Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

SUMMARY RECORD OF THE FOURTH (4th) MEETING OF EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF INDUSTRY-I SECTOR PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The fourth meeting of the Expert Appraisal Committee (EAC) for Industry-I Sector in terms of the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-I Sector Projects was held on 25th – 26th February, 2016 in the Ministry of Environment, Forest and Climate Change. Prof. Arun Pandey, Member of EAC has expressed his inability to attend the meeting due to prior departmental engagements. The list of participants is annexed.

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

Confirmation of the minutes of the 3rd Meeting

The minutes of the 3rd meeting, as circulated were confirmed.

4.3 ENVIRONMENTAL CLEARANCE (EC)

4.3.1 Cement manufacturing unit of M/s Mehboob Cement Industries Pvt. Ltd. located at Village Wuyan Bala, Tehsil Pampore, District Pulwama, Srinagar, Jammu & Kashmir [J-11011/247/2015-IA.II(I)]

The project proponent and their consultant made a presentation before the Committee. It was informed that the project is located at Village Wuyan Bala, Tehsil Pampore, District Pulwama, Srinagar. It is a green field project for the production capacity of 600 TPD cement. The proposal was initially submitted to State Environmental Impact Assessment Authority (SEIAA) on 18.01.2013 for grant of Terms of Reference (TOR), as per EIA Notification, 2006. Subsequently, the project was appraised by the SEIAA and ToRs were prescribed to the project on 23.02.2013.

The project proponent mentioned that the Dachigam National Park is located at a distance of 6.5 Km (Aerial distance) from the project site and the Dachigam National Park is in the buffer zone i.e. within the 10 km radius of the project site. The General Condition of EIA Notification, 2006 is applicable to the project; therefore, the proponent submitted the proposal to MoEFCC for appraisal.

During the discussions, the proponent was informed by the Committee that the Ministry *vide* amendment in EIA Notification, 2006 [SO No. 1599 (E) dated 25.06.2014], modified the provisions of the General Condition as, *'any project or activity specified in category 'B' will be appraised at the Central level as Category 'A', if located in whole or in part within 5 km. from the boundary of (i) Protected Areas notified under the Wildlife (Protection) Act, 1972 (53 of 1972); (ii) Critically Polluted areas as notified by the Central Pollution Control Board constituted under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) from time to time; (iii) Eco-sensitive areas as notified under sub-section (2) of section 3 of the*

Environment (Protection) Act, 1986 etc.; therefore, the project is well within the jurisdiction of SEIAA, Jammu & Kashmir.

In view of the above, the Committee opined that since the project is beyond 5 Km from the boundary of National Park and Eco-sensitive area, the proponent has to make an application to SEIAA, J&K; of course the clearance from Standing Committee for National Board for Wildlife is required. In the instant case since the proponent has made an application to the Ministry, the file of the proponent may therefore be transferred to SEIAA, J&K for further consideration of the proposal indicating to maintain the seniority of the project.

4.3.2 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., located at Village Pavatpur, Radhamadhabpur, Madand, PO–Bortoria, District Purulia, West Bengal [J-11011/201/2013-IA-II(I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s Global Tech Enviro Experts Pvt. Ltd., Bhubaneswar, Odisha) gave a detailed presentation on the salient features of the project. An application for proposed integrated Steel plant of M/s Shakambhari Ispat and Power Ltd. was initially received in the Ministry on 05.03.2013 for obtaining Terms of References (TORs) as per EIA Notification, 2006. The revised Form- I was received on 04.11.2014. The project was appraised by the Expert Appraisal Committee (Industry) during its meeting held on 11.12.2014 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed TORs to the project *vide* letter No. J-11011/201/2013-IAII(I) dated 13th April, 2015. The project proponent vide online application No. IA/WB/IND/48189/2014 dated 6th February, 2016 submitted the EIA/EMP report to the Ministry for environmental clearance.

M/s Shakambhari Ispat & Power Ltd (SIPL) is a running steel plant in Village Pavatpur, P.O. Bartoria, P.S. Neturia, District Purulia, West Bengal. The proposal is for enhancement of integrated steel plant production from 0.074 MTPA to 0.3 MTPA. The project site lies at 23^0 36' 52" N Latitude and 86^0 47' 12" E Longitude. The project site is well connected by road and rail. The National Highway NH-2 is about 27 Km away from the existing site. The nearest railway station is Ramkanali, which is about 7.5 km away from the site. Raniganj and Durgapur are the nearest cities where market facilities are available.

The present plant configuration of SIPL is 3x100TPD DRI kiln, 2x12T IF with caster, 1x6MW (WHRB) and 1x6 MW (AFBC) power plant, 1x8 TPH & 2x15 TPH IF with caster and 400 TPD Rolling mill and 1X15 TPH IF are under commissioning and billets are on sale. M/s SIPL proposes to expand its existing unit by installing 0.74 MTPA Coal Washery, 0.63 MTPA Iron Ore Beneficiation Plant, 1x20m2 Sinter Plant, 1x1870 TPD Pellet Plant, 4x350 TPD DRI Plant, 350m3 MBF, 4x12 MVA Ferro Alloys, 2x35T & 4x25T Induction Furnace, 225m3

Oxygen Plant, 250 TPD Lime Plant, 59 MW (1x23MW+1x36MW) AFBC Power Plant, 28 MW WHRB Power Plant and 600TPD Rolling Mill. The estimated project cost for expansion project of M/s SIPL is 1001 crores. The likely employment to be generated from the project is for 1700 persons.

The company has already acquired 177.19Acres land at Madandih in Bartoria, Purulia, West Bengal in which their existing plant is running and the expansion will be accommodated in the vacant space of this land. The company has taken permission from Eastern Coal Fields Limited for dumping ash in abandoned coal mines 2B & 2C in nearby Parbelia Village. The project essentially aims at installing facilities for the manufacture of 0.5 MTPA steel billets and converts 0.3 MTPA billets to rolled product and balance billets for sale or supply to sister units. The configuration of the existing and the proposed plant is as under:

Sl.No.	Facilities	Configurations			Product	Production	End Use
		Existing	Expansion	Final			
1.	Coal Washery	-	0.74 MTPA	0.74 MTPA	Clean Coal Middlings Rejects	0.33 MTPA 0.28 MTPA 0.05 MTPA	DRI AFBC Sale
2.	Rolling Mill	400 TPD	600 TPD	1,000 TPD	Rolled product	3,00,000 TPA	Sale
3.	Iron Ore Beneficiation	-	0.63 MTPA	0.63 MTPA	Beneficiated IO Tailings	0.394 MTPA 0.236 MTPA	Pellet Sale/ Landfill
4.	Sinter Plant	-	1X20 m^2	1X20 m^2	Sinter	1,98,000 TPA	MBF
5.	Pellet Plant	-	1X1870 TPD	1X1870 TPD	Pellet	5,82,000 TPA	DRI
6.	DRI with Pre-heater	3x100TPD	4x350 TPD	3x100TPD 4x350 TPD	Sponge Iron	5,44,000 TPA	IF
7.	MBF	-	1x350m^3	1x350m^3	Hot metal	2,49,900 TPA	IF
8.	Ferro Alloy Plant	-	2X12 MVA 2X12 MVA	2X12 MVA 2X12 MVA	Fe-Mn Si-Mn	36,608TPA 26,542 TPA	IF
9.	IF with LRF & or AOD	1x8T,2x15T,2x12T,8H	2X35T, 4X25T	1x8T,2x15T 2X35T,4X25T	Billet	5,23,950TPA with Ferro-alloys	Rolling Mill
10.	Oxygen Plant	-	225 m^3	225 m^3	Oxygen		MBF

11.	Lime Plant	-	250 TPD	250 TPD	Calcined Lime	80,000 TPA	DRI/Billet/Sinter
12.	AFBC	6MW	59 MW	65 MW	-	65 MW Power	Internal Use
13.	WHRB	6MW	28 MW	34 MW	-	34 MW Power	Internal Use

The details of raw material required for the plant is presented in the following table.

Sl. No.	**Raw Material**	**Quantity in TPA**	**Sourcing**	**Mode of transport**
1.	Coke	1,92,871	Local purchase	Road
2.	Coal for Washery	7,76,816	Eastern Coal Field	Rail
3.	Imported Coal	2,60,064	Imported Coal	Ship
4.	Mn ore	1,31,974	MOIL/Odisha	Rail/Road
5.	Dolomite	24,488	Madhya Pradesh	Rail/Road
6.	Iron ore lump	3,49,460	Odisha/Jharkhand	Rail/Road
7.	Iron Ore fines(Pellet plant)	6,00,000	Essel Mining/Sirajjudin & co	Rail/Road
8.	Iron Ore fines(Sinter plant)	1,82,952	Odisha/Jharkhand	Rail/Road
9.	Bentonite	6,000	Import	Ship
10.	Scrap	9,000	In plant generation	Road
11.	Cashing Sheet	265	Local Purchase	Road

The parameters required for Ambient Air Quality monitoring include PM_{10} & $PM_{2.5}$, SO_2, NO_X and CO. Ambient Air Quality Monitoring has been carried out for one season i.e. winter season with a frequency of twice a week for four weeks in a month for the entire season. During the study period, the concentrations of PM_{10} varied between 51.6-94.3 $\mu g/m^3$, $PM_{2.5}$ varied between 30.8-56.5 $\mu g/m^3$, SO_2 varied from 9.4-13.8 $\mu g/m^3$, NO_X values varied between 10.2-20.6 $\mu g/m^3$ & CO values varied between 258-518 $\mu g/m^3$ at different locations of the study area. The proponent has mentioned that slight increase of the pollutants in some locations is due to the vehicular movement, fossil fuel burning etc.

It has been mentioned that in order to control pollution ESPs will be provided with stacks for DRI kilns, Sinter plant and CFBC; Bag filter with stack for IFs, Pellet Plant, Lime Plant and RMHP. It has been proposed to plant about 50,000 local trees @ 10,000 trees per year to develop green belt (with >15,000 trees per ha) to control dust and noise pollution. Zero discharge would be adopted for the plant and 98.5% of water to be cleaned and recycled. The waste water generated will used in green belt development and dust suppression. The Blast Furnace slag will be sent to the cement plant, the BF sludge to the ceramic plant, fly ash will be sent to the brick kilns, coal washery reject will be sent to briquette making, iron ore tailings for sale for tile making, dolchar will be burnt in AFBC and excess ash will be sent to 2B and 2C abandoned mines of Eastern Coal Fields Limited.

It is estimated that the water requirement for the proposed expansion would be about 559 m^3 /hr i.e. 13,416 m^3 /day. The water will be drawn from the Damodar water reservoir in

Damodar river, which is 13 km away from project site through DVC in phases. Clearance to draw 0.55 MGD has already been obtained. The total power requirement for the plant is 136.4MW, out of which 99 MW will be sourced from CPP and balance 37.4 MW will be drawn from DVC. The clearance for drawing 50 MW power from DVC grid is in place.

The Public Hearing for the proposed expansion project was held on 14th October, 2015 at Sampriti Sadan i.e Panchayat Samity Hall in Neturia of Purulia District of West Bengal under the chairmanship of Additional District Magistrate (Development), District Purulia.

