltd.**, at vill. Kudari, Mauja, Chuarod, Tehsil Mohania, Dist. Bhabhua, Bihar (**TOR**) (J-11011/335/2014-IA.II(I)

The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP. Since the production capacity of the proposed project is less than 1.0 million tonnes/annum the project activity listed at S.No. 3(b) comes under Category 'B' of the Schedule of EIA notification 2006. However, General Condition is applicable due to project is located at a distance of 3.68 km from Uttar Pradesh- Bihar state boundary. Therefore the proposal is treated as category 'A' and appraised by Expert Appraisal Committee (I).

RLJ Cement Products (P) Ltd. has proposed to establish Clinker Grinding Unit Capacity(Cement) 300000 TPA (1000 TPD) at Plot No – 134,135 & 137, Chau Road, Post – Karmnasa, Tehsil- Mohania, Distt.- Kaimur (Bhabua), Bihar. The total land requirement is 2.58 Acre out of which 1.70 acre will be used for machinery and Plant infrastructure and 0.85 for Green Belt. The proposal is a Category "B" project but as general condition is applied because site is situated within 5 km radius of inter State Boundary of Bihar and Uttar Pradesh which is 3.68 km from the site, therefore the proposal is considered at the central level. Nearest River is Karamnasa River which is at a distance of 3.68 km. Nearest railway station is Karamnasa at a distance of 2.5 km. Nearest airport is Varansi at 70 km.

The total power requirement for the plant operation is 2000 KVA. Power requirement during the construction and operation phase will be taken from Bihar electricity board. The net water requirement is 20 KLPD, water requirement will be met through Borewell (Ground Water). No Solid Waste will be generating from the process. The Dust Collected in Bag Filter will be 100 % recycle to the Process. The cost of the project is Rs 3031.20 lakhs (Estimated)

Following table shows raw material requirement for the project.

Raw Material	**Quantity**
Clinker	198000 TPA
Fly Ash	96000 TPA
Gypsum	6000 TPA
Total	300000 TPA(Cement)

Cost towards Environmental protection measures (Capital cost) will be Rs. 80 lakhs. Recurring cost towards Environmental control measures will be approximately 15 lakhs per annum. 2% of the total profit of project after the project comes into operation as per the CSR Act (By Ministry of Corporate Affairs) Notification GSR 129(E).

After deliberations, the Committee prescribed following specific TORs for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-3**:

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

29.7.6 Proposed Expansion of Steel Plant of **M/s API Ispat & Powertech (P) Ltd.** at village Siltara, Near Phase-II Siltara Industrial Area, Tehsil & Dist. Raipur, Chhattisgarh (**TOR**) (J-11011/377/2014-IA.II(I)

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

API Ispat & Powertech Pvt. Limited has proposed expansion of existing steel plant at village Siltara, (near Siltara Industrial Growth Centre, Phase – II), Tehsil and Dist Raipur, Chhattisgarh. CTO has been accorded by CECB for the existing plant of Sponge Iron, Induction Furnace & Power plant (WHRB & FBC) (CTE issued prior to EIA Notification, 2006). Environmental Clearance was obtained from SEIAA, Chhattisgarh for establishment of Rolling Mill of 1,45,250 TPA capacity. The proposed expansion is for Pellet Plant, Induction furnace, EAF with AOD/ VOD, Rolling Mill & Ferro Alloys. The cost of the project is 240 cr.

A total 96.57 acres of diverted land is in possession of management and proposed expansion will be taken up the existing plant premises. The proposed project area falls in Raipur area which is severely polluted area as categorized by CPCB with CEPI of - 65.45. There are no National Parks / Sanctuaries / Reserve Forest within 10 Km. radius of the plant. Kharun river & Kulhan nala are flowing at distance of 1.8kms & 7.8kms respectively from the plant. National Highway (NH # 200) is passing at a distance of 2.4kms from the plant. Nearest Railway Station is Mandar situated at distance of 7.3kms from the plant. Nearest village is Sondra situated at a distance of 0.8kms from the plant. No Forestland is involved in the site.

Total water required for the proposed expansion project will be supplied by C.G. Ispat Bhumi Limited. Total water requirement for the expansion Project will be 1525 KLD. It was stated that the dolochar (60,000 TPA (200TPD) is to be consumed in an FBC based CPP of 7MW.

