MINUTES OF 39thEAC (THERMAL & COAL MINING PROJECTS) MEETING HELD ON 16th -17th July, 2015

The 39th EAC (Thermal & Coal mining projects) Meeting was held on 16th -17th July, 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 37th EAC meeting held on 11th -12th June, 2015.
- C. The following proposals were considered.

Agenda 39.1

Transfer of EC granted vide letter No.J-11015/327/2008-IA.II (M) dated 31.12.2008 for expansion of production capacity of Dharmasthal Coal Mine Project in District Narsimhapur (MP) from 0.24 MTPA to 0.30 MTPA in an area of 249.24 ha from M/s BLA Industries Limited to M/s Western Coalfields Limited.

- **39.1.1** The proposal is for transfer of EC granted vide letter No. J-11015/327/2008-IA.II (M) dated 31.12.2008 (for expansion of production capacity of Dharmasthal Coal Mine Project from 0.24 MTPA to 0.30 MTPA in an area of 249.24 ha (Latitude 22° 44′ 05″ to 22° 45′ 0″ N and Longitude 78° 47′ 45″ to 78° 49′ 40″ E) in favour of M/s BLA Industries Limited to M/s Western Coalfields Limited, as a custodian for operating the Coal Mine Project located in villages Chargaon Khurd, Gatitoria (Mohapani), Richhai, Tehsil Gadarwada, District Narsimhapur (MP) in pursuance of Gazette Notification of Ministry of Coal No. F No. 13016/2015-CA-III(Part) dated 30.03.2015.
- **39.1.2** The EAC was briefed about the instant proposal by the project proponent M/s Western Coalfields Limited, (present custodian), on the following lines:-
- i. The Ministry of Coal, in exercise of the powers conferred by sub-section (1) of section 18 of the Coal Mines (Special Provisions) second ordinance 2014(7 of 2014), vide Notification No. 13016/2/2015-CA-III dated 30/03/2015 appointed Coal India Limited as designated custodian to manage and operate Gotitoria (E) & Gotitoria (W) Madhya Pradesh on behalf of Central Government until further orders.
- ii. Coal India Limited vide its letter No. CIL/CH/CUSTODIAN/D21/2015/12 dated 31/03/2015 has authorized M/s Western Coalfields Limited on behalf of the custodian for operating the mines with effect from 00:00 hrs of 01/04/2015 as per the provisions of Coal Mines (Special Provisions) 2nd ordinance, 2014 and Coal mines (Special Provision) Rules 2014 until further order.
- iii. M/s Western Coalfields Limited a subsidiary of Coal India Limited has requested to act as a custodian akin to the designated custodian vide letter No. 13016/2/2015-CA-III dated 30/03/2015.
- iv. FC for diversion of 35.285 ha of forest land for opencast coal mining was granted in favour of M/s BLA Industries Ltd, vide F. No. 8-54/95-FC on 06.12.2006. FC for use of 158.714 ha of forest land for underground coal mining was obtained vide F. No.8-54/95-FC on 19.02.1997.

- v. Ministry of Environment, Forest & Climate Change has been requested to transfer the Environmental Clearance letter No. J-11015/327/2008–IA–II(M) dated 31/12/2008 to the designated custodian M/s Western Coalfields Limited,.
- **39.1.3** In order to ensure continuous coal production from the mine and also as directed by Hon'ble High Court of Delhi, the EAC recommended for transfer of EC from M/s BLA Industries Limited to M/s Western Coalfields Limited with details of the project, mine plan and the conditions stipulated therin, remain unchanged. Any change in the EC conditions before and during the operation should be brought to the notice of Ministry for amendment/modification in the original EC. The Committee further observed that the above recommendation is only to facilitate an interim arrangement till further orders of the Hon'ble Court.

Transfer of EC granted vide letter No. J-11015/425/2007-IA.II (M) dated 27.01.2011 to Marki Mangli II, III & IV Opencast Coal Mining project in District Yavatmal (Maharashtra) for 0.30 MTPA in an area of 273 ha) in favour of M/s Shree Veerangana Steel Private limited to M/s Western Coalfields Limited.