Based on the presentation made and discussions held, the Committee desired additional information on the following for further consideration of the proposal:

i. The project consultant M/s Mecons should be invited for providing details on the technical aspects of the project during the consideration of the project.
ii. The subject of project to be changed as this is an integrated project.
iii. Details regarding Electric load list and power consumption reduction per unit production should be submitted.
iv. A note on Secretariat for Industrial Assistance (SIA) registration.
v. Capacity calculations for settling tanks / pond should be furnished.
vi. Material balance diagram should be resubmitted.
vii. Details regarding proposed pollution control measures for the project should be submitted along with details on the number of pollution control equipments provided for each unit proposed.
viii. Disposal of the solid waste plan should be submitted.
ix. Status of permission for fire and safety.
x. Details of the area under possession for the existing and the proposed plant should be submitted. Break up for the existing land use and the proposed usage should be submitted.
xi. Acquisition of land long with consent from the land owners should be submitted.
xii. Biodiversity data should be presented.
xiii. Revised cost of EMP should be submitted, based on quantitative evaluation of the project.
xiv. Plan for occupational health and budget should be submitted.
xv. The proforma enclosed herewith at Annexure-XI regarding your project should be duly filled in and submitted.
xvi. Information on 'disaster preparedness and management plan' for hazards like fire, accident and other unforeseen situations should be submitted

4.3.3 Expansion of Sponge Iron Plant, Induction Furnaces, Installation of Ferro Alloys Unit, Alloy Steel Billet Plant, Alloy Steel Bar/TMT Rolling Mill, Light & Medium Section Mill, Heavy Section Mill of M/s Top Worth Urja & Metals Ltd. located at Village Heti, PO Udasa, Tehsil Umred, District Nagpur [J-11011/283/2013-IA-II(I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant [M/s Pollution and Ecology Control Services (PECS), Nagpur (QCI-NABET Ref No. 118)] gave a detailed presentation on the salient features of the project. An application for proposed Steel plant of M/s Top Worth Urja & Metals Ltd. was initially received in the Ministry on 30.08.2013 for obtaining Terms of Reference (TOR) as per

EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) during its meeting held on 19th – 20th December, 2013 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed TORs to the project on 30th April, 2014. Based on the revised application dated 22.07.2014 the matter was again considered in the 22nd EAC meeting held on 18th – 19th September, 2014 and the revised ToRs were prescribed on 5th November, 2014. The project proponent vide online application No. IA/IND/MH/23895/2014 dated 5th February, 2016 submitted the EIA/EMP report to the Ministry for environmental clearance.

The proposal is for enhancement of the production of Sponge iron from 60,000 TPA to 2,91,000 TPA by installing 2 x 350 TPD rotary kilns, M.S Billets from 240 TPD to 480 TPD by installing 2 x 12 Ton Induction Furnaces & TMT Bars from 66,000 TPA To 1,50,000 TPA. In addition to this, it is also proposed to install 2 X 16.5 MVA or 4 x 9 MVA Submerged Arc Furnaces to produce 50000 TPA Ferro Alloys, Arc Furnace based 4 Lac TPA Steel Melt Shop, 3 Lac TPA Alloy Steel Bar Mill, 1.5 Lac TPA Light & Medium Section Mill for Rolling of Steel sections and 2.5 Lac TPA Heavy Section Mill for Rolling of Structural Steel Heavy Sections. The existing and the proposed production capacities are presented in the following table:

Sr. No.	Name of Units	Existing Capacity	Proposed Expansion	Total after Expansion
1	Sponge Iron	60000TPA	231000TPA	291000TPA
2	Steel Billets	240 TPD	240 TPD	480TPD
3	TMT Bar	66,000TPA	84,000 TPA	1,50,000 TPA
4	Captive Power plant	100MW	--	100MW
5	Ferro Alloys Plant	--	50000 TPA	50000 TPA
6	Alloy Steel Melt shop	--	400000 TPA	400000 TPA
7	Alloy Steel Bar/Wire Rod/TMT Bar Mill (Stainless Steel, Alloy Steel, Carbon Steel & Wire Rods)	--	300000 TPA	300000 TPA
8	Section Mill For Rolling of Steel Sections	--	150000 TPA	150000 TPA
9.	Heavy Section Mill For Rolling of Structural Steel Heavy Sections	-	250000 TPA	250000 TPA

The land required for the project is 160 acres (64.7996 ha), out of which an area of 45 acre is kept for plant and machinery, 12 acre for building construction, 50 acre for plantation and 53 acre is kept as open space. Entire land is in possession of the proponent and all the expansion work will be carried out within the existing premise. No forestland involved. The topography of the area is flat and lies between 20°55'39.10"N Latitude and 79°14'47.96"E Longitude in Survey of India topo sheet No. 55 P/1, 55P/5, 55 O/4, 55 O/8, at an elevation of 310 m MSL. It has been reported that no water body exist in the project are and

modification/diversion in the existing natural drainage pattern at any stage has not been proposed. However, the Ukkarwahi lake and Paradgoan lake are located at a distance of 0.5 km N and 3 km SW respectively from the project site. Following table presents the raw material requirement for the plant:

Sr. No.	Raw Material Requirement	Existing Requirement	For Proposed Expansion	Total Requirement
1.	Manganese Ore	----------	7050 MT/M	7050 MT/M
2.	Ferro Alloy	100 MT/M	600 MT/M	700 MT/M
3.	Pig Iron	----------	3500 MT/M	3500 MT/M
4.	Billets	5850 MT/M	70275 MT/M	76125 MT/M
5.	M. S. Scrap	1140 MT/M	6405 MT/M	7545 MT/M
6.	Sponge Iron	7200 MT/M	36615 MT/M	43815 MT/M
7.	Coal (DRI+ Power plant+ Rolling mill)	69300 MT/M	28875 MT/M	98175 MT/M
8	Iron Ore/Pellets	7500 MT/M	28875 MT/M	36375 MT/M
9.	Dolomite	750 MT/M	2888 MT/M	3638 MT/M

No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are located in the core and buffer zone of the project.

The total water requirement of the project is estimated as 3009 m^3/day, which is being obtained from the Paradgaon Dam. The existing power requirement is 21.75 MW and it is proposed to enhance the same during expansion to 92.5 MW, which will be met from 100 MW existing Power Plant.

The proponent has informed that the ambient air quality monitoring has been carried out at 8 locations during January- April,– 2014 and the data submitted indicated that PM_{10} ranges from 29.7 to 59.7 µg/m^3, $PM_{2.5}$ ranges from 14.2 µg/m^3 to 30.7 µg/m^3, SO_2 ranges from 6.7 µg/$m^3$to 25.7 µg/m^3 and NOx ranges from 8.1 µg/m^3 to 32.7µg/m^3. The results of the modeling study indicates that the maximum increase of GLC for the project is 6.78µg/m^3 with respect to the PM_{10}, 21.15µg/m^3 with respect to the SO_2, 18.56 µg/m^3 with respect to the NOx.

A total of 16500 TPA of slag is generated, which will be crushed by spraying water in solid condition for separating slag and metal. Metal is reused in furnace and slag is used for hardening of working area, levelling or construction purpose. The fly ash generated (116 TPD) will be sent brick manufacturing unit within the premises of TUML. At present 28 Acres of land is developed as Green Belt and it is proposed that another 22 Acres will be developed as green belt in phase manner within two years.

The capital cost of the project is Rs. 1637.55 crores and the capital cost for environmental protection measures is Rs 26.8 crores. The annual recurring cost towards the

environmental protection measures is Rs 2.68 crores. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held, the Committee desired additional information on the following for further consideration of the proposal:

i. Details for the ToRs No. 19 and 29 should be submitted.
ii. Mitigation measures for SOx and NOx to be provided quantitatively.
iii. Traffic study for the existing road should be conducted and analysis report should be submitted.
iv. Details for the ToRs No. 31, 27, 28, 36, 37 and 42 (in tabular form) should be rewritten and submitted.
v. TCLP (ToR 38) test should be conducted and details should be submitted.

4.3.4 Existing Iron Ore Pellet Plant (1.2MTPA) of M/s MSPL Ltd. located at Village Halavarthi, Tehsil and District Koppal, Karnataka [F.No-J-11011/383/2014-IA.II(I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant [M/s Pollution and Ecology Control Services (PECS), Nagpur (QCI-NABET Ref No. 118)] gave a detailed presentation on the salient features of the project. An application for proposed Steel plant of M/s MSPL Ltd. was initially received in the Ministry on 02.12.2014 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 31st meeting held on 8th - 9th January 2015 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry had prescribed TORs to the project for undertaking detailed EIA-EMP study vide letter No. F.N. J-11011/383/2014-IA.II (I) dated 8th April 2015. Based on the TORs prescribed to the project, the project proponent submitted an online application No. IA/KA/IND/26038/2014 dated 5th February 2016 for environmental clearance to the Ministry.

The project of M/s MSPL Ltd. is located at Survey no. 2, 8, 9, 12 to 15, 132, 136 & part of 5, 6, 7, 16, 17 of Village Halavarthi, Tahsil Koppal, District Koppal, Karnataka. The proposal is for seeking environment clearance for the existing operational Pellet Plant for production of 1.2 MTPA Iron Ore Pellets. The process involves use of Travelling Grate Kiln process of Pellet manufacturing. The ore for the plant would be procured from Mines of MSPL, located near Hospet at a distance of 35 kms. and any other sources located in and around Hospet area through e-Auction. The ore will be transported by road in Tarpaulin covered trucks. Following table provide details of the raw material required, source and mode of transportation:

Sr. No.	Raw material	Annual Requirement Tons	Probable Source	Mode of Transport
1	Iron Ore Fines	1348600	Mines of MSPL, situated near Hospet, which is about 35 km away from the plant site and any other source in and around Hospet through E- Auction.	In Tarpaulin covered Trucks by road.

2	Coal	53900	Indigenous/ Imported	In Tarpaulin covered Trucks by road
3	Bentonite	15300	Gujarat	In Tarpaulin covered Trucks by road
4	Fuel Oil	15600 KL	Local sources / Petroleum Companies	By Tanker

The total land in possession for the project is 113 Acres, out of which 41 acres is for pellet plant. No forestland involved. It has been reported that no water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed. No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are located in the core and buffer zone of the project. The topography of the area is flat and lies between 15°19'49.9" N to 15°19'49.4" N Latitude and 76°12'29.9"E to 76°12'12.0"E Longitude in Survey of India topo sheet No. 57 A/3, at an elevation of 515 m MSL. The water level in pre-monsoon is recorded in the range of 1.82 m to 12.26 m in the area and the in post -monsoon is recorded in the range of 0.82 m to 13.55 m.

The water requirement of the project is 514.06m^3/day, which is being obtained from the Tungabhadra Dam. The power requirement for the Pellet Plant is 12 MW and will be met by the Karnataka State Electricity Board sanctioned quota.

