

**MINUTES OF 37thEAC (THERMAL & COAL MINING PROJECTS) MEETING
HELD ON 11th-12th June, 2015**

The 37th EAC (Thermal & Coal mining projects) Meeting was held on **11th -12th June, 2015** in New Delhi to consider the proposals in coal mining sector. The list of participants of EAC and the proponents are given at Annexure-1 and 2 respectively.

B. Confirmation of Minutes: The Committee confirmed the minutes of the 35th EAC meeting held on 14th -15th May, 2015.

C. The following proposals were considered.

37.1 Kusmunda Opencast Expansion Project (Normative 15 MTPA to 50MTPA & Peak 18.75 MTPA to 62.50 MTPA in an ML area 3510.348 Ha); Latitude 22^o 15' 18" to 22^o 21' 30" North and Longitude 82^o 38' 39" to 82^o 42' 08" East of M/s South Eastern Coalfields Ltd., located at dist. Korba, Chhattisgarh - (EC based on TOR granted on 01.12.2014).

37.1.1 The proposal is for Environmental Clearance of Kusmunda Opencast Expansion Project (Normative 15 MTPA to 50MTPA & Peak 18.75 MTPA to 62.50 MTPA) in an ML area 3510.348 Ha of M/s South Eastern Coalfields Ltd., located at dist. Korba, Chhattisgarh - The project proponent made the presentation and informed that:

- i. The project was accorded TOR vide letter no. **No. J-11015/176/2014-IA.II (M) Dated 01.12.2014.**
- ii. The sub-committee made site visit to three mines (Kusmunda, Gevra and Depika), a pithead coal washery of Gevra and the surrounding areas on 9th– 10th October 2014 before according the TOR.
- iii. The latitude and longitude of the project are 22^o 15' 18" to 22^o 21' 30" North and 82^o 38' 39" to 82^o 42' 08" East respectively.
- iv. In view of present of forest land, the proposal for EC is being requested in two phases:
 - Phase I: Proposal without Forest Land (1655.825 ha.)
 - Phase II: Proposal with Fresh Forest Land (3510.348 ha) including Phase I.
 - The Land applied under Phase I (1655.825 ha) lies within the area of existing environmental clearance (18.75 MTPA)
- v. Joint Venture: There is no Joint venture
- vi. Coal Linkage :Various thermal power plants including Chhattisgarh State Electricity Board (CSEB)
- vii. Employment generated / to be generated: 2017 persons / 4130 Persons
- viii. Benefits of the project: Enhancement in production will considerably improve the socio-economic status of the adjoining areas. This will result in following benefits
 - Improvements in Physical Infrastructure
 - Improvements in Social Infrastructure
 - Increase in Employment Potential
 - Contribution to the Exchequer
 - Meet energy requirement
 - Post-mining Enhancement of Green Cover
- ix. LAND DETAILS (0-50 MTY)

S.NO		Revenue Forest Land	Govt. Land	Agriculture/ Private Land	TOTAL
1.	0-10 MTY	205.961	404.267	1021.725	1631.953
2	10-15 MTY	22.026	79.409	649.378	750.813
3.	15-50MTY	148.935	117.385	861.262	1127.582
TOTAL	0-50 MTY	376.922	601.061	2532.365	3510.348

x. The land usage of the project will be as follows:

Pre-Mining: Core Zone Pre-Mining Land Use (in Ha.)

S.N	Particulars	Forest Land	Ten. Land	Govt/ Other Land	Total
(a)	PHASE I	205.96*	1045.597	404.267	1655.825
(b)	PHASE II (Including land given in Phase I)	376.922**	2532.365	601.061	3510.348

* Proposal due for 1st Stage Clearance from MoEF Delhi

** Additional Forest Land Clearance is under process. 148.935 ha forest land have been identified between 15MTPA and 50 MTPA boundaries. Application for diversion will be applied after acquisition of land.

Post- Mining:

Sl.No.	Activities	Total Area(Ha)
1	Void/ Water body	355.000
2	Reclaimed internal OB dump	1245.000
3	Safety zone	166.000
4	Rehabilitation	130.000
5	Colony	40.250
6	External dump	325.000
7	Infrastructures	300.000
8	Service road	10.000
9	Others	939.098
	Total	3510.348

Core area: Phase I: Land Use during Mining

This land will undergo changes during mining and the land use pattern will be as follows:

Particulars	Area in Ha
Area to be excavated	788.874 Ha
Storage for top soil	03.00 Ha
Over Burden / Dumps	325.00 Ha
Mineral Storage	00.00 Ha
Infrastructure(Workshop, Administrative Buildings)	284.634 Ha
Roads	07.517 Ha
Green Belt	10.00 Ha
Effluent Treatment Plant	01.00 Ha
Rehabilitation site(outside mine)	69.00 Ha
Colony (outside mine)	39.00 Ha
Safety Zone	82.80 Ha
Other Specify for Future mining	45.00 Ha
Total	1655.825Ha

Land Use during Mining for Phase II\

Particulars	Area in Ha
Area to be excavated	1600.000
Storage for Top soil	3.000
Overburden/Dumps	325.000
Mineral storage	0.000
Infrastructure (W/Shop, Admin. Building)	300.000
Roads	10.000
Green Belt	10.000
Rehabilitation Site(outside mine)	130.000
Colony(outside mine)	40.250
Safety Zone	153.000
Other specific (future mining)	939.098
TOTAL	3510.348

- xi. The total geological reserve is 1105.00MT. The mineable reserve 956.98 MT, extractable reserve is 956.98 MT. The per cent of extraction would be 100%.
- xii. The coal grade is G11. The stripping ratio is 1.34 cum/tonne. The average Gradient is 4 to 10 Degree there will be 03seams with thickness ranging upto 2.86m to 60.83m.
- xiii. The total estimated water requirement is 16447 m3/day. The level of ground water ranges from 1.59m to 14.60m.
- xiv. The Method of mining would be Opencast with shovel- dumper& Surface miner.
- xv. There are 13 external OB dump with Quantity of 20.80 Mbcm in an area of 325Ha with height of 60 meter above the surface level and 02 internal dump with Quantity of 1321.70 Mbcm in an area of 1245.00 ha.

- xvi. The final mine void would be in 355 Ha with depth 300 mtrs (Maximum) and the Total quarry area is 1600.00 Ha. Backfilled quarry area of 1245.00 Ha shall be reclaimed with plantation. A void of 355 Ha with depth of about 300 m which is proposed to be converted into a water body.
- xvii. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- xviii. The life of mine is 24 Years.
- xix. Transportation: Coal transportation in pit Tippers, Surface to siding by tippers, Siding to Consumer by Belt conveyor and Rail.
- xx. There is R & R involved. There are 8200 PAFs.
- xxi. Cost: Total capital cost of the project is Rs. 7612.33 Crores. CSR Cost As per CIL Policy and company act for 50 MTPA. R&R Cost 508.28 Crores. Environmental Management Cost: Rs 575.33 Crore (Including R&R).
- xxii. Water body: The Hasdeo River, Ahiran Nadi, Kholar Nullah and many small channels joining Hasdeo river.
- xxiii. Approvals: Ground water clearance applied on 25.11.2005. Board's approval obtained on 03.08.2013. Mining plan not applicable. Mine closure plan obtain on 03.08.2013.
- xxiv. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xxv. Forestry issues: Total forest land involved is 376.922 Ha.
- xxvi. Total afforestation plan shall be implemented covering an area of 1570.00 ha at the end of mining. Green Belt over an area of 106.41Ha. Density of tree plantation 2500 trees/ ha of plants.
- xxvii. There are court cases/violation pending with the project proponent.

Case no.	Subject	Status
Case No. 128/2012 Judicial Magistrate, Class I, Katghora	Case has been filed under Sec. 44/47 of Water Act, Sec. 21/22, 37, 39 of Air Act, 15, 16 of EPA, 1986, against over production of coal in 2008-09.	Pending at Honourable Court, Katghora Distt. Korba (C.G.)

- xxviii. Public Hearing was held on **11.02.2015**. The issues raised in the PH includes Air quality data; Green Belt development & Afforestation plan; Conceptual Final Mine Closure Plan; Techno-Economic; basic facilities such as Electricity, Water, Roads, Hospital facility, Education; Blasting; employment and compensation; Groundwater; coal transportation; plantation of Fruit bearing as well as Medicinal plants; Public hearing venue etc.

37.1.2 EAC received a representation from one of the NGOs requesting EAC to address issues w.r.t. EIA Report not being in the Public Domain; justification for major expansion from 6 MTPA to 60 MTPA in less than a decade; status of Court Case pending at Hon'ble Court, Katghora Dist. Korba (Case No.128/2012-2008-09), relocation of 10 villages, implementation of action plan prepared by Chhattisgarh Environment Conservation Board (CECB) in January 2011, management plan for managing voids, overburden and evacuation system, etc.

37.1.3 The Committee, after detailed deliberations sought following additional information for further consideration:

- i. Detailed note on status of Forest Clearance.
- ii. Land use pattern of the additional area to be mined during Phase -1 and Phase-2
- iii. Commitment that fully mechanized facilities will be provided for coal transportation which

inter-alia includes in-pit conveyor system to siding; wagon loading to silo and from silo to consumer by Rail.

- iv. Details of the villages located outside the Mine lease area, its distance from the boundary of ML area, current AAQ and proposed mitigative measures. The Committee also decided to obtain comments of the India Meteorological Department on AAQ data and prediction Models..
- v. Detailed Green Belt Plan (75-100 m width) all around the villages adjacent to the ML area which is effective and functional
- vi. Status of Compliance with respect to Coal transportation and loading at different levels of production as per different EC's granted by MOEFCC.
- vii. Action Plan for Ground water recharge measures and monitoring of water table level. In addition to creating ponds, the feasibility of setting up Check dams may also be explored.
- viii. Revised water balance diagram.
- ix. Comparative statement on the EMP proposed for the current activities vs. the proposed expansions.
 - x. Cumulative Impact Assessment of three mines namely Dipika, Gevra and Kusmunda.
 - xi. Reclamation and Mine Closure Plan w.r.t. implementation of conditions stipulated in the different EC's granted by MOEFCC.
 - xii. External OBD as per EC and present status and OBD re-handling (internal dumps and voids).
 - xiii. Annual operation plan.
 - xiv. Response to the issues raised by the NGO in the communication dated 10.06.2015.
 - xv. Response and action plan to the recommendations made by the sub-committee pursuant to the site visit held in October, 2014.
 - xvi. Updated action plan on issues raised in the Public Hearing including R & R issues
- xvii. Mine Plan/ Mine Closure Plan approvals for the intended capacity for which EC is being sought.

37.2 Expansion of Amera OC project (from 1.0 MTPA to 2.0 MTPA in an ML area of 664.184 Ha; Latitude- 23° 02' 50" to 23° 04' 34" N and Longitude 83° 01' 34" to 83° 03' 38" E of M/s South Eastern Coalfields Limited located at village Amera, Tahsil Lakhanpur in District Sarguja Chhattisgarh – (EC Expansion under 7(ii) of EIA Notification, 2006).