- **39.2.1** The proposal is for transfer of EC granted vide letter No. J-11015/425/2007-IA.II (M) dated 27.01.2011 to Marki Mangli II (0.30 MTPA in 273 ha), III (0.21 MTPA in 256 ha) and IV(0.2 MTPA in 256 ha); Latitude 19° 48' 59.14" to 19° 50' 27.7" N and Longitude 78° 49' 1.7" to 78° 50' 36.6" E) Open Cast Coal Mining Project located in District, Yavatmal, (Maharashtra) in favour of M/s Shree Veerangana Steel Private limited to M/s Western Coalfields Limited as a custodian for operating Coal Mine project in pursuance of Gazette Notification of Ministry of Coal No. F No. 13016/2015-CA-III (Part) dated 30.03.2015.
- **39.2.2** The EAC was briefed about the instant proposal by the project proponent M/s WCL (present custodian), on the following lines:-
- i. The Ministry of Coal in exercise of the powers conferred by sub- section (1) of section 18 of the Coal Mines (Special Provisions) second ordinance 2014(7 of 2014), vide Notification No. 13016/2/2015-CA-III dated 27/03/2015 appointed Coal India Limited as designated custodian to manage and operate Marki Mangli II (Maharashtra) on behalf of .
- ii. Coal India Limited vide its letter No. CIL/CH/CUSTODIAN/D21/2015/12 dated 31/03/2015 has directed M/s Western Coalfields Limited for operating the Mines with effect from 00:00 hrs of 01/04/2015 as per the Provisions of Coal Mines (Special Provisions) 2nd ordinance 2014 and Coal mines (Special Provision) Rules 2014 until further order.
- iii. M/s Western Coalfields Limited a subsidiary of Coal India Limited is requested to act as a custodian akin to the designated custodian vide letter No.13016/2/2015-CA-III dated 27/03/2015.
- iv. Application for Stage –I FC for 100.20 ha forest land yet to be made.
- v. MoEF&CC has been requested to transfer the EC in partial modification of existing EC in respect of

Marki Mangli–II Coal Mine Project in its name vide letter No. WCL/WNA/AGM/ANO(Env)/15-16/017 dated 18.04.2015 & WCL/ENV/HQ/11-L/121 dated 20.06.2015.

39.2.3 The EC was issued (vide letter No. J-11015/425/2007-IA.II (M) dated 27.01.2011) in favour of M/s Shree Veerangana Steel Private limited for Marki Mangli II (0.30 MTPA in 273 ha), III (0.21 MTPA in 256 ha) and IV (0.2 MTPA in 256 ha) with a combined production capacity of 0.51 MTPA in total ML area of 785 Ha. But the project proponent applied for the transfer of EC only for Marki Mangli –II for 0.30 MTPA in 273 ha including 100.20 ha of forest land, for which even application under FCA has not been made. Since the EC was issued for integrated mining of Marki Mangli II, III and IV, the question of transfer of EC for Marki Mangli II alone does not arise.

Agenda 39.3

Transfer of EC granted vide letter No J-11015/256/2006-IA.II (M) dated 17.05.2007 for Marki Mangli Coalmine Project located in villages Marki Buzurg, Pandharkavda, Ganeshpur, Pardi, Tehsil Jhari Jamni, District Yavatmal, (MS) for 0.30 MTPA in an area of 731.42 ha in favour of M/s B. S. Ispat Limited to M/s Western Coalfields Limited.

39.3.1 The proposal is for transfer of EC granted vide letter no J-11015/256/2006-IA.II (M) dated 17.05.2007 for Marki Mangli Coalmine Project for production capacity 0.30 MTPA in an area of 731.42 Ha; Latitude19° 50′ 28.9″ to 19° 51′ 48″ N and Longitude 78° 46′ 01″ to 78° 48′ 36.89″ E) located in villages Marki Buzurg, Pandharkavda, Ganeshpur, Pardi, Tehsil Jhari Jamni, District Yavatmal, Maharashtra in favour of M/s B. S. Ispat Limited to M/s Western Coalfields Limited, as a custodian for operating in the Marki Mangli Coalmine Project located in villages Marki Buzurg, Pandharkavda, Ganeshpur, Pardi, Tehsil Jhari Jamni, District Yavatmal, Maharashtra in pursuance of Gazette Notification of Ministry of Coal No. F No. 13016/2015-CA-III(Part) dated 30.03.2015.