Ambient air quality monitoring has been carried out at 8 locations during 1st March, 2015 – 29th May, 2015 and the data submitted indicated that PM_{10} ranges from 37.0 to 60.4 µg/m^3, $PM_{2.5}$ ranges from 16.7 to 27.3 µg/m^3, SO_2 ranges from 10.5 to 28.7 µg/m^3 and NOx ranges from 11.8 to 32.2µg/m^3. The results of the modelling study indicates that the maximum increase of GLC for the project is 0.96 µg/m^3 with respect to the PM_{10}, 2.89 µg/m^3 with respect to the SO_2, 2.48 µg/m^3 with respect to the NOx.

No solid waste is generated from the plant. It has been envisaged that an area of 15.0 acres is developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project.

The capital cost of the project is Rs. 300.50 crores and the capital cost for environmental protection measures is Rs 15 crores. The annual recurring cost towards the environmental protection measures is Rs 3.35 crores. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

i. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.

ii. Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm^3 and installing energy efficient technology.

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

iv. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.

v. Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.

vi. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.

vii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act whichever are more stringent.

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, SPCB and CPCB.

ix. A time bound action plan shall be submitted to reduce solid waste generated due to the project related activity, its proper utilization and disposal.

x. A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.

xi. 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 and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines.

xii. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the

environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

xiii. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.

xiv. The project proponent shall provide for LED lights in their offices and residential areas.

xv. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.

xvi. The proponent shall prepare a detailed CSR Plan for every year for the 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. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

xvii. 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.

4.3.5 Expansion of Cement Grinding Unit (from 2.5 to 3.4 MTPA) by process Optimization of M/s Ambuja Cement Ltd. located at Village Daburji, P.O Lodhimajra, Tehsil and District Ropar in Punjab (F. No. J-11011/146/2012-IA II (I)

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s J.M. EnviroNet Pvt. Ltd., Gurgaon) gave a detailed presentation on the salient features of the project. The application for proposed expansion of Cement Grinding Unit of M/s. Ambuja Cements Ltd. located at Village Daburji, P.O. Lodhimajra, Tehsil & District Ropar (Punjab) was initially received in the Ministry on 16th March, 2012 for obtaining Terms of Reference (ToRs) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its meeting held on 24th May, 2012 and prescribed ToRs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment and Forests had prescribed ToRs to the project on 15th June, 2012 and the validity of the same was extended vide letters dated 5th November, 2014 and 5th October, 2015.

Based on the ToRs prescribed to the project, the project proponent submitted an online application No. IA/PB/IND/2817/2012 dated 30th January, 2016 for environmental clearance to the Ministry. It may be mentioned that the cement grinding unit are categorised as category 'B' projects; however, in view of the inter-state boundary of Himachal Pradesh and Punjab within 4 km towards East direction; therefore, as per the general condition the project has been considered as category 'A' at the MoEFCC level.

The proposal is for enhancement of production of Cement Grinding Unit from 2.5 million tonnes per annum (million TPA) to 3.4 million TPA by process optimization. The total existing plant area is 68.47 ha. No additional land is required for the proposed expansion as the same will be done within the existing plant premises. No R&R is involved. No forest land is involved. The topography of the area is flat and reported to lies between 31° 01' 50.65" N to 31° 02' 54.09"N Latitude & 76°32' 6.23"E to 76° 35' 43.06"E Longitude in Survey of India topo sheet No.53A/12, 53A/8, 53B/9 and 53B/5. The elevation of project ranges from 257-285 m. The Satluj River (2.2 km in WNW direction, Sirsa Nadi (1.8 km in N direction) and Nangal Hydel Canal (1.0 km in SE direction) exist within 10 km radius of the study area. Existing area is under the possession of the proponent. No National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve, etc. are reported to be located in the core and buffer zone of the project.

The targeted production capacity of the cement grinding unit is 3.4 million TPA. The raw materials required for the proposed expansion are clinker (2.13 MTPA), gypsum (0.24 MTPA) and fly ash (1.03 MTPA). The clinker and gypsum will be transported through roads whereas fly ash will be transported through pneumatic conveying system.

The ground water table reported to ranges between 2.5 m - 9.7 m below the land surface during the post-monsoon season and 2.8 m - 10.15 m below the land surface during the pre-monsoon season. Based on the hydro- geological study, it has been reported that the radius of influence of pumped out water will be 9.47 m. Further, the stage of ground development is reported to be 52.69% and thereby the area is designated as safe area**.**

The existing fresh water requirement for the cement grinding unit (including colony) is 430 m^3/day, which is sourced from ground water. Additional 25 m^3/day water will be required for the proposed expansion; thus, the total fresh water requirement after the proposed expansion will be 455 m^3/day, which will be sourced from ground water. The existing power requirement for cement grinding unit (including colony) is 15.8 MW (15800 KW), which will be sourced from Captive Thermal Power Plant. No additional power is required for the proposed expansion project.

Ambient air quality monitoring has been carried out at 8 locations during post-monsoon season (i.e. October to December, 2012) and the data submitted indicated that PM_{10} ranges from 57.4 $\mu g/m^3$to 92.2 $\mu g/m^3$, $PM_{2.5}$ ranges from 23.5$\mu g/m^3$ to 43.2 $\mu g/m^3$, SO_2 ranges from 7.1 $\mu g/m^3$to 13.6 $\mu g/m^3$ and NOx ranges from 14.4$\mu g/m^3$ to 23.9 $\mu g/m^3$. The result of the modeling study indicates that the maximum increase of GLC for the proposed expansion project is 1.12 $\mu g/m^3$ with respect to the PM.

No solid waste will be generated from the cement manufacturing process. Dust collected from air pollution control equipment will be totally recycled back in the process. Solid waste in the form of sludge generated from the Sewage Treatment Plant (STP) will be utilized as manure for greenbelt development / plantation.

It has been mentioned that out of the total plant area i.e. 58.47 ha (excluding 10 ha area of truck yard), 10.52 ha (~18%) has already been developed under green belt/plantation and the same will be maintained. An additional area of 8.77 ha (~15%) will be further developed. Thus after proposed expansion, an area of 19.45 ha i.e. 33% of the plant area will be developed under green belt.

The Public hearing of the project was held on 5th May, 2015. The issues raised during public hearing are employment, pollution, infrastructure development, land related issues, education, CSR related issues, plantation, water etc.

The capital cost of the project is Rs. 1.05 crores and the capital cost for environmental protection measures is proposed as Rs 5.25 lacs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.52 lacs / annum. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

i. The project proponent shall install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.

ii. The Standards issued by the Ministry vide G.S.R. No. 612 (E) dated 25th August, 2014 regarding cement plants with respect to particulate matter, SO_2 and NO_x shall be followed.

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

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

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

vi. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by use of conveyors/rail mode of transport wherever feasible. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.

vii. 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.

viii. 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.

ix. Green belt shall be developed in 33% of the project area within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, along road sides etc. by planting native and broad leaved species in consultation with local DFO and local communities as per the CPCB guidelines.

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

xi. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.

xii. 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. 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.

xiii. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.

xiv. The project proponent shall provide for LED lights in their offices and residential areas.

xv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

4.4 FURTHER CONSIDERATION

4.4.1 New primary Metallurgical SSI Unit of M/s Tirupati Metals & Minerals, located at Buti Bori Industrial Area, District Nagpur, Maharashtra [F. No. J-11011/288/2014-IA II (I)]

Consideration of the proposal was deferred based on the request of the Project Proponent. The proposal would be considered in the next meeting of the EAC.

4.4.2 Integrated Project for Modernisation of Kumarasamy Raja Nagar Cement Plant for Increase of Clinker production from 2.8 MTPA to 3.185 MTPA by Upgradation of Line-1 & Optimum Utilisation of Line-II and Installation of 6MW Turbo generator of M/s Ramco Cements Ltd. located at KSR Nagar, Jaggayyapet Mandal, Dist. Krishna, A.P. regarding Amendment in Environment Clearance (F.No.J- 11015/403/2006-IA.II(I)

The proposal was earlier considered during the 2nd meeting of Expert Appraisal Committee held on 28th – 30th December 2015, when the Committee had desired additional information on the following for further consideration of the proposal:

i. Water balance statement should be revised and submitted to the Ministry
ii. Compliance report for the EC granted for the existing plant should be submitted.
iii. Aerial photograph of the entire site showing the existing facility and the site for the proposed plant should be submitted.

The project proponent vide letter No. RCL/MoEF&CC/104/2015-16 dated 11.02.2016 submitted the requisite information.

Based on the presentation made and discussions held the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

i. The project proponent shall install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.

ii. The Standards issued by the Ministry vide G.S.R. No. 612 (E) dated 25th August, 2014 regarding cement plants with respect to particulate matter, SO_2 and NO_x shall be followed.

iii. Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm^3 and installing energy efficient technology.

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

v. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R.

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

vi. Vehicular pollution due to transportation of raw material shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material.

vii. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.

viii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment(Protection) Act,1986.

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

x. A time bound action plan shall be submitted to reduce solid waste generated due to the project related activities, its proper utilization and disposal

xi. Proper utilization of fly ash 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.

xii. A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.

xiii. Green belt shall be developed in at least 33% of the project area by planting native and broad leaved species in consultation with local DFO and local communities as per the CPCB guidelines.

xiv. All the commitments made to the public during Public Hearing/public consultation meeting shall be satisfactorily implemented and adequate budget provision shall be made accordingly.

xv. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.

xvi. The proponent shall prepare a detailed CSR Plan for every year for the 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. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

xvii. The Company shall submit 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.

xviii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

xix. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.

xx. The project proponent shall provide for LED lights in their offices and residential areas.

4.5 ANY OTHER ITEM

4.5.1 Partial transfer of Environmental Clearance for 1MTPA Coke Oven Plant and 2.5 MTPA Coke Oven Plant from M/s JSW Steel Ltd to M/s Dolvi Coke Projects Ltd. located at Village Dolvi, Taluka Pen, District Raigad, Maharashtra regarding amendment in Environment Clearance (F.No. J-11011/76/2013-IA.II(I)

The Environmental Clearance to the project of 3.0 MTPA to 5.0 MTPA Integrated Steel plant at Village Dolvi, Taluka Pen, District Raigad in Maharashtra was accorded *vide* letter J-11011/166/2011-IA-II (I) dated 21st November 2012 to M/s JSW Steel Ltd and further expansion of its project up to 10 MTPA was accorded environmental clearance *vide* letter J-11011/76/2013-IA II (I) dated 25th August 2015.

It has been explained by the project proponent that the expansion projects up to 5 MTPA have been established. The existing steel plant is based on the Direct Reduced Iron (DRI) - Blast Furnace-CONARC - Continuous Casting – Rolling Mill (CSP) route. The expansion is based on proven BF - EAF route.