37.2.1 The proposal if for Expansion under 7(ii) of EIA Notification, 2006 of Amera OC project (from 1.0 MTPA to 2.0 MTPA) in an ML area of 664.184 Ha; of M/s South Eastern Coalfields Limited located at village Amera, Tahsil Lakhanpur in District Sarguja Chhattisgarh. The project proponent made the presentation and informed that:

- i. The project was accorded EC vide letter no. **J-11015/14/2004-IA.II (M)** date **22/02/2005**.
- ii. The latitude and longitude of the project are *23°02'50"N to 23°04'34"North* and *83°01'34"E to 83°03'38"East* respectively.
- iii. Joint Venture: There is no joint venture.
- iv. Coal Linkage : Various thermal power plants
- v. Employment generated / to be generated: 210 persons / 224 persons
- vi. Benefits of the project: Enhancement in production will considerably improve the socio-economic status of the adjoining areas. This will result in following benefits:
 - Improvements in Physical Infrastructure
 - Improvements in Social Infrastructure
 - Increase in Employment Potential
 - Contribution to the Exchequer
 - Meet energy requirement

- Post-mining Enhancement of Green Cover
- vii. The land usage of the project will be as follows:

Pre-Mining:

Stages of mining	Activity	Mining Lease Area			Total
		Forest	Agri./ Tenancy	Govt	
1.	Quarry area	51.989	374.423	41.588	468.000
2.	Storage for top soil	0.000	0.000	2.000	2.000
3.	Dumps-External	0.000	10.750	1.250	12.000
4.	Infrastructure, workshops, admin building etc.	0.000	8.960	1.040	10.000
5.	Roads	0.000	46.580	5.420	52.000
6.	Township / R& R site	0.000	22.390	2.610	25.000
7.	Safety zone & allied purpose	0.000	85.256	9.928	95.184
	TOTAL	51.989	548.359	63.836	664.184

Post- Mining:

Sl. No	Pattern of utilization	Area (ha)
1.	Reclaimed external and internal dumps	462.000
2.	Green belt	10.000
3.	Final void /Water body	20.000
4.	Built up area (Infrastructure, colony, roads, R & R site)	87.000
5.	Safety zone	85.184
	Total	664.184

Core area:

Stages of mining	Activity	Mining Lease Area			Total
		Forest	Agri./ Tenancy	Govt	
1.	Quarry area	51.989	374.423	41.588	468.000
2.	Storage for top soil	0.000	0.000	2.000	2.000
3.	Dumps-External	0.000	10.750	1.250	12.000
4.	Infrastructure, workshops, admin building etc.	0.000	8.960	1.040	10.000
5.	Roads	0.000	46.580	5.420	52.000
6.	Township / R& R site	0.000	22.390	2.610	25.000
7.	Safety zone & allied purpose	0.000	85.256	9.928	95.184
	TOTAL	51.989	548.359	63.836	664.184

- viii. The total geological reserve is 24.75 MT. The mineable reserve 22.50MT, extractable reserve is 20.815MT. The per cent of extraction would be 90%.

- ix. The coal grade is G-6. The stripping ratio is 6.40 Cum/tonne. The average Gradient is 0.5 to 2.5 degree. There will be 03 seams with thickness 1.00m to 5.16m.
- x. The total estimated water requirement is 498 m³/day. The level of ground water ranges from 1.76m to 8.32m.
- xi. The Method of mining would be Open Cast mining with shovel- dumper.
- xii. There is 1 external OB dump with Quantity of 2.00 Mbcm in an area of 12.00 ha with height of 25.00 m above the surface level and 02 internal dump with Quantity of 141.90 Mbcm in an area of 450.00 ha.
- xiii. The final mine void would be in 20 Ha with depth 30 m and the Total quarry area is 470 Ha. Backfilled quarry area of 450 Ha would be reclaimed with plantation. A void of 20 Ha with depth 30 m is proposed to be converted into a water body.
- xiv. The seasonal data for ambient air quality has been documented and results at all stations are within prescribed limits.
- xv. The life of mine is 11 Years.
- xvi. Transportation: Coal transportation from Inpit by tippers, Surface to siding by tippers, Siding to Consumer by Rail.
- xvii. There is R & R involved. There are 490 PAFs.
- xviii. Cost: Total capital cost of the project is Rs. 4283 Lakhs as per PR Revised Cost estimate (RCE) of Amera OCP approved on 04/02/2015 for capital outlay of 335.970 crores. CSR Cost Rs. 5 / tonne of Coal + 50 lakhs for CD of coal production. R&R Cost Rs. 367.50 Lakhs. Environmental Management Cost Rs. 523.32.
- xix. Water body: Ghunghuta river on the Eastern side of the mine and Chandanai nalla on the Western side of mine boundary.
- xx. Approvals: Ground water clearance applied on 26.03.2004. Board's approval obtained on 05.04.2005. Mining plan has been approved on 05.04.2005. Mine closure plan obtain on 27.01.2014. It was clarified by the PP that the Board's approval was for existing mining activities.
- xxi. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xxii. Forestry issues: Total forest land involved in the Mining area is 51.989 Ha. Stage-1 FC obtained for 51.989 Ha of forest land vide MoEF F. No. 8-8/2005-FC dated 02.08.2005. Final stage Forestry clearance, issued by MoEF vide letter no. F. no. 8-8/2005-FC dated 02.05.2008.
- xxiii. Total afforestation plan shall be implemented covering an area of 472.00 ha at the end of mining. Green Belt over an area of 10ha. Density of tree plantation 2500 trees/ ha of plants.
- xxiv. There are no court cases/violation pending with the project proponent.
- xxv. Public Hearing was held on 03.01.2003. The issues raised in the PH and commitment given by PP include the following :
 - The mine discharge will be used for watering of plant/ sprinkling after desired treatment;
 - Tree plantation in view of the regional ecology including indigenous species would be carried out co-sharing the villagers.
 - One person from every family of land owners/ joint land owners or holders as far as possible would be given employment against acquired land there from as per Govt. rules;
 - Effective control measures would be adopted against pollution air/water as per prescribed standards;
 - Arrangements for electricity, water, education and health in nearby rural areas under CD activities would be made;
 - Corrective measures would be taken to keep the noise pollution level within the limits;
 - Trees existing in the mine premises would not be felled;

- Air monitoring would be done on monthly basis and report should be submitted to SPCB on regular basis; The regular monitoring of SO₂ in ambient air would be done around the mine;
- Colony roads of the proposed mines would be made pakka before mining.
- Water sprinkling would be done around the working mine.
- Camp would be made for the affected villages as per instruction of Upper Collector under R & R policy.

37.2.2 EC compliance report: EC Compliance Report issued vide letter no. 3-24/2014 (ENV)/391 dated 11.12.2014 of the, Regional Office, MoEFCC at Bhopal was deliberated in the EAC meeting. The Committee noted the action taken for compliance by the PP which inter alia, is as follows:

- i. Topsoil removed & stacked in 9.024 Ha. Area is used for rehabilitation of mined out area.
- ii. Dump sites are earmarked and properly maintained. However, reclamation of the dump needs to be expedited.
- iii. Proposal for construction of catch drains, garland drain has been initiated only recently.
- iv. Retaining wall at the toe of dump has been constructed.
- v. Plantation on back filled OB dump are proposed for 10500 nos. in year 2015-2016.
- vi. CHP has not yet been commissioned.
- vii. New piezometer have been installed.
- viii. Regular health checkup carried out on routine basis.
- ix. Drilling of 03 boreholes for hand pump at Amera village cost Rs.1.31 Lakhs in year 2009-10 03 boreholes with submersible pump at Puhputra village cost Rs.3.68 Lakhs in 2012-13. 03 nos. of boreholes with submersible pump at Chilbil village cost Rs.3.68 Lakhs in 2012-13 Drilling of one borehole for hand pump at Singitana village cost Rs.70,000 and Drilling of boreholes with installation of hand pump at Peeparkhar near Amera village cost Rs.2.09 Lakhs in year 2011-12.
- x. Total no of land oustees is 591. Employment proposed is 631 and already given to 121 persons. The rest in under process.
- xi. Development of greenbelt is in progress.
- xii. Monitoring of water quality and AAQ are being carried out regularly.
- xiii. Construction of ground water reservoir for recharge is in progress.

37.2.3 The Committee, after detailed deliberations sought following additional information for further consideration:

- i. Detailed note on management of OBD. It was noted that details as per papers sent by post and details as per presentation were not matching.
- ii. Updated action plan for implementation of conditions stipulated by MOEF in the earlier EC.
- iii. Revised Basic information submitted by PP w.r.t. embankment of river on the eastern and western side of the ML area.
- iv. Mine Plan/ Mine Closure Plan approvals for the intended capacity for which EC is being sought.
- v. Feasibility of reducing transportation by Road to reduce the distance from 53.8 km to approximately to 12 km to Jayanagar Railway Siding needs to be studied.
- vi. Feasibility of railway siding in the Amera area where large no. of other coal mines/BLOCKS ARE located needs to be assessed.
- vii. Crushing arrangements at the pit head site needs to be implemented as provided in the EC as presently unsized coal is being transported.
- viii. Note on phased plantation programme for dump reclamation.

- ix. Surface water quality w.r.t. BOD.
- x. Schedule of employment for remaining 478 persons and revised R&R table.

37.3 Expansion of Bellampalli OC Mine Extension Project – II (from 0.40 MTPA to 1.00 MTPA in an ML area of 191.98 ha; Latitude: 19° 12' 34" to 19° 12' 56" N and Longitude: 79° 20' 53" to 79° 21' 41" E) of M/s Singareni Collieries Company Ltd., located in village Abbapur, Mandal Tandur, District Adilabad, Telangana (EC Expansion under 7(ii) of EIA Notification, 2006).

37.3.1 The proposal is for Expansion under 7(ii) of EIA Notification, 2006 of Bellampalli OC Mine Extension Project – II (from 0.40 MTPA to 1.00 MTPA) in an ML area of 191.98 ha of M/s Singareni Collieries Company Ltd., located in village Abbapur, Mandal Tandur, District Adilabad, Telangana. The project proponent made the presentation and informed that:

- i. The project was accorded EC vide letter no. J-11015/147/2005 - IA.II (M) dated 11.09.2006.
- ii. The latitude and longitude of the project are 19° 12' 34" to 19° 12' 56" North and 79° 20' 53" to 79° 21' 41" East respectively.
- iii. Joint Venture: There is no Joint Venture.
- iv. Coal Linkage: Basket Linkage.
- v. Employment generated / to be generated: Direct: 212 Persons; Contractual: 340 Persons.
- vi. Benefits of the project: Generation of direct and indirect employment; Meeting the demand of coal in the region; Improvement in social infrastructure; Conservation of non-renewable fossil fuel by excavating remnant coal locked in underground mine.
- vii. The land usage of the project will be as follows:

Pre-Mining:

Sl. No.	Pre-mining Land use	Area (Ha)
01	Forest Land	137.40
02	Non-Forest Land	
(a)	Agricultural land	36.33
(b)	Waste land	8.67
(c)	Grazing land	5.93
(d)	Surface water bodies	3.65
	Sub Total	54.58
(1)+(2)	Grand Total	191.98

Post- Mining:

Sl.	Description	LAND USE DETAILS (Ha.)
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		Planta- tion	Wat er body	Publi c Use	Othe r Uses	Total
1	Excavation Area					
	(a) Backfilled area (Block C & B Ext.)	49.87	--	--	--	49.87
	(b) Void area left of (Block-D)	--	40.64	--	--	40.64
2	External waste dump	19.16	---	---	---	19.16
3	Diversion of Nallah	---	13.58	---	---	13.58
4	Diversion of public road	---	---	5.08	---	5.08
5	Area utilized for rehabilitation and resettlement	---	---	22.7	---	22.7
6	CHP and Service buildings	3.10	---	---	---	3.10
7	Protective bund around quarry & dump yard, safety distance & drains	37.85	---	---	---	37.85
TOTAL		109.98	54.22	27.78		191.98

Core area :

Sl. No	Particulars	Existing for 0.040 MTPA			Proposed for 1.00 MTPA
		Forest Land	Non-forest Land	Total	Total
1	Quarry, excavation area.	87.45	3.06	90.51	Same as for 0.40 MTPA
2	Safe barrier, drainage, protection bund etc	29.94	1.34	31.28	
3	Dump yard including drains around the dump	-	23.81	23.81	
4	Diversion of Nallah	11.95	1.57	13.52	
5	Diversion of public road	3.04	2.04	5.08	
6	Road between Block-b ext & Block-D	1.92	-	1.92	
7	CHP, ETP & Service buildings	3.1	-	3.10	

8	Land for R&R (Outside core area)	-	22.76	22.76
Total		137.4	54.58	191.98

- viii. The total geological reserve is 7.69 MT. The mineable reserve 4.60MT, extractable reserve is 4.60MT. The per cent of extraction would be 100%.
- ix. The coal grade is G-9, G-7 &G-8. The stripping ratio is 1:6.50 Cum/tonne. The average Gradient is 3.17 to 4.4. There will be 3 seams with thickness.