It was informed that EC has been obtained on 10.02.2009 from SEIAA for the existing Rolling Mill. Pet coke (S content of 5-5.5%) is to be used in Ferro Alloys Unit. Scrubber to be installed.

After deliberations, the Committee prescribed following specific TORs for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-3**:

i. P.H. is exempt only if the unit is located within Siltara Industrial Area- Ph.II and if this Area is falling within a notified industrial area. Details should be provided for processing for exemption from conduct of P.H.
ii. Compliance report for the existing plant should be submitted along with the EIA EMP report
iii. Since the pet coke has sulphur content of 5.5% it should be scrubbed before use
iv. Cumulative impact of the existing plant and the proposed units should be assessed while preparing the EIA report
v. Plan for 100% utilisation of dolochar to be prepared.

The TOR would be granted after furnishing copy of CTE dated 13.02.2004 and first CTO for the existing DRI Plant copies of Consent to Operate for the plants installed before 2006 and after 2006 along with a

clarification that the unit was costing less than Rs 100 crores. In addition, copy of EC from SEIAA for the existing units should be provided.

29.8 Further Consideration Cases

29.8.1 Proposed 0.74 MTPA Coal Washery, 0.46 MTPA Coke Oven Plant, 0.63 MTPA Iron ore Beneficiation Plant, 1x20m2 , 1870 TPD Pellet Plant, 11x100TPD+2x350 TPD DRI Plant, 2x128m3 + 94 m3 MBF, 4x9 MVA Ferro Alloys, 2x35T & 4x25T Induction Furnace, 225m3 Oxygen Plant, 250 TPD Lime Plant, 2x26MW Power Plant, 45 MW (27 MW +18MW) WHRB Power Plant, 600TPD Rolling Mill of **M/s Shakambhari Ispat and Power Ltd.**, at vill Pavatpur, Radhamadhabpur, Madand, PO–Bortoria, dist. Purulia, West Bengal (TOR) [J-11011/201/2013-IA-II(I)]

The aforesaid proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 11th meeting held during 26-27th August, 2013 for prescribing TORs for undertaking detailed EIA-EMP study. The Committee deferred the proposal and recommended that a site visit shall be undertaken by the Regional Office of the MoEF&CC at Bhubaneshwar to verify the existing plant details including its compliance status and the report shall be submitted to the EAC for further consideration of the proposal. While the matter was again considered in the 23rd meeting of REAC held during 18th and 19th September 2014, the committee deferred the proposal for grant of TOR and advised the PP to submit the following information.

i. Revised layout plan shall be submitted with site boundary and the plant layout superimposed on it. Green belt shall also be shown on the layout map.
ii. It has been observed by the committee that the PP has not revised the installation of the furnaces as committed in the previous meeting (i.e. 4x350 TPD DRI unit instead of 6x100 TPD + 2x350 TPD DRI unit). The committee advised the PP to revise the project component and submit it again since it is not as per the earlier MOM
iii. Submit the configuration with covering letter and fresh Form 1.

PP has presented the changed project configuration & product mix during the meeting. Regarding revised layout plan, PP has submitted the hard copy of the layout plan as suggested during the meeting. Regarding revising the project component, PP has submitted the following table showing the revised units and its capacities:

Unit	Capacity
Coal washery	0.74MTPA
Iron Ore Beneficiation Plant	0.63 MTPA
Sinter Plant	1X 20m^2
Pellet Plant	1x1870 TPD
DRI Plant (with or without Pre Heater)	4X 350 TPD
MBF	1x 350m^3

Ferro Alloys	4 X 12 MVA
Induction Furnace with LRF & AOD	2 X 35T & 4 X 25 T
Oxygen Plant	225 m^3
Lime Plant	250 TPD
AFBC Power Plant	1x23MW+1X36MW
WHRB power plant	28MW
Rolling mill	600 TPD

PP has also submitted the configuration with covering letter and fresh Form 1.