The project proponent mentioned that the environment clearance for steel plant up to 5 MTPA includes 1.0 MTPA recovery type Coke Oven. Further, the environment clearance up to 10 MTPA plant includes 2.5 MTPA recovery type coke oven plant. It is proposed to combine the Coke Ovens of 1.0 MTPA and 2.5 MTPA, which are part of the earlier ECs as mentioned above into a single 3.5 MTPA Coke Oven plant in same location under 5 MTPA to 10 MTPA expansion project. By combining both the Coke Ovens into one the pollution load and other resource requirement like water will not increase; however the land requirement and Capital Cost will be optimized for setting up a single Coke oven in-place of setting up two small and separate coke ovens. Also this will have varied and distinct advantages in terms of lower land foot print with compact design for better operational and maintenance practices and logistics for handling coal and coke.

Total project cost of the coke oven plant of 3.5 MTPA will be Rs 2520 Crores. In order to optimize the capital expenditure, it is proposed to outsource the establishment and operations of the Coke Oven facility. The 3.5 million ton Coke Oven will be established and operated by an Associate Company, called Dolvi Coke Projects Limited and JSW Steel will be the largest shareholder of the SPV. JSW Steel Ltd. will sign the take or pay agreement from the associate company. This arrangement will help JSW to optimize the requirement of capital expenditure for setting up 10 Million ton capacity at Dolvi Works.

The project proponent further mentioned that while granting the environmental clearance for the expansion project, Ministry *vide* its specific condition No (iii) stipulated that *'The commitment made by the PP for plantation of the green belt to the tune of 655 acres should be expedited. Three rows of green belt, 12-15 meters wide, all along the periphery of the plant should be planted'*. The project proponent mentioned that they are in the process of developing green belt with three tier plantation along the periphery and avenue plantation along the internal roads inside the premises. JSW Steel Ltd. is fully committed to comply with the 33% green belt requirement. However, it is becoming difficult to get continuous land at Dolvi, Taluka Pen, District Raigad to comply with 33% green belt cover along the periphery premises. Therefore, the project proponent requested to grant permission for plantation in nearby areas in degraded private/ Government land outside the plant premises in coordination with District Revenue/ Forest Department, Raigad, Maharashtra or plantation in line with the condition stipulated by the Maharashtra Pollution Control Board in its Consent to Operate, which states "The applicant shall bring minimum 33% of the available open land under green coverage / plantation".

Regarding CSR related activity the project proponent mentioned that EAC on 26th March, 2015, directed to allocate 2.5% of the total project cost to be spent on CSR activities, which includes 2% of the annual profit as provided in clause No 135 of the Companies Act 2013. Accordingly, the CSR plan of 10 years was submitted to MoEFCC and was accepted. However while granting the environmental clearance, an amount equivalent to 5% of the total cost of the project to be earmarked towards the Enterprise Social Commitment (ESC) based on local needs, has been mentioned as per the specific conditions, point no (v), of the EC dated 25.08.2015. The project proponent requested to consider the CSR plan of 2.5% of the project cost as submitted.

Based on the presentation made and discussions held in detail, the Committee opined as under:

(i) Regarding combining of the two Coke Oven plants of 1.0 MTPA and 2.5 MTPA, which were part of earlier ECs, into a single 3.5 MTPA Coke Oven plant in the same location under 5 MTPA to 10 MTPA expansion project to be operated by their Associate Company, called Dolvi Coke Projects Limited is an administrative decision to be taken by the Ministry. However, as there is no provision in the notification for partial transfer of the environment clearance, the Committee has; therefore, deferred decision in the matter and referred matter to Ministry.

(ii) Regarding plantation, the Committee agreed to the submission of the project proponent and recommended the proposal of plantation in nearby areas in degraded private/ Government land outside the plant premises in consultation and coordination with District Revenue/ Forest Department, Raigad, Maharashtra.

(iii) With regard to reconsideration of CSR budget, the Committee recommended to revise the condition for 2.5% of the total cost of the project for CSR instead of 5%.

4.5.2 Expansion of Steel Plant by M/s Drolia Electrosteels Private Limited, located at Siltara, Block Dharsiwa, District Raipur, Chhattisgarh [F. No. J-11011/386/2008-IA-II (I)]

The above proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) during its 33rd meeting held on 10th -11th February, 2015. The Committee after deliberations recommended for extension of validity of environment clearance for a period of 5 years with effect from 15th December, 2013.

However, in the meantime an amendment in the EIA Notification, 2006 was issued by the Ministry vide Gazette Notification No. S.O. 1141(E) dated 29th April, 2015, extending the period of validity of Environment Clearance from 5 years to 7 years. Therefore, the environment clearance accorded to the Project vide letter No. J-11011/386/2008-IA-II (I) dated 15.12.2008 stands valid upto 14.12.2015. Therefore a communication was sent to the project proponent that in case of seeking further extension of environment clearance beyond 14.12.2015, an application as per the provisions of EIA Notification, 2006 as amended may be submitted afresh by online to the Ministry.

The project proponent *vide* online application No. IA/CG/IND/19892/2008 dated 29th September, 2015 requested for extension of validity of environment clearance dated 15.12.2008 for further period of 3 years.

The implementation status of the project as informed by the proponent is indicated below:

S. No.	Facility	Capacity	Facilities implemented	Yet to be Implemented
1	Sponge Iron (100tpdX2nos DRI kilns)	66000 TPA	66000 TPA	-
2	Semi Finished Steel billet & Ingot	166000 TPA	145200 TPA	20800 TPA
3	Iron Ore beneficiation	200000 TPA		200000 TPA

	and Pelletization Plant			
4	Dry Coal beneficiation	150000 TPA		150000 TPA
5	Power Plant (WHRB) based on waste heat	5 MW	5 MW	-
6	Power Plant (CFBC) based on Coal	6 MW	6 MW	-
7	Ferro Alloys (Fe Mn/ Si Mn)	11500 TPA		11500 TPA
8	Rerolled Steel	150000 TPA		150000 TPA

The committee after detailed deliberation recommended the proposal for extension of validity of environment clearance for further period of 3 years that is upto 14th December, 2018.

4.5.3 Amendment in Environmental Clearance regarding use of fuel (such as Petcoke, Coal and Lignite) in existing Thermal Power Plant (15 MW) and Captive Power Plant (33 MW) by M/s Ambuja Cement Limited (Unit Bhatapara), located at Baloda Bazar, Rawan, Chhattisgarh [F.No-J-11011/355/2005-IA.II(I)].

M/s. Ambuja Cements Limited (Unit: Bhatapara) has an existing Clinkerisation Unit [(Clinker Production 2.72 MTPA and Captive Power Plant of capacity 48 MW (33 MW & 15 MW)] at Village Rawan, Tehsil Baloda Bazar, District Baloda Bazar- Bhatapara, Chhattisgarh.

The environmental clearance (EC) to the aforesaid project was granted by MoEFCC *vide* letter No. J-11011/355/2005-IA II (I) dated 13th April 2007. The environment clearance for expansion in clinker production capacity (4.42Million TPA to 4.80 million TPA) and Captive Power Plant (2x15MW and 33MW) was issued *vide* letter dated 25th January, 2016.The environment clearance compliance, duly certified by the Regional Office, MoEFCC, Bhuvneshawar has also been obtained *vide* letter No. 5-6/2007(ENV)/1980 dated 17.11.2014.

M/s Ambuja Cements Ltd. (Unit: Unit Bhatapara) has now proposed for amendment in above mentioned Environmental Clearances regarding use of Fuel Mix (Coal, Petcoke & Lignite) instead of only coal, in existing Captive Power Plant (15 MW & 33 MW) as the cost of production by pet coke & lignite is cheaper as compared to coal and the proposed change shall not result in any adverse impact on environment. By using Petcoke (Waste product of refinery), we are doing national saving by reduction of indigenous coal.

It has been envisaged that there will be no additional land requirement, no change in plant capacity and manufacturing process, no additional water and power requirement, no additional wastewater generation, no change in utilities etc. due to the proposed change of fuel mix.

Based on the presentation made and discussions held, the Committee recommended the proposal for amendment in the Environment Clearance for use of Fuel Mix (Coal, Petcoke & Lignite) instead of only coal, in existing Captive Power Plant (15 MW & 33 MW) with the following additional conditions:

i. The project proponent shall ensure capturing of 90% of the SOx and NOx.

4.5.4 Mini Steel Plant (1.5 LTPA), Sponge Iron Plant (1.2 LTPA to 1.65 MTPA), Iron Ore Pelletisation Plant (6.0 LTPA) and Captive Power Plant (25MW) by M/s KMMI Steel Pvt. Ltd. (KSPL) (Now called Mineral Steel & Power Pvt. Ltd.), located at Village Yerrabanahalli, Taluk Sandur, District Bellary Karnataka regarding Amendment in Environment Clearance [F.No. J-11011/1166/2007-IA.II(I)].

Consideration of the proposal was deferred based on the request of the Project Proponent. The proposal would be considered in the next meeting of the EAC.

4.5.5 Expansion of Integrated Steel Plant with Sponge Iron 2, 10, 000 TPA to 2, 64, 000 TPA, Total Power Plant -26 MW (CPP) to 28 MW (CPP) (WHRB -18 MW to 20 MW), SMS – 1, 29, 6000 TPA (by 4 nos. Induction Furnace of 8T each) to 1, 29, 600 TPA (by 6 Nos. Induction Furnace of 8T each), Ferro Alloys 14,400 TPA to 19, 800 TPA and new Pellet Plant (0.6 MTPA) in its existing plant by M/s Shri Bajrang Power & Ispat Ltd., located at Village Borjhara District Raipur, Chhattisgarh regarding exemption from Public Hearing [F.No. J-11011/531/2007-IA.II(I)].

The Terms of References(ToRs) for the project was prescribed by the Ministry *vide* letter No. J-11011/531/2007-IA.II(I) dated 14th January, 2016. The proposed expansion project of M/s Shri Bajrang Power & Ispat Ltd. is located at Village Borjhara, District and Tehsil Raipur, Chhattisgarh. The project is located within the Urla Industrial Growth Centre.

The proposal was earlier considered by the Expert Appraisal Committee(EAC) during its 1st meeting held on 18th to 20th November, 2015 when the committee recommended the project for grant of ToRs along with conduct of public hearing. During the presentation the project proponent has not requested for exemption of public hearing, therefore the ToRs dated 14th January, 2016 was issued with conduct of public hearing.

The project proponent has now requested for exemption from Public Consultation process, in view of location of the project within the Notified Industrial Area(Urla Industrial Growth Centre).

The Committee has considered the request of the proponent and after detailed deliberation recommended the proposal for exemption from Public Hearing, subject to submission of notification to the effect that the project is located within the Urla Industrial Growth Centre at the time of environment clearance.

4.6 CASE FOR TERMS OF REFERENCE (TOR)

4.6.1 Expansion of Asbestos Cement Sheet manufacturing unit from 72000 MTPA to 1,75,000 MTPA, by M/s HIL Limited, located in Industrial Area, Jasidih, District Deoghar in Jharkhand [F.No J-11011/01/2016-IA.II(I)].

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons for his absence by the applicant.

4.6.2 Proposed installation of the Ferro Alloy Plant through setting up of 1x6 MVA and 1x9 MVA submerged Arc Furnaces for production of Ferro

Manganese(38,156TPA) or Silico Manganese(27,109TPA) or Ferro Silicon(10,421TPA) by M/s Electrosteel Casting Limited, located at Haldia, District Purba Medinipur in West Bengal [F.No J-11011/02/2016-IA.II(I)].