Block – B Extension

Seam/ Sections	Thickness Range (m)	Average thickness (m)	Avg.GCV (K.cal/Kg)
Middle Seam	4.58-7.73	6.2	4646

Block – D

Seam/ Sections	Thickness Range (m)	Average thickness (m)	Avg.GCV (K.cal/Kg)
Top seam	1.22-3.57	2.00	5131
Parting			
Middle Seam	1.07-6.55	4.00	5322
Parting			
Bottom seam	2.13-5.19	3.80	5071

- x. The total estimated water requirement is 1200 m³/day. The level of ground water ranges from 1.21m to 14.33 m.
- xi. The Method of mining would be Opencast.
- xii. There is one external OB dump with Quantity of 3.60 Mbcm in an area of 23.81 ha with height of + 60 meter above the surface level and Four internal dump with Quantity of 31.76 Mbcm in an area of 104.04 ha.
- xiii. The final mine void would be in 40.64 Ha with depth 130 m. and the Total quarry area is 90.51Ha. Backfilled quarry area of 49.87 Ha shall be reclaimed with plantation. A void of 40.64 ha with depth 130 m which is proposed to be converted into a water body
- xiv. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- xv. The life of mine is 5 Years.
- xvi. Transportation: Coal transportation In pit By Dumpers; Surface to siding By Trucks; Siding to loading (CHP to Consumers) By Rail from Goleti CHP.
- xvii. There is R & R involved. There are 146 PAFs.
- xviii. Cost: Total capital cost of the project is Rs. 35.51 Crores. CSR Cost Rs. 3% of average net profits of the company made during last three years were allocated for CSR at company level. R&R Cost Rs. 13.73 Crores. Environmental Management Cost (capital cost Rs.424.58 Lakhs (Direct) and 599.13 Lakhs (Indirect), annual recurring cost Rs. 32.80/Tonne per tonne).

- xix. Water body: There are three seasonal nallahs flowing across the project area. i.e., Narsapur Nallah (Block-C), a Nallah flowing on the western side of Block B-Extension, Sonapur Nallah (Block-D). Narsapur Nallah has already been diverted during excavation of Block-C. Seasonal nallah on the western side of Block-B Extn., and Sonapur Nallah have to be diverted all along the boundary of project area through I&CAD, State Government.
- xx. Approvals: Ground water clearance obtained on 24.3.2005. Board's approval obtained on 29.12.2003. Mining plan has been approved vide Lr No 13016/6/2006-CA-II dt 3rd July, 2006 for 0.4 MTPA capacity and revised Mining Plan for 1.00 MTPA capacity has been submitted to Ministry of Coal on 28.11.2014. Mine closure plan is an integral part of mining plan.
- xxi. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xxii. Forestry issues: Total forest area involved 137.40 ha, Total Forestland involved in the project is already diverted to SCCL under F(C) Act, 1980.
- xxiii. Total afforestation plan shall be implemented covering an area is not applicable at the end of mining. Green Belt over an area of 3.10ha. Density of tree plantation 2500 trees/ ha of plants.
- xxiv. There are no court cases/violation pending with the project proponent.
- xxv. Public Hearing was held on 15.12.2004. The issues raised in the PH Demanded that most of the locals do not have proper pattas for the lands they hold and requested District Collector to compensate the project-affected persons properly; Demanded Rs.1,00,000 as compensation per acre; Demanded for a compensation of Rs.1000 per month to PAPs during this ten year period for establishing themselves in the newly rehabilitated site; Demanded for compensation to podu lands and Government lands being cultivated by local community as being paid in case of patta lands. The compensation to be paid to actual enjoyers of land after conducting proper survey involving local communities; Demanded for Rehabilitation at a suitable site as selected by the PAPs with all infrastructure facilities before commissioning of the Project; Demanded to take suitable measures to safeguard the rehabilitated villages even after shifting to Rehabilitation site; Demanded for suitable compensation to project affected persons and also allocation of land to all major sons of the family; Demanded for employment to the Project affected persons; Demanded for providing training to locals in self-employment schemes & awarding of off-loading works of worth below Rs.10.00 lakhs to the VTDA committee and also to provide employment to locals in these works.; Demanded that Aslamada, Narsapur and Bejjala villages are in the vicinity of the project. Asalmada is on the right side of the proposed project, there will be water problem and hence requested the district Collector for taking suitable measures for ensuring availability of water for the village needs; Demanded that proper measures shall be taken against depletion of ground water; Demanded for supply of excess mine water and also construct bore wells for raising two crops throughout the year; Demanded that adequate pollution control measures shall be taken in the proposed project; Suggested for opening of UG mines along with OC projects so that there will be larger scope for generation of employment opportunities to local community; Requested for de-silting of nearby irrigation tanks and construct check dams of a distance of 1 Km. in the diverted vagu.

37.3.2 EC compliance report: EC Compliance Report issued vide letter no.EP/12.1/326/AP/106 dated 30.03.2015 by the Regional Office, MoEFCC at Chennai was deliberated in the EAC meeting. The Committee noted that the status of compliance as reported by the Regional Office is satisfactory.

37.3.3The Committee, after detailed deliberations sought following additional information for further consideration:

- i. Mine Plan/ Mine Closure Plan approvals for the intended capacity for which EC is being sought.

- ii. Updated status on implementation of Public Hearing issues held on 15.12.2004.
- iii. Diverted nallah should be connected to the original channel.
- iv. Revised note on management of external and internal OBD including backfilling of one void to ground level from Abbapur OCP as proposed by PP.

37.4 Junad Deep Extension Project (Expansion from 0.60 MTPA to 1.5 MTPA and expansion in an ML area from 174.28 Ha to 449.63 Ha; Latitude 20⁰ 01'.05" to 20⁰ 04'.10" N and Longitude 79⁰03'.09" to 79⁰05'00" E) M/s Western Coalfields Limited, located at district-Yavatmal, Maharashtra (EC based on TOR granted on 21.11.2014).

37.4.1. The proposal is for Junad Deep Extension Project (Expansion from 0.60 MTPA to 1.5 MTPA and expansion in an ML area from 174.28 Ha to 449.63 Ha; Latitude 20⁰ 01'.05" to 20⁰ 04'.10" N and Longitude 79⁰03'.09" to 79⁰05'00" E) M/s Western Coalfields Limited, located at district-Yavatmal, Maharashtra. The proponent made the presentation and informed that:

- i. The project was accorded ToR vide letter no. **J-11015/255/2014-IA.II (M)** dated **21.11.2014**.
- ii. The latitude and longitude of the project are 20⁰ 01'.05" to N 20⁰ 04'.10" N and 79⁰03'.09" to 79⁰05'.00"E respectively.
- iii. Joint Venture: There is no joint venture.
- iv. Coal Linkage : Linked to Thermal Power Plants of Mahagenco
- v. Employment generated: 219 Nos
- vi. Benefits of the project: Production of Coal for generation of electricity contributing towards meeting the need of the nation simultaneously contributing to the society through generation of employment, development of infrastructure and mixing of cultural heritage establishing the fact of unity in diversity.
- vii. Change in land use during mining :

SL. NO.	PARTICULARS	AREA (ha)
1	QUARRY AREA	101.70
2	EXT. OB DUMP	175.00
3	INFRASTRUCTURE INCLUDING APPROACH ROAD ETC.	15.00
4	EMBANKMENT	20.00
5	BLASTING ZONE	70.50
6	RATIONALISATION AREA	67.43
	TOTAL	449.63

- viii. The land usage of the project will be as follows:

Pre-Mining: The total land requirement for this project is 449.53 ha out of which 174.28 ha has

already been acquired in existing Junad OC mine and balance 275.35 ha will have to be acquired

S.No.	LAND USE	Within ML Area (ha)	Outside ML Area (ha)	Total
1	Tenancy land	443.53	Nil	443.53
2	Forest land	Nil	Nil	Nil
3	Govt. land/Waste land	6.10	Nil	6.10
	Total	449.63	Nil	449.63

Post- Mining:

S. N.	Land use during mining	Land use (ha)				Total
		Plantation	Water Body	Public use	Undisturbed	
1	External OB Dump	175.00	-	-	-	175.00
2	Excavation	-	101.70	-	-	101.70
3	Infrastructure	3.00	-	7.00	-	10.00
4	Green belt	15	-	-	-	15.00
5	Diversion of roads including embankment	17.0	-	8.00	-	25.00
6	Danger zone and rationalization of area	-	-	-	122.93	122.93
	Total	210.0	101.70	15.0	122.93	449.63

- ix. The total geological reserve is 14.581 MT. The mineable reserve 6.13 MT, extractable reserve is 6.13 MT. The per cent of extraction would be 42.045 %.
- x. The coal grade is GCV 4748 k Cal /kg (Grade G-9). The stripping ratio is 1:8.26 Cum/tonne. The average Gradient is 1 in 2.5 to 1 in 3.5. There will be 1 seam with thickness ranging

Coal seam/ Parting	Thickness range (m)	
	Minimum	Maximum
Composite Seam	14.82	18.83
Parting	0.09	2.21

- xi. The total estimated water requirement is 645 KL/day. The level of ground water ranges from 1.5 m to 12.65 m.
- xii. The Method of mining would be opencast with shovel-dumper combination.
- xiii. There is 2 external OB dump with Quantity of 60.95 Mbcm in an area of 175.00 ha with height of 60m above the surface level.
- xiv. The final mine void would be in 101.70 Ha with depth 170 m. and the Total quarry area is 101.70 ha. Backfilled quarry area of 0.00 Ha shall be reclaimed with plantation. A void of 101.70 ha with depth 170m which is proposed to be converted into a water body.
- xv. The seasonal data for ambient air quality has been documented and all results at all stations are

- within prescribed limits.
- xvi. The life of mine is 11 Years.
- xvii. Transportation:

Details of transportation of coal	
i. In pit:	
ii. Surface to siding:	Dumpers
iii. Siding to loading:	Dumpers & Pay loaders

- xviii. There is R & R involved. Only land oustee families to be determined at the time of acquisition.
- xix. Cost: Total capital cost of the project is Rs. 57.784 Crores. CSR Cost Rs. 5 per Tonne of coal production. R&R Cost Rs. 8.11 Crore. Environmental Management Cost Capital – Rs 37.16 Lakhs and Revenue- @ Rs 3.85/t.
- xx. Water body: The Wardha River flows near the mine lease boundary of the project at distance 125 m north easterly.
- xxi. Approvals: Ground water clearance is not Applicable as it is not falling in critical area as per CGWA. Board's approval obtained on 15.11.2007. Mining plan has been approved on 15.11.2007. Mine closure plan is an integral part of mining plan.
- xxii. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xxiii. Forestry issues: There is no forest land involved.
- xxiv. Total afforestation plan shall be implemented covering an area of 210.00 ha at the end of mining. Green Belt over an area of 15.00 ha. Density of tree plantation 2500 trees/ ha of plants.
- xxv. There are no court cases/violation pending with the project proponent.
- xxvi. Public Hearing: Public Hearing was held on 05.02.2013 Kamgar Manoranjan Kendra, Bhalar Township, Post Bhalar, Tal. Wani, Dist. Yavatmal Maharashtra. The issues raised in the PH includes Crop compensation; acquisition of balance land; Rehabilitation of Kolar, Pimpri, and Aheri village; Suppression of dust on Nilapur – Brahmni road; Venue of Public Hearing; Tree Plantation; Street lights etc.