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

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

29.9 Any Other Items

29.9.1 Expansion of Steel Plant (semi-finished steel/Pig Iron 21,000 TPA to 100,000 TPA) Re-rolled Steel product 15,750TPA to 95,000 TPA Sintered Bricks/Briquetted Sintered Minerals or Lime or Activated Minerals 55,000 TPA; DG set (6MW) of **M/s Indus Smelter Ltd** at 436-B, 453, and 454-B, Sector-C, Urla Industrial Growth Centre, Raipur, Chhattisgarh – Letter dated 22.09.2014 **seeking (i) Amendment of EC, (ii) Extension of validity of EC No. J-11011/503/2007-IA.II(I) dated 09.06.2008 and (iii) Change of Company name to M/s Balajee Loha.**

Environmental Clearance for M/s Indus Smelter Ltd. was issued vide F.No. J-11011 / 503 / 2007 – IA II (I) dated 09/06/2008. The plant is located at Plot No.436/B, 453 & 454/B, Sector "C", Urla Industrial area, Raipur, Chhattisgarh. PP mentioned that after obtaining the Environmental Clearance, part of the facilities have been implemented. However, the company was not in a position to go ahead with the implementation of the balance part of the project due to severe recession in steel sector (sluggish market condition) and fall in cash flow of the company during the past few years. The status of implementation is as presented below:

S.N.	Unit	Capacity (TPA)	Status of Implementation
1	Semi finished Steel / Pig iron or Pig iron casting like moulds	1,00,000	45,000 TPA has been implemented and is in operation
2	Re-rolled steel product	95,000	45,000 TPA has been implemented and is in operation
3	Sintered bricks / briquetted Sintered Mineral ore Lime or Activated Mineral (Iron ore or Mill Scale)	55,000	15,000 TPA has been implemented and is in operation

4	Carbon Powder (Internal Consumption)	1,100	To be implemented
5	Block / Briquette of Coal Ash and Bag Filters Dust	5,000	To be implemented
6	Power (DG Set)	6 MW	To be implemented

PP mentioned that M/s Indus Smelters Ltd could not run the company due severe recession in steel sector, due to which it could not generate required funds to run the company. Accordingly M/s. Indus Smelter Ltd. has sold the unit located in Plot No.436/B, 453 & 454/B, Sector "C", Urla Industrial area, Raipur, Chhattisgarh, to us i.e. M/s Balajee Loha Ltd.

PP has requested to extend the validity of EC for further period of 5 years and transfer of Environmental Clearance in the name of Balajee Loha Ltd. It was clarified that no amendment of EC is required, only extension of validity of EC.

The Committee after deliberations recommended extension of validity of EC for a period of 5 years with effect from 09.06.2013. Regarding change of name, the Committee suggested to submit necessary documents to the Ministry for change of name of the company for extending the validity of EC.

29.9.2 Proposed Installation of Bleached Chemical Thermo Mechanical Pulp (BCTMP) Unit in existing Mill PSPD Bhadrachalam Unit of ITC-BCM of **M/s ITC Ltd.**, vill. Sarapaka, Mandal Burgampahad, dist. Khammam, Telangana (Letter dated 13.10.2014 **seeking exemption of P.H.**)

The existing facility of 1LTPA bleached pulp unit at Bhadrachalam was accorded Environmental Clearance (EC) by Ministry of Environment and Forests, New Delhi vide F.No.J-11011/574/2009-IA II (I) dated 18th March 2011 and also obtained Consent to Operate (CFO) from State Pollution Control Board for production of 7.40 lakhs tpa of Paper & Paperboard, 3.50 lakhs BD tpa of bleached wood pulp, 114.5MW cogeneration plant and other supporting facilities. The unit was first started in 1979 and was granted first EC in October 1996. The project has so far obtained 5 ECs with 2 P.H. – first in Nov./Dec. 2006 and the second in 2010.

PP has proposed a project of "Mill Growth Plan (MGP)" to be established in a site adjacent to the existing facility to enhance the paper/board production from the existing tpa to 12.40 lakhs tpa bleached wood pulp production to 8.50 lakhs BD tpa, new Bleached Chemical Thermo Mechanical Pulp (BCTMP) of 1.50 lakhs BD tpa along with 190MW Captive Power Plant and auxiliaries. PP has identified about 800 acres of adjoining forest land for developing the proposed Mill Growth Plan. The proposal of Mill Growth Plan project was considered during the 33rd EAC meeting on 27th & 28th February 2012 and Ministry accorded Terms of reference (TOR) vide letter no. F.No.J-11011/09/2012-IA-II (I) dated 23rd March 2012. TOR was granted on 23.03.2012 for a 5LTPA Paper & Bleached Pulp Unit- Mill Growth Plan adjacent to existing Mill. It has been mentioned by PP that due to the State/Central Government procedures, the approval for the forest land proposed for the MGP was not accorded. PP approached MoEF for extension of the validity of the TOR issued for MGP project. The matter was again considered

during 18th EAC meeting held during 28th April to 30th April 2014 and recommended the extension of validity of TOR till March 2015.