The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. For this purpose, the project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(b), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the central level.

It is a Greenfield project and M/s Electrosteel Castings Limited proposes to install a new manufacturing unit for production of Ferro Manganese or Silico Manganese or Ferro Silicon. It is proposed to set up the plant for ferro alloy production based on modern technology. The proposed unit will be located at Haldia, District Purba Medinipur in West Bengal. The project lies within the geographical coordinates of 22°5'20.89"N Latitude & 88°6'34.75"E Longitude, with mean sea level of 12 ft. The land area acquired for the steel plant is 3.19 acres (1.29 Ha), out of which 1.0 acres (0.4 ha) land will be used for green belt development. Total project cost is approx 50.0 Crore rupees. Proposed employment generation from proposed project will be 178 direct employments and around 500 indirect employments.

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

Name of unit	**No. of units**	**Capacity of each Unit**	**Production Capacity**
Ferro Alloy Plant	1 1	6 MVA Submerged Arc Furnace. 9 MVA Submerged Arc Furnace.	Ferro Manganese – 38,156 TPA or Silico Manganese – 27,109 TPA or Ferro Silicon– 10,421 TPA

The electricity load of 12.5 MW will be procured partly from the Captive Power Plant of the company, operating in the adjacent land and partly from the supply system of WBSEDCL. The Company has also proposed to install two nos. 600 KVA DG Set for emergency backup power for partial cooling & lighting.

Proposed raw materials are:

For Ferro Manganese production	Manganese Ore – 74,230 TPA, Iron Scrap- 3,815 TPA, Coke Breeze- 19,078 TPA.
For Silico Manganese production	Manganese Ore – 12,076 TPA, Manganese Slag – 37,953 TPA, Quartzite – 7,393 TPA, Dolomite – 6,777 TPA & Iron Scrap- 2,710 TPA, Coke Breeze- 13,554 TPA.

For Ferro Silicon production	Quartzite – 18,144 TPA, Iron Scrap- 2,501 TPA, Coke Breeze- 13,287 TPA.

Requirement of raw materials will be fulfilled from different mines in India and abroad. Iron scrap from local rolling mills, market. Fuel in this process will be mainly electricity. Water consumption for the proposed project will be 420m^3/day, which will be sourced from the Haldia Development Authority supply. The plant will be designed as a zero discharge plant as far as the process effluents are concerned. The processed water will be re-circulated through cooling and treatment. The entire wastewater after necessary treatment will be recycled for various purposes inside the plant. Domestic wastewater will be treated in Septic tank–Soak pit system.

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

i. Best available technology for fugitive emission should be employed and details should be submitted
ii. Public Hearing to be conducted by West Bengal Pollution Control Board.
iii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
iv. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report. While preparing the CSR plan, fund should be allocated for the Medical component.
v. Information as per Annexure 11 of the Minutes of the Meeting should be provided

4.6.3 Environmental Clearance for 1000 TPD of Gold ore processing plant by M/s Deccan Exploration Services Private Limited (DESPL), located at Village Ganajur of Haveri District in Karnataka [F.No J-11011/03/2016-IA.II(I)].

The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. For this purpose, the project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(b), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the central level.

It is a Greenfield project and M/s Deccan Exploration Services Private Limited (DESPL) proposes to install a new manufacturing unit for 1000 TPD gold ore processing. It is proposed to set up the plant for 1000 TPD Capacity and involves Gravity separation – Cyanidation – Carbon in Leach – calcination - Electrolysis technique. The mill tailings shall be disposed off separately in a designated tailing dump. The proposed unit will be located at near Ganajur Village, Haveri Taluk,Haveri District, Karnataka. The land requirement of the project is 38.45 ha, out of which 8ha area is kept for mineral ore storage, 7ha for mineral separation plant, 0.7ha

for ETP,2.35ha for roads and infrastructure, 8.4ha for tailing dump, 1ha for township, 6ha for water reservoir and 5ha for green belt development. Total project cost is approx 265 Crore rupees. Proposed employment generation from proposed project will be 100 direct employment and150 indirect employments.

S. No.	Name of unit	No. of units	Capacity of each	Unit Production Capacity
1.	Gold production	1	1000 TPD ore processing	Around 3 kg/day of gold

The electricity load of 5.0 MW will be procured from GESCOM. It is also proposed to install DG Set of 1000 kVA for meeting requirement during emergency. Proposed raw material and fuel requirement for project are Gold Ore, Sodium Cyanide, Lime, Hot Caustic cyanide solution, HNO3, Activated Carbon, Cyanochlor/bleaching powder and Steel Wool etc. Main raw material is Gold ore, which will be obtained from captive mine. Water Consumption for the proposed project will be 3000 m^3/day and waste water generation will be about 1500 m^3/day, which will be treated and recycled back to the process. Domestic wastewater will be treated in septic tanks followed by soak pits. No residential colony is proposed inside the project area.

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

i. Details regarding detoxification of cynide in the process should be submitted.
ii. Details on effluent management should be submitted such that cynide should not mix with the storm water, ground water or the stream.
iii. Details on Arsino-pyrite disposal and handling should be submitted.
iv. Public Hearing to be conducted by the Karnataka Pollution Control Board.
v. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
vi. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report. While preparing the CSR plan, fund should be allocated for the Medical component.
vii. Information as per Annexure 11 of the Minutes of the Meeting should be provided

26th February, 2016/Friday

4.7 ENVIRONMENTAL CLEARANCE (EC)

4.7.1 Expansion of Clinker production capacity (5.35 MTPA to 8.0 MTPA) and WHRB (15 MW to 50 MW) by M/s. JK Lakshmi Cement Ltd., located at Village Jaykaypuram, Teshil Pindwara, District Sirohi, Rajasthan [F. No. J-11011/306/2013-IA-II (I)] .

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (J.M. EnviroNet Pvt. Ltd., Gurgaon) gave a detailed presentation on the salient features of the project. An application for proposed plant of M/s. JK Lakshmi Cement Ltd. was initially received in the Ministry on 5th August, 2013 for obtaining Terms of References (TORs) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) during its meeting held on 19th December, 2013 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry had prescribed TORs to the project dated 31st January, 2014. Based on the TORs prescribed to the project, the project proponent submitted an online application dated 30th January, 2016 for environmental clearance to the Ministry.

The project of M/s. JK Lakshmi Cement Ltd. is located at Village Jaykaypuram, Tehsil Pindwara, District Sirohi, State Rajasthan and is for enhancement of production of Clinker (from 5.35 to 8.0 MTPA) and capacity enhancement of WHRB (from 15 to 50 MW). The total project area is 380.74 ha. The topography of the area is flattened reported to lies between 24° 41' 6.98" N to 24° 42' 6.78" N Latitude and 72° 59' 50.51" E to 73° 0' 41.68" E Longitude in Survey of India topo sheet No. 45D/13, 45D/14, 45H/1 and 45H/2, at an elevation of 360-390 m. The proposed expansion will be done within the existing plant premises; thus, no additional land is required for the same. No River passes through the project area. No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project.

	Units	**Existing Capacity (Line - I, II & III)**	**Proposed Expansion Capacity**		**Total Capacity After Expansion**
			Line - I, II & III	**New Line – IV**	
Project Proposal	Clinker (MTPA)	5.35	0.65	2.0	8.0
	Cement (MTPA)	8.70	Nil	Nil	8.70
	Captive Power Plant (MW)	58 (2 x 20 + 1 x 18)	Nil	Nil	58 (2 x 20 + 1 x 18)
	WHRB (MW)	15	20	15	50
	D.G Sets (MW)	19	Nil	Nil	19

For re-utilization of the wasted heat from the expelled gases of Pre-Heaters (PH) and Air Quenched Coolers (AQC); Waste heat recovery boiler of 35 MW capacity will be installed. The main objective of WHRB is to utilize waste heat from cement production lines, for generating electric power which will be utilized on-site and will reduce power supplied from the Grid. WHRB will contribute to the more efficient use of energy at JKCL and will reduce reliance on exhaustible fossil fuel.

The targeted production capacity of the Clinker is 8.0 MTPA and WHRB is 50 MW. The raw materials required for the proposed expansion are Limestone (13.0 MTPA) and Red

Ochre (0.2). The Limestone will be transported through covered conveyor belt and Red Ochre will be transported through roads.

The ground water table reported to ranges between 8.44m to 27.64m. The water requirement of the project is estimated as 5380 KLD, out of which 4820 KLD of fresh water requirement will be obtained from the West Banas Dam and Ground water and the remaining requirement of 560 KLD will be met from the treated waste water from Recycled water from CPP & STP. The power requirement of the project is estimated as 112.25 MW, which will be sourced from Captive Power Plant, RSEB Grid, VSLP and WHRB.

Ambient air quality monitoring (composite for Plant & Proposed Mine) has been carried out at 8 stations during Winter Season (December, 2013 to February, 2014) and the data submitted indicated that PM_{10} ranges from 52.3 to 93.1 $\mu g/m^3$, $PM_{2.5}$ ranges from 23.8 to 43.8 $\mu g/m^3$, SO2 ranges from 5.9 to 11.8 $\mu g/m^3$ and NOx ranges from 12.3 to 23.7 $\mu g/m^3$. The result of the modelling study indicates that the maximum increase of GLC for the proposed project is 5.53 $\mu g/m^3$ with respect to the PM, 4.58$\mu g/m^3$ with respect to the SO2 , 3.91 $\mu g/m^3$ with respect to the NOx.

The proposed expansion will be done within the existing plant premises; thus, no additional land is required for the same. Therefore, No R&R is involved.

No solid waste will be generated from the cement manufacturing process. Dust collected from air pollution control equipments will be totally recycled back to the process. Solid waste in the form of sludge will be generated from the sewage treatment plant and same will be used as manure for greenbelt development/ plantation. It has been envisaged that an area of 125 ha has been developed under green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

The Public hearing of the project was held on 28th August, 2015 for the proposed expansion in Clinker (5.35 to 8.0 MTPA) and WHRB (15 to 50 MW), under the Chairmanship of Additional District Collector, Sirohi.

The capital cost of the project is Rs. 1140 Crores and the capital cost for environmental protection measures is proposed as Rs. 120 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 3.5 Crores/ annum. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

i. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.

ii. The Standards issued by the Ministry vide G.S.R. No. 612 (E) dated 25th August, 2014 regarding cement plants with respect to particulate matter, SO_2 and NO_x shall be followed.

iii. 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 viz 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.

iv. The project proponent shall take all precautionary measures during construction/operation of the project for conservation and protection of endangered fauna namely sloth bear, leopard, etc. found in the project area and its surroundings. Mitigation measures including rescue and rehabilitation of wild animals coming in conflict with humans will form part of overall conservation strategy etc. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the Wildlife Conservation Pan so prepared specific to the project site shall be effectively implemented. A copy of the approved site specific conservation plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Lucknow.