37.4.2 EC Compliance report: The compliance report of earlier EC has been obtained from MOEF, Regional Office, Bhopal vide its letter no. 3-42/2006(ENV)/2090 letter dated 16/17.12.2013. Action Taken Report on the EC Compliance submitted to MOEF New Delhi & MOEF, Bhopal by PP vide letter no. WCL/ENV/HQ/11-H/304 dated 26.08.2014 was deliberated in the EAC meeting. The Committee has noted that the Action taken for compliance by the PP which inter alia is as follows:

- i. No ground water is used for mining operations as such the condition is not applicable. Further this area does not fall under the notified critical area of CGWA. As such separate permission is not required. The piezometer monitoring of the borewell in use is carried out as any adverse impact on ground water level will get immediately noticed.
- ii. There is a full-fledged Domestic Effluent Treatment Plant (DETP)/ Sewage treatment plant of 0.40 MLD Capacity in operation in the existing colony. There is a Workshop effluent Treatment plant (WETP) in operation. The necessary modification in the WETP has been done and it has been put into operation.
- iii. The Consent to Operate for enhancement of capacity from 0.324 MTPA (i.e. 27000 tonnes per month) to 0.60 MTPA (i.e. 50,000 tonnes per month) was granted by MPCB vide its order no.

BO/Yavatmal- /CC-510 dated 13.06.2006. Therefore, enhancement in capacity has been done only after obtaining EC from MOEF & consent from MPCB. Subsequently the renewal of this consent for 0.60 MTPA (i.e. 50,000 tonnes per month) was granted vide MPCB order no. BO/PCI-II/EIC No.AM-0758-08/R/CC-360 dated 30.04.2008. Further renewal has been applied.

- iv. NABL accredited Centralized Environmental Laboratory has been established by CMPDIL, RI-IV (Regional Institute of CMPDIL a subsidiary of CIL and ISO certified Consultant for giving total support to all the coal producing subsidiary of CIL) at Nagpur. The laboratory is equipped with state-of-art instruments such as Atomic Absorption Spectrophotometer (AAS), UV –Visible Spectrophotometer, Microprocessor based Spectrophotometer, Respirable Dust Samplers, Fine dust Samplers. The laboratory is manned skilled and trained workforce (21 nos.) for carrying out environmental monitoring.
- v. The schedule of monitoring every fortnight is communicated to SPCB in advance.

37.4.3 The Committee, after detailed deliberations sought following additional information for further consideration:

- i. One new external OBD of 60 m height is proposed at a distance of 100 m from the township / habitation. PP should explore the possibility to SHIFT /start internal refilling with a view to SHIFT IT AWAY FROM COLONY AND ALSO reduce the height of the dumps (and also) BY providing an artificial barrier inside the mine (lease area) so that sliding of dumps (into the township) towards the working area can be prevented. The PP may also explore the possibility of relocating the dumps to another location within the ML area.
- ii. Revised reclamation / vegetation plan for OBD.
- iii. Detailed Green Belt Plan (75-100 m width) all around the township which is effective and functional.
- iv. Measures to reduce the level of PM₁₀ outside the ML area.
- v. Mine Plan/ Mine Closure Plan approvals for the intended capacity for which EC is being sought.
- vi. As the total mine de-coaled area of 101.70 ha and 170 m depth is proposed to be left unfilled and an area of 175 ha is being used as external OB dump of 60 m height, the committee desired that in order to reduce land degradation the external OBD should be re-handled into the de-coaled area.

37.5. Khadia Opencast Coal Mine Expansion Project (from 10 MTPA to 14 MTPA) and an existing ML area of 1640 ha; Latitude 24°07'26" N - 24°08'47" N and Longitude 82°41'40" E - 82°44'47" E) of M/s Northern Coalfields Limited, located in District Sonebhadra, Uttar Pradesh and in Tehsil Singrauli in District Sidhi, Madhya Pradesh – (EC under 7(ii) of EIA Notification 2006) - further consideration.

37.5.1 The proposal is for Expansion under 7(ii) of EIA Notification 2006 of Khadia Opencast Coal Mine Expansion Project (from 10 MTPA to 14 MTPA) and an existing ML area of 1640 ha of M/s Northern Coalfields Limited, located in District Sonebhadra, Uttar Pradesh and in Tehsil Singrauli in District Sidhi, Madhya Pradesh. The proposal was last considered in the 29th EAC meeting held on 15th -16th January, 2015. The Committee sought following information for further consideration of the project:

- i. Comparative Chart of deployment of men, machinery. Pollution load in the area to be indicated.
- ii. EC was granted in J-11015/255/2006-IA.II (M) dated 10.04.2007 for 10 MTPA. However, till now the even the normative capacity has not been achieved. The detailed reason for under production of coal needs to be furnished for taking a decision for granting high production capacity.

- iii. The impact of additional production coal has also not been analyzed. This needs to be submitted.
- iv. Details of monitoring of PM 10 be submitted.
- v. Reasons for non-installation of piezometers be submitted.

37.5.2 The proponent made the presentation and informed that:

- i. Comparative Chart of deployment of men, machinery be submitted. Pollution load in the area to be indicated.

a) Comparative chart of deployment of Men

Sl No.	Description	For 10 MTPA		For 14 MTPA
		As per PR	Actual as on 31.01.2015	
1	Manpower	2050	1433	No additional requirement

b) Comparative chart of deployment of Machinery

Sl No	Machinery	As per PR for 10 MTPA	For 14 MTPA
1	Dragline	4	No additional requirement
2	Shovel	11	No additional requirement
3	Electric Drill	21	No additional requirement
4	Rear Dumper	52	No additional requirement
5	Dozer	17	No additional requirement
6	Grader	7	No additional requirement
7	Crane	6	No additional requirement
8	Water Sprinkler	4	No additional requirement

1. Actual machinery present as on date

Sl No	Machinery	Actual at present
1	Dragline	2
2	Shovel	12
3	Electric Drill	14
4	Rear Dumper	45
5	Dozer	20
6	Grader	5
7	Crane	11
8	Water Sprinkler	1

c) Pollution load in the area.

The pollution load in the four stations within the core and buffer zones of Khadia OCP for two quarters has been monitored w. r.t. PM₁₀, SO₂& NO_x and found to be within the permissible limits

- ii. The application for 180 ha forest land in the state of M.P. required for Khadia Expn. Project (10MTPA) was submitted on 09/03/2005. Stage –II clearance of the above land was granted on 14/09/2010. The possession of the land was handed over on 30.09.2013. Thus the delay in transferring of land resulted in subsequent delay in Khadia Expn. Project (10 MTPA). The procurement of dragline as per schedule (PR) is 2 Nos. up to 2013-14, 1 additional dragline in 2014-15 and 1 more in 2015-16. According to this the full capacity of 10 MTPA is to be reached in 2015-16/16-17. But due to shortage of coal the production is to be increased beyond 10 MTPA in 2015-16. Presently the working is being carried out in West section and in East section box cut is being opened, after that dragline will be deployed and production shall be increased substantially in 2015-16 as two sections will operate at the same time.
- iii. The only significant impact shall be on Ambient Air Quality (AAQ) which has been analyzed in detail and the total predicted concentration for different production capacities has been generated through AQIP computer model. It was noted that the AAQ level with 14 MTPA production is within the permissible limits.
- iv. The order for installation of piezo-meters (drilling and construction) has been placed recently on 25.02.2015 for 6 nos. piezo-meters in Khadia OCP. The reasons for delay was mainly due to non-participation of adequate bidders for the tender. Some of the bidders did not qualify for the work.

37.5.3 The Committee after detailed deliberation sought following additional information for further consideration.

- i. No coal transport by road is permitted.
- ii. The reclamation plan should be revisited to ensure that the void will be completely back filled.
- iii. Revised Mine Closure Plan.
- iv. Mine Plan/ Mine Closure Plan approvals for the intended capacity for which EC is being sought.

37.6 Amlohri Opencast Expansion Project of (Normative 10 MTPA to Peak 14 MTPA in an ML area 2175 Ha; latitudes 24° 07' 30" to 24° 09' 30" North and Longitudes 82° 34' 30" to 82° 36' 30" EAST) M/s Northern Coalfields Limited, located at dist. Sidhi, Madhya Pradesh – (EC under 7 (ii) of EIA Notification, 2006) - further consideration.

37.6.1 The proposal is for expansion under 7(ii) of EIA Notification, 2006 of Amlohri Opencast Expansion Project of (Normative 10 MTPA to Peak 14 MTPA) in an ML area 2175 Ha of M/s Northern Coalfields Limited, located at dist. Sidhi, Madhya Pradesh. The proposal was last considered in the 23rd EAC meeting held on 16th -17th October, 2014 and 35th EAC meeting held on 14th -15th May, 2015. The Committee sought following information for further consideration of the project

- i. Discrepancy in the basic information and presentation made before EAC with respect to external and internal dumps should be reconciled by the PP and resubmitted.
- ii. Final dump reclamation plan for Amlohri Opencast Expansion Project
- iii. Mine Closure plan proposed vis-à-vis proposed modification / expansion
- iv. The Satellite map is indicating that the PP is dumping extra OBD on the already existing vegetated and stabilized OBD thereby reducing the green cover. The OB dumps without any vegetative cover are being eroded in the forest area and the PP should submit an action plan to mitigate the same and timelines for implementation should not exceed six months.
- v. Distance from the critically polluted area
- vi. The proposed EMP should also include the following:
 - The surface water from nearby villages should be diverted to a pond to be created in the villages for the benefit of local community

- Piezometer should be installed for monitoring of water quality.
- Laboratories should be adequately strengthened with qualified ecologists and wildlife biologists in addition to existing engineers and scientists.
- Clarification on the September, 2000 data with respect to AAQ.