PP informed that due to the time taken in the land conversion process of the forest land intended for the MGP project, the BCTMP project is also getting delayed significantly. Currently the existing mill is utilizing the imported/purchased BCTP from outside with a very high cost. Hence installation of BCTMP in the existing facility has become essential for overall profitability and flexibility of the existing operations. Hence, the present proposal of the PP is to install a BCTMP within the existing premises. The proposed BCTMP project comprises of installation of New BCTMP of capacity 100,000 BD tpa, a new BCTMP waste-liquor evaporation plant and supporting facilities within the existing premises. The power and steam required for the new facility will be sourced from the existing co-generation plant. PP mentioned that the only additional source of air emission will be from the existing recovery boilers that will be firing additional black liquor generated from BCTMP mill. Electrostatic precipitators are already installed to control the dust emissions from the recovery boiler with suitably designed stacks as per the CPCB norms. The proposal involves - No additional installation of boiler, no additional installation of power utilities, additional water requirement of 2000m3/d which is within the existing EC and no increase in treated wastewater discharge. It was stated that the unit would be zero-discharge as the process involves recycling with evaporation and incineration, details of which are provided in the PFR.

PP further mentioned that a detailed baseline environmental studies has been carried out between 1st March to 31st May 2012 as a part of the TOR No.J-11011/09/2012-IA.II(I) dated 23.03.2012 for the MGP project. Subsequent to the extension of TOR for the MGP project, PP has undertaken revised baseline environmental studies in June 2014 to revalidate the baseline studies undertaken in the year 2012.

PP has requested for grant of fresh ToR and permit utilizing the baseline studies undertaken for MGP and exemption of conduct of Public Hearing since the proposed BCTMP facility will be located within the existing facility and public hearing for other projects within the existing facility was conducted on 30.04.2010.

The Committee sought the latest Environmental Performance in terms of compliance of EC along with certified compliance report along with a note on the process details of this facility, plant layout (existing + proposed), emissions levels, solid waste generation and mode of disposal and effluent characteristics and environmental impacts of the proposed installation of BCTMP. The Committee also sought compliance of the issues raised in the earlier P.H. The Committee decided that the report would be considered for giving exemption from conduct of P.H. under clause 7.2.

The Committee after deliberations deferred the proposal and requested the PP to submit the following information. The proposal shall be considered further once the details are obtained.

i. Impact of the new proposal in terms of disposal of effluent, increase in effluent quantity and mechanism of zero discharge should be submitted.
ii. Additional requirement of resources like water and power.
iii. A report on quantity and quality of treated waste water should be submitted

iv. Parawise compliance report for the existing environmental clearances should be submitted Process details of the new facility and the environmental impact of the new proposal should be submitted
v. Details of the status of compliance of the PH held in the year 2006 and 2010 should be submitted.

In case of the project in the adjoining site for which TOR was granted in 2012 and extended, the Committee decided that the PP may apply afresh for fresh TORs, in case the PP does not intend to go ahead with the project.

29.9.3 Proposed Cement Plant with a capacity of Clinker 3 MTPA, Cement 7 MTPA (OPC, PSC, PPC) of **M/s JSW Cement Ltd.** at vill. Mogla, Tehsil Chitapur, Dist. Gulbarga, Karnataka (Letter dated 01.09.2014 seeking **relocation of the proposed project** for TOR No.J-11011/271/2012-IA.II(I) dated 20.02.2013)

ToR for the above proposal was granted vide letter No. J-11011/271/2012-IA.II(I) dated 20.02.2013. M/s JSW Cement Limited has proposed to set up a Greenfield Cement Plant with a production capacity of 3.0 MTPA of Clinker and 7.0 MTPA of Cement at Mogla village, Chitapur taluka in Gulbarga district of Karnataka. It was informed that the new plot is 303 acres and of single crop agricultural land. The land requirement for the project is 250.03 acres. This is a cement unit from slag produced by their sister concern – M/s JSW Steel Ltd at Vijaynagar, dist. Bellary, Karnataka.