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 the specific mitigative measures taken in the existing project and proposed for the expansion project to keep the emissions well below prescribed 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 by use of

conveyors/rail mode of transport wherever feasible. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.

xii. 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.

xiii. 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.

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

xv. 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 / re-processors only.

xvi. The kiln shall be provided with a flexible fuel feeding system to enable use of hazardous wastes and other wastes including biomass, etc.

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

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

xix. 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 and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines.

xx. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.

xxi. The project proponent shall provide for LED lights in their offices and residential areas.

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

xxiii. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.

xxiv. The proponent shall prepare a detailed CSR Plan for every year for the 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. 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.

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

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

xxvii. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.

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.

4.7.2 Proposal for 2 x 6 MVA Sub merged Arc Furnace for Ferro Alloy - Ferro Manganese-23,630 Mt/P.A Or Silico Manganese- 16,150 Mt/P.A or Pig Iron 26,100 Mt/P.A, 4 x 15 MT Induction Furnace with Billet – 129900 Mt/P.A, Re- Rolling Mill – 89280 Mt/P.A ha. by M/s Supersmelt Industries Pvt. Ltd, located at Barjora, Bankura, West Bengal.

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (Envirotech East Pvt. Ltd., Kolkata) gave a detailed presentation on the salient features of the project. An application for proposal was initially received in the Ministry on 29th October, 2014 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 27th meeting, held on 13th November, 2014 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed TORs to the project on 12th February, 2015. Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 26th March,2015.

The Member Secretary has informed the Committee that the proposal received in the Ministry on 26th March, 2015 was considered by the Expert Appraisal Committee during its 41st meeting held on 2nd June, 2015. During the meeting, the Committee observed that the EIA report submitted by the proponent was shown to be prepared by M/s Visiontek Consultancy Services Pvt. Ltd.; however, the team of people making presentation on behalf of the Consultant (M/s Visiontek Consultancy Services Pvt. Ltd.) were not from M/s Visiontek Consultancy Services Pvt. Ltd. but from other Company naming as M/s Green Mount. The Committee therefore did not proceed with the presentation. Accordingly, Ministry had taken a decision not to accept the EIA report. The proponent was therefore advised to revise the EIA and EMP report based on collection of fresh baseline data through accredited Consultant. The proponent had therefore engaged M/s Envirotech East (Pvt.) Ltd., Kolkata as EIA Consultant and submitted revised online application dated 27th January, 2016 to the Ministry. On enquiry by the Committee on the present status of the matter, the proponent has informed that they have lodged complaint against the fraudulent Consultant and thereafter nothing heard about him.

The project of M/s Supersmelt Industries Pvt. Ltd. is located at Village Ghutgoria, Tehsil Barjora, District Bankura, West Bengal, is for setting up of a new steel plant for installation of 2x6 MVA Sub merged Arc Furnaces for production of Ferro Alloy, Ferro Manganese - 23,630 TPA or Silico Manganese - 16,150 TPA or Pig Iron - 26,100 TPA; 4x15 MT Induction Furnaces for production of Billet – 129900 TPA and Re-Rolling Mill for production of 89280 TPA TMT Bars. The following table presents the existing and the proposed capacities:

Sl. No.	UNIT	Unit (as per EC obtained vide Letter No. J-11011/ 678/2008-IA II (I) dated 11th February 2009) which are not implemented	Proposed Units Capacity	Product

1.	Submerged Arc Furnaces	4x6 MVA	2x6 MVA	Ferro Manganese (23,630 TPA) / Silico Manganese (16,150 TPA)/ Pig Iron (26,100 TPA)
2.	Induction Furnace (IF) (with matching Ladle Refining Furnace & Continuous Billet Caster)	- -	4x15 T	Billets (1,29,900 TPA)
3.	Re-Rolling Mill with 18 TPH Reheating Furnace	- -	89,280 TPA	TMT Bars

The total land required for the project is 11.2 acres (4.53 ha) and it is under the possession of the Company. The landuse is industrial in nature. No forest land is involved. The entire land has been acquired for the project. No R&R is envisaged. River Damodar is flowing at a distance of 6.0 km from the Project site. There is no eco-sensitive area like National Park/ Wildlife Sanctuary/ Tiger Reserve/ Elephant Reserve/ Core Zone of Biosphere Reserve/ Habitat for Migratory birds etc. within 10 km radius study area around the Project site.

The major raw materials, which will be handled, consist of Sponge Iron, Scrap, Ferro Alloys, Manganese Ore, Coke, Dolomite, Quartzite etc. for the proposed project.

SL. NO.	RAW MATERIALS	ANNUAL REQUIREMENT (IN TPA)	SOURCE
4x15 T Induction Furnaces:			
1.	Sponge Iron	96800	Local Market
2.	Pig Iron	31300	IN HOUSE / Local Market
3.	Scrap	32970	Local Market
4.	Ferro Alloys	940	IN HOUSE
2x6 MVA Submerged Arc Furnaces:			
5.	Manganese Ore	57560	Orissa
6.	Coke	42676	Local Market
7.	Dolomite	13199	Local Market
8.	Mill Scale / Scrap	1600	Local Market
8.	Quartzite	2108	Local Market

9.	Iron Ore	48626	Orissa

The topography of the area is flat and reported to lies between 23°25'49.93"N Latitude and 87°15'9.39"E Longitude, at an elevation of 88.39 m AMSL. at Barjora block, the average water level from the last five years is 5.95 meters bgl during summer and during post-monsoon the average water level is 2.15 meters bgl.

It is estimated that the water requirement for the project to the tune of 104 m3/day. The raw water will be sourced from the borewell, for which the permission has already been obtained from State Water Investigation Directorate (SWID). The power requirement of the project is estimated as 50 MW, which will be sourced from the Damodar Valley Corporation (DVC).

Ambient air quality monitoring has been carried out at 8 locations during 1st October, 2015 to 31st December, 2015. The data submitted indicated that PM_{10} ranges from 50 $\mu g/m^3$ to 99 $\mu g/m^3$), $PM_{2.5}$ ranges from 18 $\mu g/m^3$ to 45 $\mu g/m^3$, SO_2 ranges from 5 $\mu g/m^3$ to20 $\mu g/m^3$ and NO_x ranges from 10 $\mu g/m^3$ to 42 $\mu g/m^3$. The results of the modelling study indicated that the maximum increase of GLC for the proposed project is 2.53 $\mu g/m^3$ with respect to the PM and 3.13 $\mu g/m^3$ with respect to the SO_2.

It is proposed that 6000 TPA of slag from IF furnaces and 15,150 TPA of slag will be generated during Silico Manganese production, which will be used for road construction / land filling. About 16120 TPA of slag generated from the process of Ferro Manganese will be used in Silico Manganese manufacturing. End cuts, Scale & Scrap (8700 TPA) from CCM/ Rolling Mill will be used in Induction Furnaces. It has been envisaged that an area of 3.7 acres (1.5 ha) will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

The Public hearing for the project was exempted by the EAC committee, as this project was earlier accorded environment clearance by the Ministry under EIA Notification, 2006.

The capital cost of the project is Rs. 100.88 crores and the capital cost for environmental protection measures is proposed as Rs. 538 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 54.70 Lakhs**.** The proponent has mentioned that there is no court case to the project or related activity.

The Committee noted that the project proponent's application provided two independent processes, one for setting up of Submerged Arc Furnaces for production of Ferro Alloy and another for setting up Induction Furnaces for production of Billet and Re-Rolling Mill for production TMT Bars. It is noted that only a small quantity of ferro alloy will be used for production of billets, and the rest of the ferro alloys will be sold in the open market. Since the TORs to the project were provided combinedly, the Committee therefore decided to consider both the proposal together as per the TORs and decided to stipulate specific conditions for both steel plant and ferro alloy plant.

Based on the presentation made and discussions held, the Committee desired additional information on the following for further consideration of the proposal:

i. Details of compliance of ToRs No. 19, 36, 37, 41, 42 should be rewritten and submitted.
ii. Revised layout map should be submitted.
iii. Revised layout plan for green belt.
iv. Information as per Annexure 11 of the Minutes of the Meeting should be provided

4.7.3 Expansion of existing clinker and cement manufacturing capacity (2.90 MMTPA to 5.65 MMTPA of clinker production and 3.45 MMTPA to 7.05 MMTPA of cement production) and installation of an additional coal based captive power plant of 35 MW and a Waste Heat Recovery Boiler of 10 MW, by M/s J.K. Cement Works, located at Village Mangrol, Tehsil Nimbahera, District Chittorgarh, Rajasthan [F. No. J-11011/267/2013-IA-II (I)].

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s. Enkay Enviro Services Pvt. Ltd., Jaipur) gave a detailed presentation on the salient features of the project. The project of M/s J.K. Cement Works-Mangrol located in Village- Mangrol, Tehsil Nimbahera, District Chittorgarh, State Rajasthan was initially received in the Ministry on 28.08.2013 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC (I)] during its meeting held on 18.11.2013, and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment and Forests had prescribed TORs to the project on 31.01.2014. Based on the TORs prescribed to the project, the project proponent submitted an online application dated 22.01.2016 for environmental clearance to the Ministry.

The proposal is for expansion of existing clinker(from 2.90 MMTPA to 5.65 MMTPA) and cement manufacturing capacity (3.45 MMTPA to 7.05 MMTPA of cement production) and installation of an additional Coal based Captive Power Plant(35 MW) and Waste Heat Recovery Boiler (10 MW). The details of existing and proposed production is given below:

S.No.	Product	Production Capacity Million Ton Per Annum (MTPA)				
		Existing Cement Plant			Proposed Cement Plant Unit-3	After Expansion Cement Plant (Unit-1, 2, and 3)
		Unit-1	Unit-2	Total Existing		
1	Clinker	0.75	2.15	2.90	2.75	5.65
2	Cement	0.95	2.50	3.45	3.60	7.05
S.No.	**Power Plants**	**Energy Production in MW**				
		Existing			**Proposed**	**After Expansion**
1	CPP	25 EC obtained on 13.9.2013			35	Two Captive power plants of 25 and 35
2	WHRB	10 EC obtained on 13.9.2013			10	Two WHRB plants of 10 MW each

The total land/plant area is 149.42 ha. The proposed expansion will be done within the existing plant premises, thus no additional land will be acquired for the proposed expansion

project. No Forest land is involved. The entire land has been acquired for the project. The Gambheeri River passes through the project area (buffer zone), which is about at a distance of 4.52 km NE, Nimba river is about 6.0, SSE and Kadmali river is at 6.54 km, SSE. Diversion in the existing natural drainage pattern at any stage has not been proposed.

One Reserve forest and one Protected forest reported to be located at a distance of 6.5 KM, E & 8.7 KM, SE respectively from the site. No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project.

The topography of the area is flat and reported to lies between:

NE	NW	SE	SW
24° 41' 58.94" N Latitude	24° 41' 51.41" N Latitude	24° 41' 28.02" N Latitude	24° 41' 24.34" N Latitude
74° 41' 20.49" E Longitude	74° 40' 21.03" E Longitude	74° 41' 24.94"E Longitude	74° 40' 30.89"E Longitude

The area falls in Survey of India topo sheet No.45 L/9, 45 L/10 and 45 L/14 at an elevation of 439m AMSL.