37.6.2 The proponent made the presentation and informed that:

- i. "In the original checklist submitted during first EAC meeting held on 16.10.2014, there was typographical error at point no. 29, regarding quantity of OB dump to be dumped in the internal dumps. It was typed as 29.87 Mm³ in place of 1129.87Mm³". This has been reconciled and resubmitted.
- ii. The final reclamation shall have OB of 1129.87Mm³ in internal dump and 185Mm³ in external dump. As per the final dump reclamation plan the volume of OB required to backfill the void up to 40 m from the surface is 200Mm³. Total area that will be reclaimed with plantation will be 728 Ha as internal dumps and 402Ha as external dumps.
- iii. There will be no change in the total quantity of OB to be lifted throughout the life of the mine for the increased production. The total coal reserves and the volume of OBR will remain the same. Only the rate of extraction of coal will increase. The depth of the void after filling OB will be about 30 to 40 m. There is provision of Rs.26076.40 Lakhs in mine closure cost for this purpose. Northern Coal Field Ltd has opened an Escrow account for closure fund. The above annual closure cost compounded @ 5% annually will be deposited annually for 16 years. The proposed increase in production of 14 Mtpa is taken as peak production for the year where geo-mining conditions favours. Therefore the mine closure plan will remain same as planned for 10 Mtpa. Absolute figures will remain same, only time span will be reduced.
- iv. The Satellite map indicating that the PP is dumping extra OBD on the already existing vegetated and stabilized OBD thereby reducing the green cover has been submitted. An action plan to mitigate the same and the timelines for implementation has been submitted. Plantation roadmap year wise has been prepared.

Sl No	Year	Plantation	Area (Ha)
1	2015-16 (In July- Aug)	60000	22.2
2	2016-17	37500	13.5
3	2017-18	37500	13.5
4	2018-19	40000	14.2
5	2019-20	40000	14.2

In addition to this with increased rate of OB removal (14MTY), external dumps will exhaust by 2017-18, after which plantations area in dump slopes and dumps will increase considerably and the vegetation cover will also increase substantially. As an interim measure in the western side grassing work will be taken up in 2015-16 and 2016-17 to improve the green cover. Actual lease hold area is 2175 Ha. Lease hold area as shown in remote sensing report of 2014 is 3123 Ha, while the actual leasehold area is 2175 Ha. Difference in area is 948 Ha. 64 Ha green land reduced from original lease hold. 884 Ha tenancy land shown in remote sensing map. Last year

total plantation done was in 22 Ha (59,000 Trees). The report indicated that the vegetation has reduced from 867 Ha to 803 Ha i.e difference of 64Ha. (A).This area was not in the survey map of 2014 because of which the difference was there. Map using satellite data of 2015 is under preparation at CMPDI. Vegetation cover mapping of Singrauli coalfields which is done regularly at three years interval is also under preparation and will be prepared in 2015. The area on the South West side (B) was included in the leasehold which does not belong to Amlohri presently. As per the EMP total external dump allocated area was 402 Ha out which 321Ha has been used till now for external dumping. The dumping is being carried out in the specified area as per the EMP and some of the vegetation is covered with OB. West section has opened in 2009 and hence activities are increased in this side. This will remain active upto 2017-18 as per the EMP.

- v. CEPI moratorium was re-imposed in Singrauli region (U.P and M.P) on 17.09.2013. The industries of this area were under critically polluted area. Amlohri was also in the region. As per order no MoEFCC O.M No J-11013/5/2010-IA. II (I) dated 10.06.2014 the moratorium has been kept in abeyance since 10.06.2014. At present Amlohri OCP is not under moratorium of CPA.
- vi. The Environment Management Plan included the following:
 - Amlohri project is at present having zero discharge and excess water is drained out only during monsoon season. A new pond of 70,000 cum has been recently developed near Bharua village at a distance of about 500m. Pumping facilities along with required pipeline/water channel can be provided (in consultation with RO, MPPCB) to nearby villages. (Bharua and Amjar village). After consultation the pipeline installation /water channel shall be installed. Two nos.RO plant of capacity 10/5 KL per day for drinking water has been installed and is in operation in nearby two villages, Dasuti and Kachini.
 - Work order already issued to contractor, work is in progress, to be completed in six months. Site selection completed, drilling to start.
 - Presently the Environment lab. of CMPDI has three environmental engineers and one mining engineer, three junior scientific assistants, three lab technicians and three sampling assistants. Help is being taken from two ecologists presently posted in CMPDI HQs, Ranchi and RI V Bilaspur.
 - Environmental monitoring of coal mine projects of NCL has been carried out by CMPDI as per standards for coal mine prescribed by MoEFCC vide GSR 742(E) dated 25.09.2000.

37.6.3 The Committee after detailed deliberation sought following additional information for further consideration:

- i. Mine Plan/ Mine Closure Plan approvals for the intended capacity for which EC is being sought.
- ii. Revised reclamation plan taking into consideration the height of external Dump and internal dump from original mine contour. No mine void at the end of mining.
- iii. Alternative OB dumping plan may also be explored.

37.7 Coal Washery (Wet Process 2 x 2 MTPA capacity in an area of 8.195 ha) of M/s CG Coal & Power Ltd. Dist. Korba, Chhattisgarh. – TOR - further consideration

37.7.1 The proposal is regarding TOR for Coal Washery (Wet Process 2 x 2 MTPA capacity in an area of 8.195 ha) of M/s CG Coal & Power Ltd. Dist. Korba, Chhattisgarh. The proposal was last considered in the 27th EAC meeting held on **18th -19th December, 2014**. The Committee sought following information for further consideration of the project.

- i. Detailed response to the representation received from South Eastern Koyala Mazdoor Congress (INTUC) dated 13.12.2014 to be submitted.
- ii. Source of water supply be submitted.
- iii. The details of the Rejects and its utilization, transportation and the end users be submitted alongwith the MoUs.
- iv. Details of alternate be also presented as the present site appears to be only 17 km from Korba, a critically polluted area.
- iv. Coal policy vis-à-vis the land use of Chhatisgarh Industrial area be submitted.

37.7.2 The proponent made the presentation and informed that:

- i. Reply to the representation received from South Eastern Koyala Mazdoor Congress (INTUC) dated 13.12.2014:
 - a) Land for the proposed coal washery (20.25 Acre) is allotted by Chhattisgarh State Industrial Development Corporation to M/s C.G. Coal & Power Ltd. for specific purpose of establishing coal washery project. The proposed coal washery will be operated on wet process. Hence, there will be very less dust generation during coal washing. Also, suitable dust control measures like bag filters, covered conveyors, regular water sprinkling on coal stackyard, haul roads, transport road, covered transport of raw and washed coal, thick plantation around plant boundary, etc will be adopted to minimise dust emissions from the coal washery project. Hence, no major impact will be occurred on the nearby village habitations. However, M/s C. G. Coal & Power Ltd. will carry out regular medical camps and environmental monitoring programs in the nearby villages to assess the impacts, if any, due to coal washery project. Also, as on date, most of the traffic plying from Dipka & Gevra Mines are transporting raw coal from Mines to user industries located in Bilaspur, Raipur, etc. The proposed coal washery will be located very near the transportation route (Road connecting Gevra to NH-111). The proposed coal washery will divert part of the traffic for washing of coal and will transport washed coal, thereby reducing a considerable traffic load for transportation of rejects. Transportation of rejects will be based on availability of user industries might be near the coal washery. Also, there will not be any addition to traffic load as the raw coal from existing user industries, which is being transported through the same road, will be washed in the proposed coal washery. There is no habitation between the existing coal transportation road and proposed coal washery site.
 - b) The proposed coal washery will be operated on wet process. Hence, there will be very less dust generation during coal washing. Also, suitable dust control measures like bag filters, covered conveyors, regular water sprinkling on coal stackyard, haul roads, transport road, covered transport of raw and washed coal, thick plantation around plant boundary, etc will be adopted to minimize dust emissions from the coal washery project. Hence, no major impact will be occurred on the nearby village habitations. However, M/s C. G. Coal & Power Ltd. will carry out regular medical camps and environmental monitoring programs in the nearby villages to assess the impacts, if any, due to coal washery project. As on date, most of the traffic plying from Dipka & Gevra Mines are transporting raw coal from Mines to user industries located in Bilaspur, Raipur, etc. The proposed coal washery is located at 0.5 km from the transportation route (Road connecting Gevra to NH-111). The proposed coal washery will divert part of the traffic for washing of coal and will transport washed coal, thereby reducing a considerable traffic load for transportation of rejects. Transportation of rejects will be based on availability of user industries might be near the coal washery. Also, there will not be any addition to traffic load as the raw coal from existing user industries, which is being

transported through the same road, will be washed in the proposed coal washery. There is no habitation between the existing coal transportation road and proposed coal washery site.

- c) There is no educational institute (I.T.I.), existing or proposed, in the vicinity of the proposed coal washery site. However, the management will adopt necessary pollution control measures to restrict the pollution within existing permissible standards. Periodic environmental monitoring will be carried out to ensure the pollution within permissible limits.
 - d) Land for the proposed coal washery is allotted by Chhattisgarh State Industrial Development Corporation to M/s C.G. Coal & Power Ltd. for specific purpose of establishing coal washery project. The proposed coal washery will be operated on wet process. Hence, there will be very less dust generation during coal washing. Also, suitable dust control measures like bag filters, covered conveyors, regular water sprinkling on coal stackyard, haul roads, transport road, covered transport of raw and washed coal, thick plantation around plant boundary, etc will be adopted to minimise dust emissions from the coal washery project. Hence, no major impact will be occurred on the nearby village habitations. However, M/s C. G. Coal & Power Ltd. will carry out regular medical camps and environmental monitoring programs in the nearby villages to assess the impacts, if any, due to coal washery project. Also, as on date, most of the traffic plying from Dipka & Gevra Mines are transporting raw coal from Mines to user industries located in Bilaspur, Raipur, etc. The proposed coal washery is located very near the transportation route (Road connecting Gevra to NH-111). The proposed coal washery will divert part of the traffic for washing of coal and will transport washed coal, thereby reducing a considerable traffic load for transportation of rejects. Transportation of rejects will be based on availability of user industries might be near the coal washery. Also, there will not be any addition to traffic load as the raw coal from existing user industries, which is being transported through the same road, will be washed in the proposed coal washery. There is no habitation between the existing coal transportation road and proposed coal washery site.
- ii. **Source of water supply:** Application has been submitted to Water Resource Department, Chhattisgarh for permission for drawal of 1300 m³/day water from Leelagar Nala, located at 3.0km SW of the proposed coal washery site. Alternate source of water during lean season will be ground water. An application for drawal of 1300 m³/day ground water will be submitted to Central Ground Water Board.
 - iii. **The details of the Rejects and its utilization, transportation and the end users along with the MoUs:** In the proposed coal washery, out of the total 4.0 Million Tonne annual throughput raw coal, 2.8 Million tonnes washed coal and 1.2 Million Tonnes washery rejects will be generated. Washed coal will be dispatched to the user industries and reject coal will be sold to the nearby CFBC power plants. Since the Ministry of Coal is in process of revision in the Coal policy, the processes of linkages of Coal and MoUs with the user industries for use of washery rejects are withheld. However, the MoUs will be submitted along with the Final EIA/EMP report. The washery rejects will be transported by covered trucks by road. About 145 trips per day of 25 tonne capacity trucks will be required for transportation of coal rejects.
 - iv. **Details of alternate as the present site appears to be only 17 km from Korba, a critically polluted area:** Land for the proposed coal washery is allotted by Chhattisgarh State Industrial Development Corporation to M/s C.G. Coal & Power Ltd. for specific purpose of establishing coal washery project. Though the site is located at 17 km from Korba, a critically polluted area, there are no major industries in the vicinity of the proposed washery site. Also, the alternative sites selected for coal washery consists of agriculture land and hence, will not be available for industrial purpose. Those sites are also within 16 - 21 km distance from the Korba area. The proposed washery site is located very close to the raw coal source i.e. Dipka, Gevra, Kusmunda