39.3.2 The EAC was briefed about the instant proposal by the project proponent M/s WCL (present custodian), on the following lines:-

- i. The Ministry of Coal in exercise of the powers conferred by sub- section (1) of section 18 of the Coal Mines (Special Provisions) second ordinance 2014(7 of 2014), vide notification No. 13016/2/2015-CA-III dated 27/03/2015 appointed Coal India Limited as designated custodian to manage and operate Marki Mangli I (Maharashtra).
- ii. Coal India Limited vide its letter No. CIL/CH/CUSTODIAN/D21/2015/12 dated 31/03/2015 has directed Western Coalfields Limited for operating the Mines with effect from 00:00 hrs of 01/04/2015 as per the Provisions of Coal Mines (Special Provisions) 2nd ordinance 2014 and Coal mines (Special Provision) Rules 2014 until further order.
- iii. M/s Western Coalfields Limited a subsidiary of Coal India Limited is requested to act as a custodian akin to the designated custodian vide letter No. 13016/2/2015-CA-III dated 27/03/2015.
- iv. There is no forest area involved in the Mining area.

- v. MoEF&CC has been requested to transfer the EC of Marki Mangli Coal Mine Project in its name vide letter No. WCL/WNA/AGM/ANO(Env)/15-16/016 dated 18.04.2015 & WCL/ENV/HQ/11-L/120 dated 20.06.2015.
- **39.3.3** In order to ensure continuous coal production from the mine and also as directed by Hon'ble High Court of Delhi, the EAC recommended for transfer of EC from M/s B. S. Ispat Limited to M/s Western Coalfields Limited with details of the project, mine plan and the conditions stipulated therein, remain unchanged. Any change in the EC conditions before and during operation should be brought to the notice of Ministry for any amendment/modification in the original EC. The Committee further observed that the above recommendation is only to facilitate an interim arrangement till further orders of the Hon'ble Court.

Urdhan Opencast Coal Mine Project of 0.70 MTPA capacity in a project area of 315 ha; Latitude N 22° 17' to N 22° 18' and Longitude E 78° 55' 50" to E 78° 59' 30" of M/s Western Coalfields Limited (WCL) located in district Chhindwara (Madhya Pradesh)- Amendment in EC.

- **39.4.1** The proposal is for amendment in Environmental Clearance granted to Urdhan Opencast Coal Mine Project for 0.70 MTPA production capacity in project area of 315 ha; Latitude N 22° 17' to N 22° 18' and Longitude E 78° 55' 50" to E 78° 59' 30") of M/s Western Coalfields Limited (WCL) located in Chhindwara district in Madhya Pradesh.
- **39.4.2** While considering the proposal EAC noted the following:-:
- i. Ministry granted Environmental Clearance to the project vide letter no. J-11015/13/94-IA.II(M) dated 28.11.1994. There was no mention of production capacity and land area of the project in EC letter.
- ii. While processing the case for renual of 'Consent to Operate ' under the Air Act, 1981 and the Water Act, 1974, the MPPCB asked for the production capacity of the coal mine project. The PP subsequently requested MOEF vide its letter no WCL/ENV/HQ/8-S/240 dated 18.06.2013.
- iii. The production capacity of the project is 0.70 MTPA as per the EIA/EMP submitted to MOEF for approval at that stage (page no: E-1, I, 2-2,2-3, 1 of Checklist, etc). The same has been duly certified by MOEF, Regional Office, Bhopal vide letter No. 3-8/1994(ENV)/282 dated 26.03.15.
- **39.4.3** The Committee after deliberation and going through the EIA/EMP report and certification by the Regional Office of the MOEFCC, recommended for amendment in EC granted vide letter No. J-11015/13/94-IA.II (M) dated 28.11.1994 to the extent, that the production capacity and land area of the project may be mentioned as 0.70 MTPA and 315 ha respectively, with all other conditions stipulated therein remain unchanged.

Agenda 39.5

Junad Deep Coal Mine Project (0.60 MTPA normative and 1.5 MTPA peak) for and expansion of ML area from 174.28 ha to 449.63 ha; of M/s Western Coalfields Limited, located at district Yavatmal (Maharashtra)- for further consideration

- **39.5.1** The proposal is for Junad Deep Coal Mine Project (0.60 MTPA normative and 1.5 MTPA peak) for expansion in ML area from 174.28 ha to 449.63 ha; Latitude 20⁰ 01'.05" N to 20⁰ 04'.10" N and Longitude 79⁰ 03'.09" E to 79⁰ 05'.00" E of M/s Western Coalfields Limited, located at District Yavatmal (Maharashtra). The proposal was earlier considered in the 23rd EAC meeting held on 16th -17th October, 2014; 35th EAC meeting held on 14th -15th May, 2015 and 37th EAC meeting held on 11th -12th June, 2015 during the last meeting. The Committee sought following information for further consideration of the project:
 - 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. Alternate OB dumping plan may also be explored.
- **39.5.2** In response to the observations of EAC, the details submitted by the PP and/or as informed during the meeting, are as under:-
- i. The issue of providing appropriate cover to the existing colony, both against any danger of land slide and or/ dust nuisance, was examined in detail with ground truthing and the following observations were made:-