The water requirement of the proposed expansion is estimated as 1825 KLD, out of which 391KLD of fresh water requirement will be obtained from the ground water and the remaining requirement of 1227 KLD will be met from the water reservoir in the Mangrol-Tilakhera Mines, Nimbahera – Ahirpura, Karunda Mine & Maliakhera Mines. 207 KLD of water will be recycled & reuse.

The power requirement of the project is estimated as 32 MW. It is proposed to set up a 35 MW Coal Based Captive power plant(CPP) with air Cooled condenser and a 10 MW Waste Heat Recovery Based Power Plant. J.K. Cement Ltd. is in the process of arriving at a workable wheeling arrangement with central power grid to transfer the surplus power to grinding unit.

Ambient air quality monitoring has been carried out at 8 locations during March 2014 to May 2014 and the data submitted indicated that PM10 ranges from 30.1 $\mu g/m^3$ to 64.5 $\mu g/m^3$, PM 2.5 ranges from 15.1 $\mu g/m^3$ to 34.0 $\mu g/m^3$), SO2 ranges from 4.0 $\mu g/m^3$to 6.3 $\mu g/m^3$) and NOx ranges from 10.0 $\mu g/m^3$ to 24.3 $\mu g/m^3$. The results of the modelling study indicate that the maximum increase of GLC for the proposed project with respect to the PM10, PM 2.5 NOx, SO2 for the study period were 2.5 $\mu g/m^3$, 1.5 $\mu g/m^3$, 4.3 $\mu g/m^3$ and 0.7 $\mu g/m^3$ respectively.

No solid waste will be generated in cement manufacturing process. Dust collected from air pollution control equipment will be 100% recycled in the cement manufacturing. It has been envisaged that an area of 52 ha(49.30 ha area has already been developed as green belt) (33% of the total project area) will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

The Public hearing of the project was held on 05.11.2015. The issues raised during public hearing are employment to the local people, socio-economic development of surrounding villages, availability of drinking water, pollution of air, water, noise & soil, health etc.

The capital cost of the project is Rs 1974.46 crores and the capital cost for environmental protection measures is proposed as Rs 1458.91 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs Lakhs 110. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held, the Committee desired additional information on the following for further consideration of the proposal:

i. Arial photographs, from an elevated building or tower should be taken for the entire site and submitted.
ii. Compliance report from the Regional Office of the MoEFCC should be submitted.

4.7.4 Expansion of existing 280 TPD TMT bars rolling mills by setting up 360 TPD Induction Furnaces (MS Billet) (3 sets of 15 MT Per Heat capacity), by M/s Fortune Metals Ltd., located at Village Talwara, Mandi Gobindgarh, Tehsil Amloh, District Fatehgarh Sahib, Punjab [F. No. J-11011/58/2015-IA II (I)].

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s Ace Engineers and Consultants) gave a detailed presentation on the salient features of the project. The proposal is for production of 360 TPD of MS Billets by setting up of 3 sets of Induction Furnaces of 15 TPH each. The proposal was initially received in the Ministry on 21st March 2015 for obtaining Terms of References (TORs) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its meeting held on 20th May 2015 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed TORs to the project on 15th July 2015. Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 15th January 2016.

The proposal is for production of 360 TPD(0.118 Millions TPA) of MS Billets by setting up of 3 sets of Induction Furnaces of 15 TPH each within the premises of existing steel rolling mill of the company(280 TPD TMT bars capacity). The topography of the area is flat and reported to lies between 30°39'5.95"N to 30° 38'59.19"N Latitude and 76°19'32.05" E to 76°19'26.06" E Longitude in Survey of India topo sheet No. H43K6, at an elevation of 267 m AMSL. The ground water table reported to ranges between 7.02 to 30.06 m below the land surface during the post-monsoon season and 7.65 to 27.24m below the land surface during the pre-monsoon season. Further, the stage of groundwater development is reported to be 207% in core and buffer zone (Amloh region) respectively and thereby these are designated as over exploited zone.

The detail of products with capacities of existing and proposed project is given below:

S. No.	Products	Unit	Production
1.	TMT Bars (Existing)	MT/day	280
2.	MS Billets (Proposed)	MT/day	360
3.	Iron Slag (By Product)	MT/day	10

The industry is having 4.7 acres (1.90ha) of land in the existing premises of Fortune Metals Ltd. Land falls under Industrial zone as per the Master Plan of Mandi Govindpur. The proponent has informed that in the court matter pertaining to land, the Hon'ble High Court of Punjab and Haryana maintained *status quo*. Out of the 1.9ha of land, an area of 0.4ha is for rolling mill, 0.3ha for installation of Induction Furnace, 0.2 ha for common utilities, 0.05ha for office, canteen etc., 0.2ha for roads, 0.55ha for storage of raw materials and products and 0.2ha No forestland involved. The entire land has been acquired. No rivers within 10 Km. radius of the project site. It has been reported that no water body and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

The targeted production capacity of the MS Billets production is 0.118 million TPA. The raw material for the billets is iron scrap which will be sourced from local scrap dealers.

S. No.	Item	Unit	Quantity
1.	MS Scrap	MT/day	375
2.	Alloys such as Silicon, Silicon Manganese and Aluminum	MT/day	5

The water requirement of the project is estimated as 73 m^3/day, which will be sourced from the existing tubewell of the factory in the existing premises. The power requirement of the project is estimated as 25 MW, it will be supplied by PSPCL to the industry through their grid.

Ambient air quality monitoring has been carried out at 8 locations during 1st April 2015 to 31st June 2015 and the data submitted indicated that PM_{10} ranges from 30 µg/m^3 to 145 µg/m^3, $PM_{2.5}$ ranges from 20 µg/m^3 to 70 µg/m^3, SO_2 ranges from 5.5 µg/$m^3$to 29.0 µg/m^3 and NOx ranges from 6.0 µg/m^3 to 42.0 µg/m^3. The results of the modelling study indicates that the maximum increase of GLC for the proposed project is 3.5 µg/m^3 with respect to the SPM, 1.3µg/m^3 with respect to the SO_2.

The proponent mentioned that a total of 10 TPD of solid waste in the form of iron slag will be generated due to the project, which will be sold to cement plants to be used in cement kilns. It has been envisaged that 20% of the project area will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

The Public hearing of the project was held on 15.09.2015 under the chairmanship of Additional Deputy Commissioner, District Fatehgarh Sahib, Punjab. The issues raised during public hearing are ownership of the land, pollution load, employment to the local residents etc

The capital cost of the project is Rs. 54.30 crores and the capital cost for environmental protection measures is proposed as Rs 1.76 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 1.82 crores. The proponent has mentioned that there is no court case to the project or related activity; however in the court matter pertaining to land, the Hon'ble High Court of Punjab and Haryana maintained *status quo*.

Based on the information submitted, presentation made and discussions held, the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

i. The project proponent shall install 24x7 air monitoring devices to monitor air emission, as provided by CPCB and submit report to Ministry and its Regional Office.

i. 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 and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines.

ii. Secondary emission should be controlled by installing proper ducting system and the exhaust gases should be passed through the bag filter.

iii. Air pollution control devices viz. Electrostatic precipitator (ESP), and bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm3.

iv. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points, coal handling plant etc. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.

v. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.

vi. Multi stage scrubber, cyclone and bag filters etc. to control particulate emissions within the prescribed limits shall be provided. Carbon mono-oxide (CO) shall also be monitored along with other parameters and standards notified under Environment

(Protection) Act shall be followed. The reports shall be submitted to the Ministry's Regional Office, CPCB and SPCB.

vii. Efforts shall further be made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly.

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

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

x. Risk Assessment and Disaster Management Plan for the project focussing on Disaster Prevention shall be prepared and implemented in conjunction with District Disaster Management Plan.

xi. A time bound action plan shall be submitted to reduce solid waste generated due to the project related activity, its proper utilization and disposal.

xii. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.

xiii. The proponent shall prepare a detailed CSR Plan for every year for the 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. 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.

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

xv. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.

xvi. The project proponent shall provide for LED lights in their offices and residential areas.

xvii. The project proponent shall purchase scrap from dealers authorized from SPCB.

xviii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

xix. Haulage roads shall be sprinkled with water at regular intervals for which water tankers with sprinkler arrangement are deployed. Regular sweeping of roads shall be practiced with vacuum sweeping machine or water flushing to minimize dust.

xx. Trucks carrying coal and other raw material shall be covered with tarpaulin to prevent spreading of dust during transportation.

4.8 FURTHER CONSIDERATION

4.8.1 Expansion of Tannery Unit (Raw hide to finished leather) by M/s A.K.I India Pvt. Ltd., located at Village Akrampur,Tehsil & District Unnao, Uttar Pradesh[J-11011/128/2013-IA-II (I)].

The matter was earlier considered during the 29th meeting of Expert Appraisal Committee(EAC) (Industry) held on 11th and 12th December 2014 and again during the 45th meeting of the EAC held on 11th – 12th August, 2015. During the meeting, it was informed by the project proponent that they have not received copy of the site visit report conducted by the Regional Office of the Ministry of Environment, Forest and Climate Change; therefore, they are not in a position to provide response to the observations mentioned in the site visit report. The Committee; therefore, advised Ministry to forward a copy of the site visit report to the project proponent for their comments.

Accordingly, the site visit report was sent to the project proponent on 9th October, 2015 for providing compliance status for the project.

The project proponent presented the compliance status for the site visit report during the meeting. Based on the presentation made and discussions held, the Committee was of the opinion that since the proponent is presently discharging the effluent into the drain, the matter should be referred to the CPCB, to ascertain whether a charter has been prepared for tannery units also. In that case the PP has to follow the charter and, if not, then CPCB should provide specific condition for the project regarding discharge of the effluent. The Committee decided that the decision on the project will be taken after receipt of opinion of CPCB.

4.9 ANY OTHER ITEM

4.9.1 Integrated Cement Plant (Clinker 3.6 MTPA : Cement 5.0 MTPA) along with Captive Power Plant (75 MW) by M/s Reliance Cementation Limited, located near Villages Bharauli & Itahara and Limestone Mines (Sadhera Mine, 3.5 MTPA, 539.561 ha) by M/s Reliance Cementation Limited, located near Village Sadhera, Tehsil Maihar, District Satna in Madhya Pradesh [F. No-J-11011/700/2008-IA.II(I)]

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons for his absence by the applicant.

4.9.2 Addition of 500 TPD Sponge Iron and 15 MW Power Plant Demerged from M/s Corporate Ispat Alloys Ltd. and 350 TPD Sponge Iron plant and 15 MW Power Plant demerged form M/s Abhijeet Infrastructure Ltd. and merged with M/s Jayaswal Neco Industries Ltd. Siltara Growth Centre Siltara, Raipur, Chhattisgarh regarding Amendment in Environment Clearance [F.No. J-11011/883/2008-IA.II(I)].

M/s Jayaswal Neco Industries Ltd. is operating an integrated steel plant at Siltara Industrial Growth Center, near Raipur in Chhattisgarh. The plant is located in an Industrial Area and is about 25 km away from Raipur. Operation of the plant started in 1996.