coal mines of SECL. The proposed site is located only at about 2.5 km from the Dipka mine and thus, it requires very short distance for transportation of coal. Thus, this will avoid long distance transportation of raw coal, thereby reducing additional dust generation due to transportation of rejects. The proposed coal washery will be operated on wet process. Hence, there will be very less dust generation during coal washing. Also, suitable dust control measures like bag filters, covered conveyors, regular water sprinkling on coal stack-yard, blacktopping of internal roads, periodic maintenance of transport road, covered transport of raw and washed coal, thick plantation around plant boundary, etc. will be adopted to minimise dust emissions from the coal washery project. Hence, no major impact will be occurred on the nearby village habitations. The proposed site is located only at about 2.5 km from the Dipka mine and 0.5 km away from coal transportation road connecting Dipka, Gevra mines to NH-111 connecting Korba to Bilaspur & Raipur. Thus, most of the coal transportation is carried out through this road. The user industries, which are presently transporting raw coal from mines to their industries, will use the proposed coal washery facilities, for washing their raw coal and will further transport only washed coal, thereby avoiding reject transportation. This will help in reducing traffic load on the transportation route and also in dust generation (due to reduction in traffic).

- v. **Coal policy vis-à-vis the land use of Chhattisgarh Industrial area: Chhattisgarh** State Industrial Development Corporation has not notified any industrial area in the vicinity of the proposed project site and there is no defined coal policy of the CSIDC for the applied area. The land for proposed coal washery site has been acquired by CSIDC and allotted to M/s C. G. Coal & Power Ltd. CSIDC has allotted land to M/s C. G. Coal & Power Ltd. for the purpose of Coal beneficiation, coal dust, power plant, etc. over 10.25 acre area (Government land) on 99 year lease in the year on 15th February 2008 valid upto 23.09.2106 and land over 10 Acre area (Private land) on 99 year lease on 2nd June 2014 valid upto 1.06.2113 in village Batari, Tehsil Katghora, District Korba, Chhattisgarh

37.7.3 The Committee after detailed deliberation found that the site is environmentally unsuitable for the proposed coal washery on the following grounds:

- i. The site which has been selected is not located in Notified Industrial Area.
- ii. The current land use is an agriculture land.
- iii. The site is in proximity to a number of villages who would be affected by the pollution from the coal washery.
- iv. Mine water is not available for washing of coal at the present site. In the present case ground water is proposed to be used which would be in conflict with the nearby villagers.
- v. Transportation is proposed by road.
- vi. There are several issues raised by the South Eastern Koyala Mazdoor Congress (INTUC) dated 13.12.2014 which needs to be addressed.
- vii. The PP has also not provided information w.r.t. other coal Washeries in the surrounding area.

In light of the above the Committee did not agree for grant of TOR for the present site and recommended that alternate site may be explored.

37.8 Expansion of Mangrol Valia Opencast Lignite Mine Project (from 4.2 MTPA to 7.4 MTPA and expansion in ML area from 2080 ha to 3019 ha; Latitude 21° 26'03" N - 21° 31'10" N and Longitude 73°06'58" E - 73°13'44 " E) of M/s Gujarat Industries Power Company Ltd., located in Tehsil Mangrol and Valia in districts Surat and Bharuch, Gujarat- (EC based on TOR granted on 11.01.2012 /TOR Extn 21.05.2014).

The proponent vide letter no. GIPCL/SLPP/Mines/FC/4546 dated 06.06.2015 requested Ministry to postpone the presentation.

37.9 Amod Lignite Mine Project (G-19 Extn.) (1 MTPA) of M/s Gujarat Mineral Development Corporation Limited (GMDC), located in Village Amod, Tehsil Jhagadia, District Bharuch, Gujarat – Amendment in EC conditions.

The proposal was earlier considered in 33rd EAC meeting held on 9th-10th April, 2015 wherein the Committee had sought additional information. PP informed that the same will be submitted shortly.

37.10 Coal washing plant of (3.5 MTPA in an area of 7.55 Ha; Latitude 19°46'6.44" N and Longitude 79°19'52.65" E) by M/s N.N. Global Mercantile Pvt. Limited, Dist. Chandrapur, Maharashtra–TOR- further consideration.

The proponent vide letter no. Nil dated 10.06.2015 requested Ministry to postpone the presentation.

37.11 Coal Washery of 10 MTPA capacity in an area of 39.35 Ha by M/s Mahanadi Coalfields Limited located at 21° 42' 12" N to 21° 47' 20" (N) and 83° 48' 00" E to 83° 52' 41" (E) Ib Valley in Lakhanpur area village Chharla, in district Jharsuguda Odisha-TOR.

37.11.1 The proposal is regarding TOR for Coal Washery of 10 MTPA capacity in an area of 39.35 Ha by M/s Mahanadi Coalfields Limited located at 21° 42' 12" N to 21° 47' 20" (N) and 83° 48' 00" E to 83° 52' 41" (E) Ib Valley in Lakhanpur area village Chharla, in district Jharsuguda Odisha. The project proponent made the presentation and informed that:

- i. This is green field project. The latitude and longitude of the project are 21° 42' 12" N to 21° 47' 20" (N) and 83° 48' 00" E to 83° 52' 41" (E) respectively.
- ii. IB Valley Washery is located in the present land area of Belpahar OC in Lakanpur Area of Ib valley Coalfield in Jharsuguda District, Odisha
- iii. Joint Venture: There is no joint venture.
- iv. Coal Linkage: Linked to Proposed Lakhanpur-Belpahar-Lilari Integrated OCP (30 MTY), however presently Lakhanpur OCP(18.75 MTY), Belpahar OC Expn.(9.00MTY) and Lilari OCP(0.8 MTY) is in operation where from coal will be supplied till linked OCP starts operation.
- v. Employment generated / to be generated: Washery will be constructed on BOM concept and employment will be generated by BOM operator.
- vi. Benefits of the project: It will lead to improvement in performance of power plant, reduction in particulate emission, Reduction in load on railway network and cost of handling and transportation.
- vii. The total land area required for the washery is 39.35 Ha. The entire land is already acquired by MCL and is in possession of MCL. Out of this (Site-A) measuring 13.95 Ha. is non-coal bearing virgin area, Site-C & Site-E measuring 6.67+15.95= 22.62 Ha. is coal bearing area within mining lease area of existing Belpahar OC Expn. in which the extraction of coal is in progress which will subsequently be back filled after complete extraction of full coal seam prior to start of construction of proposed washery. There is no building on proposed site. Small Bushes exist on a small portion of washery construction site. Bushes will be cleared and leveling and dressing of land will be done as per requirement. Belpahar OCP is already operating and the proposed land for washery is within the acquired mining lease area of Belpahar OCP for which environmental clearance has been granted.

- viii. The total estimated water requirement is 2724 Cu. M/ day. Source of water to washery site from Hirakud back water or quarry no-5 of Belpahar OCP (1-2 km) from washery or existing eco tank (water catchment pond for rain water).
- ix. The life of Washery is 18 years.
- x. Washing Technology will be based on offer of lowest bidder. However, washing technology preferably shall be based on Jig. Bidders are free to offer any other improved/ proven technology being used elsewhere in the world. Washing circuit has to be necessarily a closed circuit with zero water discharge.
- xi. Transportation:
 - **Raw Coal:** To be transported from integrated lakhapur-belpahar-lilari ocp to washery by two nos. of belt conveyors each of approx. 1200 tph capacity.
 - **Washed coal:** To be transported from IB valley washery to the proposed silo near railway siding by twin conveyor belts at a distance of 1-2 km.
 - **Rejects:** To be stacked on the identified filled up land adjacent to the washery, which will be finally disposed off to the prospective buyers
- xii. There is no R & R involved. There are no PAFs.
- xiii. Cost: Total capital cost of the project is Rs. 336.90 Crore.
- xiv. Water body: Ib River flows at a distance of 11.46 Km (E), Lilari Nullah at 1.5 Km (NE) and Pandren Nullah 6.00 Km (NE) from the project site.
- xv. Approvals: Board's approval obtained on 05.11.2014. Mining plan has been approved on 05.11.2014. Mine closure plan is an integral part of mining plan.
- xvi. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xvii. Forestry issues: There is no forest area involved.
- xviii. Total afforestation plan shall be implemented at the end of mining. Green Belt over an area Approx. 3 Ha shall be developed around washery premises. Density of tree plantation 1600 trees/ ha of plants.
- xix. There are no court cases/violation pending with the project proponent.
- xx. Since it is pit head coal washery, alternate sites have not been considered.

37.11.2 The Committee, after detailed deliberations recommended the project for granting TOR along with the following specific TORs.

- i. Water requirement will be met only from quarry no. 5 of Belpahar.
- ii. No groundwater or water from Hirakund back waters will be tapped.
- iii. No warf loading will be permitted. The PP should construct (ct) additional silos.
- iv. The entire rejects generated will be sold to prospective buyers for use in thermal power plant etc. Firmed up MOU with the prospective buyers should be submitted at the time of EC request.
- v. No dispatch of rejects by roads except to nearby users.
- vi. The input coal will be transported by belt conveyors and washed coal will be dispatched from silo by Rail only as proposed by the PP.
- vii. Cumulative Impact Assessment within 10 km radius of the project site should be carried out while conducting EIA study.
- viii. The washery should be a closed system with zero discharge.
- ix. Community development activity should be initiated during the period when the washery is being setup.

37.12 Discussion on any other matters with the permission of the Chair.

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

Annexure 1

PARTICIPANTS IN 37th EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 11th - 12th June 2015 ON COAL SECTOR PROJECTS.

Sl. No.	LIST OF PARTICIPANTS Expert Appraisal Committee (Coal Mining)	
1.	Prof. C.R. Babu	Member
2.	Shri Jawahar Lal Mehta	Member
3.	Dr. T. K .Dhar	Member
4.	Shri A. K. Bansal	Member
5.	Shri N. K. Verma	Member
6.	Shri S. S. Bala	Member
7.	Shri. P. D. Siwal	Member
8.	Shri G. S. Dang	Member
9.	Dr. R. Warriar	Member Secretary
10.	Shri P. R. Sakhare	Deputy Director

PARTICIPANTS IN 37th EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 11th - 12th June 2015 ON COAL SECTOR PROJECTS.