Adequate precautions have been taken for protection of township from safety as well as dust nuisance which can be summarised as below:

- a) Distance of toe of dump to the building is 200 meters
- b) Height of dump on township side- 15 meters (maximum)
- c) No further heightening proposed towards township nor any extension of dump.
- d) All future dumping is proposed at site- away from township
- e) Adequate green belt cover provided between toe of dump & township on 12 Ha areas through green belt barrier of 200 m.
- f) Covering of slopes towards township with grasses is proposed.
- ii. The revised reclamation/vegetation plan for OB dump.
- iii. The details of green belt already developed are as follows:-
 - Area covered by green belt = 12 Ha; Width of green belt = 200 meter; Length of green belt = 600 meter; Area of green belt = 200 x 600 m²
 - Further about 100 m stretch of OB dump facing the township has been covered with plantation (5750 No.s). In addition grass seeding is also proposed to be taken up.
- **iv.** Appropriate control measures have been installed at the site so as to maintain the dust levels within permissible limit.
- v. Mine Plan/ Mine closure approval from Board for intended capacity for which EC is sought has been obtained on 18.02.2015. Approval of EIA/EMP for 1.50 MTPA for obtaining EC dated 11.11.2013. Approval of original PR obtained on 17.12.2007.

vi. The internal dumping simultaneously with mining activities is not technically feasible due to steep gradient of seam (1 in 3) and quarry width of (250-325 m). Moreover, the stripping ratio is 1:8.26 which requires huge excavation of OB for getting coal. As there is no possibility of internal dumping, hence entire excavated OB is accommodated outside. However, to restrict the degradation of land optimum planning has been done. As directed, the issue of minimizing land degradation due to external OBD has been re-examined and it is concluded that the left out void at the end of mining activities, can be filled up partially by dozing off the external OB lying on the dip side. The substantial area locked up with OB dump thus can be released. The OB proposed to be dozed into the void –only after end of the miningis 27.58 Mm³. This will release 113.96 ha of land and reclaim 55 ha of mined out area. Therefore, the land use pattern at post mining stage will be as follows:

S.No	Land use	Land use (ha)						
-	during	Plantatio	Water	Publi	Undisturbe	Grass	Reclamatio	Total
	mining	n	body	c use	d	cover	n	
1	External OB	61.04	-	-	-	113.96	-	175.00
	dump							
2	Excavation	-	46.70	-	-	-	55.0	101.70
3	Infrastructur	3.00	-	7.00	-	-	-	10.0
	е							
4	Green Belt	15.00	-	-	-	-	-	15.0
5	Diversion of Roads including embankmen t	17.0	-	8.0	-	-	-	25.0
6	Danger zone and Rationalizati on of area	-	-	-	122.93	-	-	122.93
	Total	96.04	46.70	15.0	122.93	113.96	55.0	449.63

- **39.5.3** The EAC , after detailed deliberations, recommended the project for grant of EC with expansion of ML area from 174.28 ha to 449.63 ha, subject to following specific conditions with other conditions stipulated in the earlier EC remain unchanged:
 - i. Adequate precautions shall be taken for safety of nearby township and minimizing the dust pollution.
 - ii. For any forest land covered under the project, forest clearance shall be obtained before operating the coal mine.
 - iii. The general conditions as applicable for opencast mining project shall strictly adhered to.

Agenda 39.6

Pakri Barwadih Coal Mine Project (15 MTPA) of M/s National Thermal Power Corporation Ltd. (NTPC) Ltd. located in District Hazaribagh (Jharkand) – Request for Change in mining sequence & land use and transportation of coal by road to Banadag railway siding for Pakri

Barwadih Coal Mine Block- for further Consideration.