The project was granted environment clearance *vide* letter No. J-11011/807/2007-IA-II (I) dated 08.092008 and subsequently revalidated on 26.09.2014 for further period of 5 Years.

M/s Jayaswal Neco Industries Ltd. had further applied to the Ministry for renovation and modernization of the existing blast furnace which have resulted in additional production of 0.10 MTPA. Total capacity of the blast furnace with this addition of 0.1MTPA became 1.75 MTPA and the Ministry issued another environment clearance *vide* letter No. J-11011/883/2008-IA-II (I) dated 26.03.2009 for the renovation and modernization. This environment clearance was also revalidated on 03.02.2015 for further period of 5 Years.

Two Sponge Iron, namely 1,20,000TPA Sponge Iron and 15 MW power plant (7.5 MW AFBC and 7.5 MW WHRB) belonging to M/s Abhijeet Infrastructure Limited and 1,50,000 TPA Sponge Iron and 12 MW power plant (WHRB) of M/s Corporate Ispat Alloys Limited Plant (total 270000 Tons along with 27 MW power plant (19.5 MW WHRB & 7.5 MW AFBC)) which were granted CTE/CTO under Air and Water Act by the Chhattisgarh Environment Conservation Board demerged from those respective companies and merged with M/s Jayaswal

Neco Industries Limited vide High Court of Bombay Bench at Nagpur, Maharashtra order dated 13th November 2009. The effective date of merger is 01.04.2008.

These plants are in the same location of M/s Jayaswal Neco Industries Limited, and after merger the boundaries had also been merged into a single plant boundary. Therefore, the proponent requested for the following:

i. Both the environment clearances granted to M/s Jayaswal Neco Industries Limited needs to be merged into one Single environment clearance, for proper monitoring and reporting of compliance.
ii. Amendment in environment clearance dated 08.09.2008 by incorporating 1,20,000TPA Sponge Iron and 15 MW power plant (7.5 MW AFBC and 7.5 MW WHRB) and 1,50,000 TPA Sponge Iron and 12 MW power plant (WHRB) , to bring the whole complex under single environment clearance.

The Member Secretary informed the Committee that the request of proponent for merging both the environment clearances granted by the Ministry into one environment clearance is not possible, as there is no mechanism/provision available in the EIA Notification, 2006 for merger of environment clearances. The second request of the proponent is also not tenable as both the 1,20,000TPA Sponge Iron and 15 MW power plant (7.5 MW AFBC and 7.5 MW WHRB) and 1,50,000 TPA Sponge Iron and 12 MW power plant (WHRB) are operating under Consent to Operate granted by the State Pollution Control Board.

Based on the presentation made and discussions held the Committee did not agree to the requests of the proponent.

4.9.3 Integrated Steel Plant (6.00 MTPA) alongwith Captive Power Plant (2.25 MW) – Discharge of 5000 KLD of water to river Mahanadi by M/s Essar Steel Orissa, located at Paradeep Jagatsingpur, Orissa regarding amendment in environment clearance [F.No. J-11011/129/2007-IA.II(I)].

Consideration of the proposal was deferred based on the request of the Project Proponent. The proposal would be considered in the next meeting of the EAC.

4.9.4 Iron Ore Beneficiation Plant (10.7 MTPA) Project of M/s Essar Steel Orissa Limited, located in Village(s) Dabuna and Basantpur, Tehsil Joda, District Keonjhar, Orissa regarding amendment in environment clearance [F.No.J-11015/876/2007-IA.II(M)].

Consideration of the proposal was deferred based on the request of the Project Proponent. The proposal would be considered in the next meeting of the EAC.

4.9.5 Expansion of Sponge Iron Plant (3,00,000TPA to 6,00,000 TPA) and Ferro alloy Plant (72,000 TPA) by M/s Rashmi Cement Limited, located at Village Jitusole(J.L. No. 702 & 703. Jitusole Junglokhas J.L. No. 731 and Baghmudi J.L. No. 928), District Paschim Medinipur,West Bengal-Extension of Validity of environment clearance[J-11011/604/2008- IA II (I)].

The proposal of expansion of Sponge Iron Plant (3,00,000 TPA to 6,00,000 TPA) and Ferro Alloy Plant (72,000 TPA) was accorded environment clearance by the Ministry *vide* letter No. J-11011 / 604 / 2008 IA II. (I) dated 12th February, 2009 for the following components:

Plant	Existing (TPA)	Proposed (TPA) EC dated 12-2-2009		Total Capacity (TPA)
		Phase -I	Phase-II	
DRI	3,00,000 (10 x 100 TPD)	1,20,000 (4 x 100 TPD)	1,80,000 (2 x 350 TPD)	6,00,000
Submerged Arc Furnace	-	36,000 (3 x 9 MVA)	36,000 (3 x 9 MVA)	72,000
Power Plant	25 MW	-	-	25 MW

The status of Implementation of the project is presented in the following table:

Name of Expansion Units	Status of Implementation	Yet To Be Implemented	Validity Extension Requested
4 X 100 TPD DRI Plant Phase – I	Foundation work done.	4 X 100 TPD DRI Unit (120000 TPA)	4 X 100 TPD; DRI Unit
2 X 350 TPD DRI Plant Phase – II	1 x 350 TPD under operation (90000 TPA)	1 X 350 TPD DRI Unit (90000 TPA)	1 X 350 TPD DRI Unit
3 X 9 MVA Ferro Alloy Plant Phase –I	2 x 9 MVA unit under operation (24000 TPA)	1 X 9 MVA (12000 TPA)	1 X 9 MVA Ferro Alloy Unit
3 X 9 MVA Ferro Alloy Plant Phase – II	Work not started	3 X 9 MVA (36000 TPA)	3 X 9 MVA Ferro Alloy Unit

The proponent has informed that the project could not be commissioned because of the following reasons:

i. Indian Steel Market is facing recession since last 4 - 5 years
ii. Jitusole plant is located in Maoist / Naxal affected Jangal Mahal area of West Bengal. The workers are transported and work under heavy security cover provided by the Government.
iii. The Maoist / Naxals have attacked the plant and destroyed plant machinery and burned the vehicles.
iv. Rashmi group has another steel making unit at Kharagpur, about 35 km from Jitusole.
v. Most of DRI and Ferromanganese required for making steel making in Kharagpur Plant are supplied from Jitusole plant. Increase in steel making capacity of Kharagpur Plant is planned; EC obtained.
vi. Due to recession in steel market, expansion of Kharagpur Plant is delayed
vii. The Company is confident that the current recession in Steel Market will turn into demand in next 2 to 3 years time.

In view of the above the proponent has requested for extension of validity of environment clearance letter dated 12th February, 2009 as per norms.

The Committee noted that the environment clearance to the plant was accorded *vide* letter dated 12th February, 2009, and as per the amendment in the EIA Notification, 2006 dated 29th April, 2015 the environment clearance is valid up to 11th February, 2016. The online application No. IA/WB/IND/5852/2008 was received by the Ministry on 14th November, 2015, which is well within the validity period of 7 years.

The committee after detailed deliberation recommended the proposal of extension of validity of environment clearance dated 12th February, 2009 for further period of 3 years i.e. up to 11th February, 2019. The PP will submit the time schedule of activities required for completion of the project in the extended period of 3 years of the EC.

Next meeting

It was decided that the next meeting of the Expert Appraisal Committee will be held on 30th -31st March, 2016.

The meeting ended with a vote of thanks to and from the chair.

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Executive Summary

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

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

ANNEXURE –I

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

1. Executive Summary
2. Introduction
   - i. Details of the EIA Consultant including NABET accreditation
   - ii. Information about the project proponent
   - iii. Importance and benefits of the project

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

4. Site Details

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

5. **<u>Forest and wildlife related issues (if applicable):</u>**

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

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

6. **Environmental Status**

i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio-economic status of the study area.

7. Impact Assessment and Environment Management Plan

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modeling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.

vi. Measures for fugitive emission control

vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.

xii. Action plan for post-project environmental monitoring shall be submitted.

xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. Occupational health

i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,

ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of abovementioned parameters as per age, sex, duration of exposure and department wise.

iii. Annual report of heath status of workers with special reference to Occupational Health and Safety.

iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

9. Corporate Environment Policy

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11. Enterprise Social Commitment (ESC)

i. Adequate funds (atleast 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13. 'A tabular chart with index for point wise compliance of above TORs.

14. The TORs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

<u>The following general points shall be noted:</u>

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 (QCl) /National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

ix. TORs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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

ANNEXURE-3

ADDITIONAL TORS FOR PELLET PLANT

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

ANNEXURE-4

ADDITIONAL TORs FOR CEMENT INDUSTRY

1. Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. If the raw materials used have trace elements, an environment management plan shall also be included.
5. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
6. Energy consumption per ton of clinker and cement grinding
7. Provision of waste heat recovery boiler
8. Arrangement for co-processing of hazardous waste in cement plant.
9. Trace metals in waste material especially slag.

ANNEXURE-5

ADDITIONAL TORs FOR PULP AND PAPER INDUSTRY

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

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

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

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

v. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills.Plan for reduction of water consumption.

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ANNEXURE-6

LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

ANNEXURE-7

COKE OVEN PLANT

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

ANNEXURE-8

ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

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

ANNEXURE-9

INDUCTION/ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE

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

ANNEXURE-10

METALLURGICAL INDUSTRY (FERROUS AND NON-FERROUS)

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

ANNEXURE-11

Air Pollution

Plant/ Unit	Pollutants	Qty generated	Method used to Control/ and specifications/attach Separate Sheet to furnish Details	Number of units planned & Capacity	Budget	Estimated Post Control Qty of Pollutant	
						Per Unit	Per Day

LIST OF PARTICIPANTS OF EAC (I) IN 4th MEETING OF EAC (INDUSTRY-I) HELD ON 25th – 26th February, 2016

S.No	Name and Address	Position	Attendance	Signature
1	Dr.Chhavi Nath Pandey, IFS(Retired)	Chairman	P	
Members				
2.	Dr. R. K. Jain, Director, Central Pulp and Paper Research Institute	Member	A	
3.	Director, Central Leather Research Institute	Member	A	
4.	Dr. Sunil Pashin, Representative of Indian Meteorological Department	Member	A	
5.	Representative of Central Ground Water Board	Member	A	
6.	Dr. G. Bhaskar Raju	Member	P	
7.	Prof. Naresh Chandra Pant	Member	A	
8.	Dr. Jagdish Kishwan, IFS(Retired)	Member	P	
9.	Dr.G.V.Subrahmanyam	Member	P	
10.	Prof. Arun Pandey	Member	A	
11.	Shri Santosh Raghunath Gondhalekar	Member	P	
12.	Shri Ashok Upadhyay	Member	P	
13.	Shri Vijay Prakash Saha	Member	P	
14.	Dr.Satish C.Garkoti, Scientist'F', MoEFCC	Member Secretary	P	
15.	Shri Amardeep Raju, Scientist 'D', MoEFCC	MoEFCC	P	

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