37.1 Kusmunda Opencast Expansion Project of M/s South Eastern Coalfields Ltd.

1. Shri D. C. Kunda
2. Shri N. K. Rai
3. Shri A. K. Gupta
4. Shri Sanjay Kumar Singh
5. Shri Pawan Kumar
6. Shri T. Chakraborty
7. Shri Ashutosh Kumar
8. Shri D. Srivastwa
9. Shri N. P. Sahu
10. Shri U. T. Kanzaokar
11. Shri I. D. Narayan
12. Dr. A. Tiwari
13. Shri A. S. Bapat

37.2 Expansion of Amera OC project of M/s South Eastern Coalfields.

1. Shri D. C. Kunda
2. Shri N. K. Rai
3. Shri A. K. Gupta
4. Shri Sanjay Kumar Singh
5. Shri Pawan Kumar
6. Shri T. Chakraborty
7. Shri Ashutosh Kumar
8. Shri D. Srivastwa
9. Shri N. P. Sahu
10. Shri U. T. Kanzaokar
11. Shri I. D. Narayan
12. Dr. A. Tiwari
13. Shri A. S. Bapat

37.3 Expansion of Bellampalli OC Mine Extension Project of **M/s Singareni Collieries Company Ltd.**

1. Shri D. Manohar Rao
2. Shri M. S. Guana Sundaran
3. Shri P. Shanth Kumar
4. Shri N. Bhaskar

37.4 Junad Deep Extension Project of M/s Western Coalfields Limited,

1. Shri K. P. Singh

2. Shri Pawan Kumar
3. Shri S. K. Sinha
4. Shri Kaushik Chakravarty
5. Shri D. M. Gokhale

37.5 Khadia Opencast Coal Mine Expansion Project of M/s Northern Coalfields Limited.

1. Ms. S. L. Saha
2. Shri B. K. Sharma
3. Shri A. K. Chaudhary
4. Shri U. C. Dumka
5. Shri M. R. Munda
6. Shri Manoj Agrawal
7. Shri Prateesh V. P.
8. Shri Pawan Kumar
9. Shri Rajneesh Kumar
10. Shri Sunil Kumar
11. Shri V. N. Dupattawall

37.6 Amlohri Opencast Expansion Project of M/s Northern Coalfields Limited

1. Ms. S. L. Saha
2. Shri B. K. Sharma
3. Shri A. K. Chaudhary
4. Shri U. C. Dumka
5. Shri M. R. Munda
6. Shri Manoj Agrawal
7. Shri Prateesh V. P.
8. Shri Pawan Kumar
9. Shri Rajneesh Kumar
10. Shri Sunil Kumar
11. Shri V. N. Dupattawall

37.7 Coal Washery (Wet Process 2 x 2 MTPA capacity in an area of 8.195 ha) of M/s CG Coal & Power Ltd.

1. Shri Arvind Kumar
2. Shri D. S. Ramteke
3. Shri Prag Khejnare

37.8 Expansion of Mangrol Valia Opencast Lignite Mine Project of M/s Gujarat Industries Power Company Ltd.

Absent

37.9 Amod Lignite Mine Project of M/s Gujarat Mineral Development Corporation Limited.

Absent

37.10 Coal washing plant of M/s N.N. Global Mercantile Pvt. Limited.

Absent

37.11 Coal Washery of 10 MTPA capacity in an area of 39.35 Ha by M/s Mahanadi Coalfields.

1. Shri Jaswinder Pal Singh
2. Shri Abhijit Sinha
3. Shri Nirbhay Bhatnagar
4. Shri Yogendra Misra
5. Shri P. K. Mishra
6. Shri R. K. Shingal

Generic ToR for coal washery

- i. Siting of washery is critical considering to its environmental impacts. Preference should be given to the site located at pit head; in case such a site is not available, the site should be as close to the pit head as possible and coal should be transported from mine to the washery preferably through closed conveyer belt to avoid air pollution.
- ii. The washery shall not be located in eco-sensitive zones areas.
- iii. The washery should have a closed system and zero discharge. The storm drainage should be treated in settling ponds before discharging into rivers/streams/water bodies.
- iv. A thick Green belt of about 50 m width should be developed surrounding the washery.
- v. A brief description of the plant alongwith a layout, the specific technology used and the source of coal should be provided.
- vi. The EIA-EMP Report should cover the impacts and management plan for the project of the capacity for which EC is sought and the impacts of specific activities, including the technology used and coal used, on the environment of the area (within 10km radius), and the environmental quality of air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts for the rated capacity. Cumulative impacts for air and water should be a part of EIA in case coal mine, TPP and other washeries are located within 10km radius. The EIA should also include mitigative measures needed to minimize adverse environmental impacts.
- vii. A Study Area Map of the core zone as well as the 10km area of buffer zone showing major industries/mines and other polluting sources should be submitted. These maps shall also indicate the migratory corridors of fauna, if any and areas of endangered fauna; plants of medicinal and economic importance; any ecologically sensitive areas within the 10 km buffer zone; the shortest distance from the National Park/WL Sanctuary Tiger Reserve, etc. alongwith the comments of the Chief Wildlife Warden of the State Government.
- viii. Data of one-season (non-monsoon) primary- base-line data on environmental quality of air (PM₁₀, PM_{2.5}, SO_x and NO_x, noise, water (surface and groundwater), soil be submitted.
- ix. The wet washery should generally utilize mine water only. In case mine water is not available, the option of storage of rain water and its use should be examined. Use of surface water and ground water should be avoided.
- x. Detailed water balance should be provided. The break-up of water requirement as per different activities in the mining operations vis-a-vis washery should be given. If the source of water is from surface water and/or ground water, the same may be justified besides obtaining approval of the Competent Authority for its drawl.
- xi. The entire sequence of mineral production, transportation, handling, transfer and storage of mineral and waste, if any, and their impacts on air quality should be shown in a flow chart with specific points where fugitive emissions can arise and specific pollution control/mitigative measures proposed to be put in place. The washed coal and rejects should be transport by train as far as possible. Road transport of washed coal and rejects should generally be avoided. In case, the TPP is within 10km radius, it should be through conveyer belt. If transport by rail is not feasible because of the topography of the area, the option for transport by road be examined in detail and its impacts along with the mitigation measures should be clearly brought out in EIA/EMP report.
- xii. Details of various facilities proposed to be provided in terms of parking, rest areas, canteen etc.to the personnel involved in mineral transportation, workshop and effluents/pollution load from these activities should be provided.
- xiii. Impacts of CHP, if any, on air and water quality should also be spelt out alongwith Action Plan.

- xiv. O.M. no. J-IIOI3/25/2014-IA.I dated 11th August, 2014 to be followed with regard to CSR activities.
- xv. Details of Public Hearing, Notice(s) issued in newspapers, proceedings/minutes of Public Hearing, points raised by the general public and response/commitments made by the proponent along with the Action Plan and budgetary provisions be submitted in tabular form. If the Public Hearing is in the regional language, an authenticated English translation of the same should be provided. Status of any litigations/ court cases filed/pending, if any, against the project should be mentioned in EIA.
- xvi. Analysis of samples indicating the following be submitted:
 - Characteristics of coal prior to washing (this includes grade of coal, other characteristics of ash, S and heavy levels of metals such as Hg, As, Pb, Cr etc).
 - Characteristics and quantum of coal after washing.
 - Characteristics and quantum of coal rejects.
- xvii. Details of management/disposal/use of coal rejects should be provided. The rejects should be used in TPP located close to the washery as far as possible. If TPP is within a reasonable distance (10 km), transportation should be by conveyor belt. If it is far away, the transportation should be by rail as far as possible.
- xviii. Copies of MOU/Agreement with linkages (for stand-alone washery) for the capacity for which EC is being sought should be submitted.
- xix. Corporate Environment Responsibility:
 - a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - d) To have proper checks and balances, the company should have a well laid down 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.
- xx. A detailed action Plan for Corporate Social Responsibility for the project affected people and people living in and around the project area should be provided.
- xxi. Permission of drawl of water shall be pre-requisite for consideration of EC.
- xxii. Wastewater /effluent should conform to the effluent standards as prescribed under Environment (Protection) Act, 1986
- xxiii. Details of washed coal, middling and rejects along with the MoU with the end-users should be submitted.

GENERIC TOR FOR AN OPENCAST COALMINE PROJECT for EC

- (i) An EIA-EMP Report shall be prepared for..... **MTPA** rated capacity in an ML/project area of.....ha based on the generic structure specified in **Appendix III of the EIA Notification, 2006.**
- (ii) An EIA-EMP Report would be prepared for..... **MTPA** rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for..... **MTPA** of coal production based on approved project/Mining Plan for.....**MTPA**. Baseline data collection can be for any season (three months) except monsoon.
- (iii) A toposheet specifying locations of the State, District and Project site should be provided.
- (iv) A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of **ecologically sensitive areas** such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
- (v) Land use map (1: 50,000 scale) based on a recent satellite imagery of the study area may also be provided with explanatory note on the land use.
- (vi) Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
- (vii) A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
- (viii) A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.
- (ix) In case of any proposed diversion of nallah/canal/river, the proposed route of diversion /modification of drainage and their realignment, construction of embankment etc. should also be shown on the map as per the approval of Irrigation and flood control Department of the concerned state.
- (x) Similarly if the project involves diversion of any road/railway line passing through the ML/project area, the proposed route of diversion and its realignment should be shown in the map along with the status of the approval of the competent authority.

- (xi) Break up of lease/project area as per different land uses and their stage of acquisition should be provided.

LANDUSE DETAILS FOR OPENCAST PROJECT should be given as per the following table:

S.N.	LANDUSE	Within ML Area (ha)	Outside ML Area (ha)	TOTAL
1.	Agricultural land			
2.	Forest land			
3.	Wasteland			
4.	Grazing land			
5.	Surface water bodies			
6.	Settlements			
7.	Others (specify)			
	TOTAL			

- (xii) Break-up of lease/project area as per mining plan should be provided.
- (xiii) Impact of changes in the land use due to the project if the land is predominantly agricultural land/forestland/grazing land, should be provided.
- (xiii) **One-season (other than monsoon) primary baseline data** on environmental quality - air (PM₁₀, PM_{2.5}, SO_x, NO_x and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season **met data** coinciding with the same season for AAQ collection period should be provided.
- (xiv) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.
- (xv) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a **Comprehensive Conservation Plan** along with the appropriate

budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.

- (xvi) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
- (xvii) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
- (xviii) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- (xix) Detailed water balance should be provided. The break-up of water requirement for the various mine operations should be given separately.
- (xx) Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users in the upstream and downstream of the project site. should be given.
- (xxi) Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
- (xxii) Impact of blasting, noise and vibrations should be given.
- (xxiii) Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
- (xxiv) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
- (xxv) Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
- (xxv) Details of waste OB and topsoil generated as per the approved calendar programme, and their management shown in figures as well explanatory notes tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use should be given. OB dump heights and terracing based on slope stability studies with a max of 28° angle as the ultimate slope should be given. Sections of final dumps (both longitudinal and cross section) with relation to the adjacent area should be shown.
- (xxvi) Efforts be made for maximising progressive internal dumping of O.B., sequential mining , external dump on coal bearing area and later rehandling into the mine void.--to reduce land degradation.
- (xxvii) Impact of change in land use due to mining operations and plan for restoration of the mined area to its original land use should be provided.
- (xxviii) Progressive Green belt and ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEFCC given below) and selection of species (native) based on original survey/land-use should be given.