PP mentioned that the present site is located on the area which is considered for the mining plan and in order to utilize mineral reserves and maintaining the safety barrier zone the cement plant site is proposed to be relocated to Sy no. 335 to 349. The area of the cement plant will be 303.19 acres. The coordinates of the site are $17^0$9'30.72"N, $77^0$8'43.04" and $17^0$9'18.06"N, $77^0$7'52.52"E

The PP has sought an amendment in TOR dated 20.02.2013. The amendment in the TOR is requested for relocating the unit by about 500m. The original site is within the ML which is mineral bearing and hence it is proposed to shift to other side of the boundary by about 500m. A railway line passes adjoining the site. A road passes through the proposed site and it was informed that this would be diverted outside the project boundary.

No Forestland is involved. No National Park, Wildlife Sanctuary is exists within 10 km radius of the project site. The water bodies located in the study area are River Kagna (4.5km), River Benithora (5.5km) and Ivni Halla stream (10km). The water requirement is 3500m^3/day which will be sourced from River Kagna.

After deliberations, the Committee prescribed following revised TORs for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-3**:

1. P.H. shall be conducted by the Karnataka Pollution Control Board as per the generic TOR.
2. Layout plan superimposed on the SOI Toposheet showing the earlier site for the cement plant, Mining area and the proposed site for the cement plant should be submitted.
3. Road should be diverted from the outer boundary of the proposed site

29.9.4 Mini Steel Plant of **M/s Agarwal Induction Furnace Pvt. Ltd**. in vill. Gollapuram, Mandal Hindupur, Dist. Ananthapur, A.P. (Letter dated 12.11.2014 seeking ext. of validity of EC No.J-11011/221/2009-IA.II(I) dated 21.01.2010 and 04.09.2012)

Environmental clearance was granted by the Ministry for establishment of mini Steel plant vide F. No. J-11011/221/2009-IA II (I) dated 27.01.2010 in the name of Surabhi Steel Pvt. Ltd. & subsequently MOEF has transferred the EC in the name of Agarwal Induction Furnace Pvt. Ltd. on 04/09/2012

The current status of implementation of the project is given below:

S.N.	Details	E.C. Accorded	Status of Implementation
1	Sponge iron Kilns	2 x 100 TPD	yet to be implemented
2	Induction Furnaces	2 x 300 TPD	300 TPD Induction Furnace has been installed and in operation
3	Rolling mill	1 x5 00 TPD	yet to be implemented
	Power plant WHRB-4 MW FBC-4MW	8 MW	yet to be implemented as it is linked with establishment of sponge iron plant

PP mentioned that the non-implementation of the units for which Environmental Clearance has been accorded, is due to sluggish market conditions and non-availability of Funds.

PP further mentioned that the Environmental Clearance accorded by MOEF on 27-01-2010 is for establishment of mini integrated steel plant. Due to poor market conditions & non availability of funds only SMS unit has been implemented and APPCB has accorded Consent for Operation for SMS unit. However APPCB is now insisting to provide CAAQMS in compliance with the general EC condition and consent is not being renewed. PP has requested approval for installation of CAAQMS immediately upon installation of Sponge iron plant and the general condition can be relaxed till such time.

After deliberations, the committee recommended extension of validity of EC for a period of 5 years with effect from 27.01.2015.

29.9.5 Proposed Integrated Steel Plant of 0.6 MTPA and 130 MW Power Plant of **M/s RBSSN -Ferrous Industries Private Limited** [RBSSN FIPL] near Hampaptna village, Hagaribommanahalli Taluk, Bellary Dist, Karnataka - Extension of validity ToR No. J-11011/496/2011-IA.II(I) dated 18.12.2012

ToR for the above proposal was granted vide MOEF letter F.No.J-1101/496/2011-IA II (I) dated 18th Dec 2012. The validity of the ToR is up to 17th Dec 2014.

The Project Proponent has submitted the draft EIA report on 13.10 2014 to KSPCB for the conduct of Public Hearing. The KSPCB has notified the date for conducting PH on 20th December 2014. Since the ToR is only valid up to 17th December, 2014 PP has requested to extend the validity period of ToR by 4

months. PP mentioned that there is no change in earlier Form -1 application filed on 24.09.2011 for obtaining TOR.

After deliberations, the committee recommended extension of validity of ToR for a period of 4 months with effect from 18th December, 2014.