Table 1: Stage-wise Landuse and Reclamation Area (ha)

S.N.	Land use Category	Present (1 st Year)	5 th Year	10 th Year	20 th year	Year to the end of mine life 24 th life) *
1.	Backfilled Area(Reclaimed with plantation)					
2.	Excavated Area (not reclaimed)/void					
3.	External OB dump Reclaimed with plantation)					
4.	Reclaimed Top soil dump					
5.	Green Built Area					
6.	Undisturbed area (brought under plantation)					
7.	Roads (avenue plantation)					
8.	Area around buildings and Infrastructure					
	TOTAL					

- As a representative example.

Table 2: Stage-wise Cumulative Plantation

S.N	YEAR*	Green Belt	External Dump	Backfilled Area	Others (Undisturbed Area/etc)	TOTAL
.						

		Area (ha)	No. of trees								
1.	1 st year										
2.	3 rd year										
3.	5 th year										
4.	10 th year										
5.	15 th year										
6.	20 th year										
7.	25 th year										
8.	30 th year										
9.	34 th year (end of mine life)										
10.	34-37 th Year (Post-mining)										

* As a representative example

(xxix) Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.

Table 3: Post-Mining Landuse Pattern of ML/Project Area (ha)

S.N.	Land use during Mining	Land Use (ha)				
		Plantation	Water Body	Public Use	Undisturbed	TOTAL
1.	External OB Dump					
2.	Top soil Dump					

3.	Excavation					
4.	Roads					
4.	Built up area					
5.	Green Belt					
6.	Undisturbed Area					
	TOTAL					110

- (xxx) Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be done.
- (xxxii) Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.
- (xxxiii) Risk Assessment and Disaster Preparedness and Management Plan should be provided.
- (xxxiiii) Integration of the Env. Management Plan with measures for minimizing use of natural resources - water, land, energy, etc. should be carried out.
- (xxxv) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
- (xxxvi) Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
- (xxxvii) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
- (xxxviii) Corporate Environment Responsibility:
- The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - To have proper checks and balances, the company should have a well laid down 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.
- (xxxix) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.
- (xl) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.

- (xl) Status of any litigations/ court cases filed/pending on the project should be provided.
- (xli) Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
- (xlii) Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

FOREST CLEARANCE: Details on the Forest Clearance should be given as per the format given:

TOTAL ML/PROJECT AREA (ha)	TOTAL FORESTLAND (ha)	Date of FC	Extent of forestland	Balance area for which FC is yet to be obtained	Status of appl. for diversion of forestland
		If more than one, provide details of each FC			

GENERIC TORs FOR AN UNDERGROUND COALMINE PROJECT

- (i) An EIA-EMP Report shall be prepared for..... **MTPA** rated capacity in an ML/project area of.....ha based on the generic structure specified in **Appendix III of the EIA Notification, 2006.**
- (ii) An EIA-EMP Report would be prepared for..... **MTPA** rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for..... **MTPA** of coal production based on approved project/Mining Plan for.....**MTPA**. Baseline data collection can be for any season (three months) except monsoon.
- (iii) A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of **ecologically sensitive areas** such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
- (iv) Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
- (v) A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
- (vi) A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.
- (vii) Original land use (agricultural land/forestland/grazing land/wasteland/water bodies) of the area should be provided as per the tables given below. Impacts of project, if any on the land use, in particular, agricultural land/forestland/grazing land/water bodies falling within the lease/project and acquired for mining operations should be analyzed. Extent of area under surface rights and under mining rights should be specified.

S.N.	ML/Project Land use	Area under Surface Rights (ha)	Area Under Mining Rights (ha)	Area under Both (ha)
1.	Agricultural land			
2.	ForestLand			

3.	Grazing Land			
4.	Settlements			
5.	Others (specify)			

Area Under Surface Rights

S.N.	Details	Area (ha)
1.	Buildings	
2.	Infrastructure	
3.	Roads	
4.	Others (specify)	
	TOTAL	

- (viii) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a **Comprehensive Conservation Plan** along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.
- (ix) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
- (x) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
- (xi) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- (xii) **One-season (other than monsoon) primary baseline data** on environmental quality - air (PM₁₀, PM_{2.5}, SO_x, NO_x and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season **met data** coinciding with the same season for AAQ collection period should be provided.
- (xiii) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting

sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.

- (xiv) Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
- (xv) Study on subsidence including modeling for prediction, mitigation/prevention of subsidence, continuous monitoring measures, and safety issues should be carried out.
- (xvi) Detailed water balance should be provided. The break up of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
- (xvii) Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.
- (xviii) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
- (xix) Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
- (xx) Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.
- (xxi) The number and efficiency of mobile/static water sprinkling system along the main mineral transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.
- (xxii) Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.
- (xxiii) Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.
- (xxiv) Greenbelt development should be undertaken particularly around the transport route and CHP. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.
- (xxv) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
- (xxvi) Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
- (xxvii) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
- (xxviii) Corporate Environment Responsibility:

- a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
- b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
- d) To have proper checks and balances, the company should have a well laid down 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.

(xxix) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

(xxx) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.

(xxxi) Status of any litigations/ court cases filed/pending on the project should be provided.

(xxxii) Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.

(xxxiii) Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

Details on the Forest Clearance should be given as per the format given:

TOTAL ML/PROJECT AREA (ha)	TOTAL FORESTLAND (ha)	Date of FC	Extent of forestland	Balance area for which FC is yet to be obtained	Status of appl. for diversion of forestland
		If more than one, provide details of each FC			

GENERIC TORs FOR AN OPENCAST-CUM-UNDERGROUND COALMINE PROJECT

- (i) An EIA-EMP Report would be prepared for a combined peak capacity ofMTPA for OC-cum-UG project which consists of MTPA in an ML/project area of ha for OC and MTPA for UG in an ML/project area of ha based on the generic structure specified in Appendix III of the EIA Notification 2006.
- (ii) An EIA-EMP Report would be prepared for..... MTPA rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for..... **MTPA** of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season (three months) except monsoon.
- (iii) The ToRs prescribed for both opencast and underground mining are applicable for opencast – cum-underground mining.

37th EAC (THERMAL & COAL MINING PROJECTS) MEETING
SCHEDULED FOR 11th -12th June, 2015

AGENDA

Venue: Brahmaputra Conference Hall, First floor, Vayu Wing, Indira Paryavaran Bhawan,
Jorbagh, New Delhi-110003.

Pl. check the MoEF website: <http://environmentclearance.nic.in/Report/Default3.aspx>

Important Note:

- i. Please send the information as per Annexure 1 by E-mail in word format and also a signed & scanned copy, to the Member-Secretary at warrier@nic.in at least one week prior to the EAC meeting.
- ii. Please indicate the agenda number on the document submitted as well as in the e-mail while forwarding the relevant information.
- iii. Without this information, EAC has discretion to invite the proponent for the meeting.
- iv. Please also provide a copy to the EAC Members during the meeting.
- v. No consultant is permitted into the meeting who has no accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) as per the MoEF OM dated 2nd December, 2009.

COAL MINING PROJECTS

Thursday, 11th June, 2015

10:00 AM -10:15 AM: Confirmation of Minutes

- 42.1 Kusmunda Opencast Expansion Project (Normative 15 MTPA to 50MTPA & Peak 18.75 MTPA to 62.50 MTPA in an ML area 3510.348 Ha); Latitude 220 15' 18" to 220 21' 30" North and Longitude 820 38' 39" to 820 42' 08" East of M/s South Eastern Coalfields Ltd., located at dist. Korba, Chhattisgarh - **(EC based on TOR granted on 01.12.2014).**
- 42.2 Expansion of Amera OC project (from 1.0 MTPA to 2.0 MTPA in an ML area of 664.184 Ha; Latitude- 230 02' 50" to 230 04' 34" N and Longitude 830 01' 34" to 830 03' 38" E of M/s South Eastern Coalfields Limited located at village Amera, Tahsil Lakhanpur in District Sarguja Chhattisgarh – **(EC Expansion under 7(ii) of EIA Notification, 2006).**
- 42.3 Expansion of Bellampalli OC Mine Extension Project – II (from 0.40 MTPA to 1.00 MTPA in a total lease area of 191.98 ha; Latitude: 190 12' 34" to 190 12' 56" N and Longitude: 790 20' 53" to 790 21' 41" E) of **M/s Singareni Collieries Company Ltd.**, located in village Abbapur, Mandal Tandur, District Adilabad, Andhra Pradesh (Presently in the State of Telangana- **(EC Expansion under 7(ii) of EIA Notification, 2006).**

LUNCH

- 42.4 Junad Deep Extension Project (0.60 MTPA normative and 1.5 MTPA peak and expansion in an ML area of 174.28 Ha to 449.63 Ha; Latitude 200 01'.05" N to 200 04'.10" N and Longitude 79o03'.09" E to 79o05'.00" E) M/s Western Coalfields Limited, located at district-Yavatmal, Maharashtra **(EC based on TOR granted on 21.11.2014).**
- 42.5 Khadia Opencast Coal Mine Expansion Project (from 10 MTPA to 14 MTPA and lease area from 1460 ha to 1640 ha) of M/s Northern Coalfields Limited, located in District Sonebhadra, Uttar Pradesh and in Tehsil Singrauli in District Sidhi, Madhya Pradesh – **(EC under 7(ii) of EIA Notification 2006) - further consideration.**
- 42.6 Amlohri Opencast Expansion Project of (Normative 10 MTPA to Peak 14 MTPA in an ML area 2175 Ha; latitudes 24⁰ 07' 30" to 24⁰ 09' 30" North and Longitudes 82⁰ 34' 30" to 82⁰ 36' 30" EAST) M/s Northern Coalfields Limited, located at dist. Sidhi, Madhya Pradesh – **(EC under 7 (ii) of EIA Notification, 2006) - further consideration.**

Friday, 12th June, 2015

- 42.7 Coal Washery (Wet Process 2 x 2 MTPA capacity in an area of 8.195 ha) of M/s CG Coal & Power Ltd. Dist. Korba, Chhattisgarh. – **TOR - further consideration.**
- 42.8 Expansion of Mangrol Valia Opencast Lignite Mine Project (from 4.2 MTPA to 7.4 MTPA and expansion in ML area from 2080 ha to 3019 ha; Latitude 21⁰ 26' 03" N - 21⁰ 31' 10" N and Longitude 73⁰ 06' 58" E - 73⁰ 13' 44" E) of M/s Gujarat Industries Power Company Ltd., located in Tehsil Mangrol and Valia in districts Surat and Bharuch, Gujarat- **(EC based on TOR granted on 11.01.2012 /TOR Extn 21.05.2014).**
- 42.9 Amod Lignite Mine Project (G-19 Extn.) (1 MTPA) of M/s Gujarat Mineral Development Corporation Limited (GMDC), located in Village Amod, Tehsil Jhagadia, District Bharuch, Gujarat – **Amendment in EC conditions.**

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- 42.10 Coal washing plant of (3.5 MTPA in an area of 7.55 Ha; Latitude 19°46'6.44" N and Longitude 79°19'52.65" E) by M/s N.N. Global Mercantile Pvt. Limited, Dist. Chandrapur, Maharashtra – **TOR- further consideration.**
- 42.11 Coal Washery of 10 MTPA capacity in an area of 39.35 Ha by M/s Mahanadi Coalfields Limited located at Ib Valley in Lakhanpur area village Chharla, in district Jharsuguda Odisha –**TOR.**
- 42.12 Discussion on any other matters with the permission of the Chair.