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

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LIST OF PARTICIPANTS OF EAC (I) IN 29th MEETING OF EAC (INDUSTRY-I) HELD ON 11th-12th DECEMBER 2014

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

ANNEXURE -I

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

1. Details of the EIA Consultant including NABET accreditation (including sector details and whether A/B and Accreditation No. shall be provided on the cover the EIA-EMP Report as well as in the Hard Copies of the presentation made before the Expert Appraisal Committee. Copy of NABET Accreditation for the period of preparation until submission of the EIA-EMP Report to MOEF and for presentation made before the EAC should be provided in the Annexures. If more than one consultant has been engaged, details thereof, including details of NABET accreditation as mentioned above.
2. Executive summary *(maximum 8-10 sheets in A4 size paper)* of the project covering project description, description of the environment, anticipated environmental impacts & its mitigation measures, environmental management plan, environmental monitoring programme, public consultation, project benefits, Social impacts including R&R.
3. Site Details:
   i. Location of the project site covering village, Taluka/Tehsil, District and State on Indian map of 1:1000,000 scale.
   ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet.
   iii. Co-ordinates (lat-long) of all four corners of the site.
   iv. Google map-Earth downloaded of the project site.
   v. A map showing environmental sensitivity [land use/land cover, water bodies, reserved forests, wildlife sanctuaries, national parks, tiger reserve etc.] and from critically/severely polluted area(s) and Eco-sensitive Areas within 10km radius of the project site vis-à-vis shortest (aerial) distance from the project. If the project is located within 10km of CPAs/severely Polluted Areas, confirm whether moratorium has been imposed on the area.
   vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. In addition, if located within an Industrial area/Estate/Complex, layout of Industrial Area and location of unit within the Industrial area/Estate/Complex, layout of Industrial Area.
   vii. Photographs of the proposed and existing (if applicable) plant site. If existing, in addition to site map, provide photographs of plantation/greenbelt in the existing project. If fresh EC application, photographs
4. Landuse break-up of total land of the project site (identified and acquired) – agricultural, forest, wasteland, water bodies, settlements, etc shall be included.
5. A copy of the mutual agreement for land acquisition signed with land oustees.
6. Proposal shall be submitted to the Ministry for environment clearance only after acquiring at least 60% of the total land required for the project. Necessary documents indicating acquisition of land shall be included.
7. **Forest and wildlife related issues:**
   i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department.
   ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha)*
   iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

8. **Expansion/modernization proposals:**

i. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB shall be attached with the EIA-EMP report.

ii. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

Details of Industrial Operations

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

Environmental Status

18. Geological features and Geo-hydrological status of the study area shall be included.

19. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of RL of the project site and mRL of the river shall also be provided.
20. If the site is within 1 km radius of any major river, Flood Hazard Zonation Mapping is required at 1:5000 to 1:10,000 scale indicating the peak and lean River discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years.
21. One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
22. AAQ data (except monsoon) at 8 locations for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO and HC (methane & non-methane) shall be collected. The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16th November, 2009 and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
23. Raw data of all AAQ data for 12 weeks of all stations as per frequency given in the 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.
24. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ.
25. Surface water quality including trace elements of nearby River (60m upstream and downstream) and other surface drains at eight locations to be provided.
26. Ground water monitoring including trace elements at minimum at 8 locations shall be included.
27. Noise levels monitoring at 8 locations within the study area.
28. Coal Characteristics – of indigenous and imported coal to be used in the project in terms of Calorific value, ash content and Suplhur content.
29. Traffic study of the area for the proposed project in respect of existing traffic, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
30. Detailed description on flora and fauna (terrestrial and aquatic) exists in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
31. Emissions (g/second) with and without the air pollution control measures.
32. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modeling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
33. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
34. Details of water requirement, water balance chart for new unit or for existing unit as well as proposed expansion (in case of expansion).
35. Source of water supply and quantity and permission of withdrawal of water (surface/ground) from Competent Authority.

36. Details regarding quantity of effluents generated, recycled and reused and discharged to be provided. Methods adopted/to be adopted for the water conservation shall be included. Zero discharge effluent concepts to be adopted.
37. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
38. Action plan for control of ambient air quality parameters as per NAAQM Standards for $PM_{10,}$ $PM_{2.5}$, SO_2 and NO_X, etc as per GSR 826(E) dated 16th November, 2009.
39. An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008.
40. Action plan for solid/hazardous waste generation, storage, utilization and disposal. Copies of MOU regarding utilization of solid waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
41. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. A detailed plan of action shall be provided.
42. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated. All rooftops/terraces shall have some green cover.
43. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources. Rain water harvesting and groundwater recharge structures may also be constructed outside the plant premises in consultation with local Gram Panchayat and Village Heads to augment the ground water level. Incorporation of water harvesting plan for the project is necessary, if source of water is bore well.
44. Environment Management Plan (EMP) to mitigate the adverse impacts due to the project along with item wise cost of its implementation. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
45. Details of Rehabilitation & Resettlement (R & R) involving the project. R&R shall be as per policy of the State Govt. and a detailed action plan shall be included.
46. Action plan for post-project environmental monitoring shall be submitted.
47. Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control needs to be addressed and included.
48. <u>Occupational health:</u>
    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 heath status of workers with special reference to Occupational Health and Safety.
iv. Action plan for the implementation of OHS standards as per OSHAS/USEPA.
v. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

49. Corporate Environment Policy
i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

50. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
51. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
52. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
53. The questionnaire for industry sector (available on MOEF website) shall be submitted as an Annexure to the EIA-EMP Report.
54. 'TORs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.
55. A tabular chart with index for point wise compliance of above TORs.
56. Name of the Consultant and the Accreditation details shall be printed on the cover page of the EIA-EMP Report in the Introduction as well as on the cover of the Hard Copy of the Presentation material for EC presentation as per requirements in TOR condition No. (1).
57. The TORs prescribed shall be valid for a period of two years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

The following general points shall be noted:

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF file No. and also attach a copy of the letter.
v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

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ANNEXURE-2

ADDITIONAL TORS FOR INTEGRATED STEEL PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of generation of coal and iron ore from coal & iron ore mines and the projects they cater to
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. Respirable Suspended particulate matter (RSPM) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements). The RSPM shall also be analysed for presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction, where applicable. Chemical characterization of RSPM and incorporating of RSPM data.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines must be prepared.

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ANNEXURE-3

ADDITIONAL TORs FOR CEMENT INDUSTRY

1. Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines
2. Quantum of generation of coal and limestone from coal & limestone mines and the projects they cater to;
3. For large Cement Units, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.
4. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. If the raw materials used have trace elements, an environment management plan shall also be included.
6. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.

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ANNEXURE-4

ADDITIONAL TORs FOR PULP AND PAPER INDUSTRY

i. For major Pulp and Paper Units, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.

ii. A note on pulp washing system capable of handling wood pulp shall be included.

iii. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln

iv. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for *Eucalyptus/Casuarina* to produce low kappa (bleachable) grade of pulp.

v. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be abolished within 2 years of issue of environment clearance.

vi. A commitment that no extra bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills.

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ANNEXURE-5

ADDITIONAL TORS FOR PROJECTS REQUIRING NBWL CLEARANCE vide MOEF O.M. No.J-11013/41/2006-IA.II(I) (Part) dated20.08.2014

Form for providing Information for consideration of Standing Committee of NBWL

1. Name and Area (ha) of National Park/Sanctuary involved.

2. Type of forest in which the proposed area falls.

3. Conservation value/critical wildlife habitats in the PA.

4. Prevalent landuse categories within 10km distance/ESZ around the PA.

5. Is any project of similar nature already located within 10km of the PA boundary/ESZ around the PA? If so, please give the following details separately for each project.

   - Name of Project
   - Distance from PA
   - Size (capacity/output in appropriate units)
   - Impact(s) perceived, if any, on the conservation status of the PA

6. Provide your assessment of the likely POSITIVE and NEGATIVE impact(s) of the proposed project giving scientific and technical justification for each impact.

7. Whether the project applicant has ever committed violation of the Wildlife (Protection) Act 1972 or Forest Conservation Act 1980 in the past. If yes, provide details of the offences and the present status of each case.

8. Have you examined the project appraisal document and the alternatives as provided in the EC application form?

9. Any information that would like to bring to the notice of the National Board for Wildlife or its Standing Committee that may be relevant and assist in decision making.

10. Do you recommend the project?
    (please provide full justification to support your recommendation)

11. Conditions, if any, to be ensured in the interest of protection and conservation of the PA for according EC to the project?

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