- **39.6.1** The proposal is for change in mining sequence & land use and transportation of coal by road to Banadag railway siding for Pakri Barwadih Coal Mine Project (15 MTPA) of M/s National Thermal Power Corporation Ltd. (NTPC) Ltd. located in District Hazaribagh (Jharkand). In view of the changes required to facilitate the interim arrangement in order to start coal production from PBCMP at the earliest, the PP has requested for change in mining sequence, change in dump location and change in coal transportation to the Banadag Railway Siding (26.5 Km approx.) through road for two years for further loading in Railway Wagons.
- **39.6.2** The proposal was last considered in 33rd EAC meeting held on 9th -10th April, 2015. The Committee sought following information for further consideration of the project:
 - i. Revised Mine plan approval from MOC for the proposed changes in mining sequence.
 - ii. Comparative statement of the original proposal for which EC was granted and the changes now being proposed along with alternatives regarding OB management.
- **39.6.3** During the meeting the proponent made the presentation and informed that:
 - i. Ministry of Coal (MOC) has permitted NTPC for change in mining sequence vide letter dated 24.06.2015.
 - ii. A comparative statement of the original proposal for which Environmental Clearance (EC) was granted and the changes now being proposed along with alternatives regarding over burden management has been submitted.
- **39.6.4** The Committee after detailed deliberation sought for the approved revised Mine Plan for further consideration.

Agenda 39.7

Jagannath Washery of 10.0 MTPA in an area of 29.94 ha of M/s Mahanadi Coalfields Ltd. in Talcher Coalfield District Talcher (Orissa)- for consideration of ToR.

- **39.7.1** The proposal is regarding grant of TOR for Jagannath Washery of 10.0 MTPA in an area of 29.94 ha(Latitude 20^o 57' 59" N to 20^o 58' 43" N and Longitude: 85^o 09' 10" E to 85^o 11' 37" E) of M/s Mahanadi Coalfields Ltd. located in Talcher Coalfield, villages Hensmul, District Talcher, (Orissa).
- **39.7.2** The details of the project, as per the documents submitted by the Project Proponent (PP), and also as informed during the above said EAC meeting are reported to be as under:
 - i. The Jagannath washery will be located at Bhubaneswari Opencast Lease Hold Area in Jagannath Area in the Talcher Coalfield of MCL. The washery site falls in Angul district of Odisha state.
 - ii. The latitude and longitude of the project are 20^0 57' 59" N to 20^0 58' 43" N and 85^0 09' 10"

- E to 85⁰ 11' 37" E respectively.
- iii. Bhubaneswari minng block having an area of 5.8 sq.km is surrounded by NH-23 and Sakhigopal block in the east, Lingaraj project in the south, Ananta Expn. Project in the West and Arakhapal block in the North connected by an all weathered metalled road to Bhubhaneswar (about 170 km).
- iv. The Jagannath washery has been proposed to be set up on BOM basis for beneficiation of raw coal (non-coking coal of grade-G-11 & ash content of 40.1% of Bhubaneswari OCP (25 MTY). Bhubaneswari OC Project (25 Mty), a working mine having EC received vide letter no. J-11015/280/2013-IA-II (M) dt. 19.02.2014, is planned for 25.00 MTPA.
- v. Joint Venture: There is no joint venture.
- vi. Coal Linkage: Linked to Bhubaneswari Opencast Project (25MTPA)
- vii. Employment generated/to be generated: Washery will be constructed on BOM concept, hence employment will be generated by BOM operator.
- viii. Benefits of the project: The beneficiation/washing of coal will lead to improvement in performance of power plant, reduction in particulate emission, reduction in load on Railway Network and reduction in handling and transportation cost of coal and solid waste.
- ix. Total land involved for washery is 29.94Ha (20.04 ha for washery Site + 9.9 ha for temporary reject storage).
- x. Present land use breakup:
- xi. Govt. Forest land NIL (2.55 ha.- mined out and regularized forest land for temporary reject storage), Govt. Non-forest land–2.30 Ha, Non Forest Land (Tenancy)–25.09 Ha. The entire land (29.94 ha) is already acquired by MCL and is in physical possession of MCL
- xii. Details of Infrastructure:
 - a. RAW COAL: To be transported from the conveyors of MCL at Transfer House 5 Cum Drive House (TH5-CUM-DH) through 2 nos of belt conveyors of capacity 1250 tph each upto washery premises.
 - b. Washed Coal: Washed coal will be conveyed from the washery through belt conveyor(s) @ 2 x 2000 tph to the MCL conveyor at Transfer House-6 (TH-6) leading to the proposed 4000 t silo located at the loop line on the southern side of the existing spur siding-III through pipe/tube conveyor of MCL. The tentative distance from the proposed washery site to the spur siding-III is 2.4 kms.
 - c. Rejects: The washery is expected to generate 2.12 million tonne of rejects per annum. Provision for 9.9 ha of land has been earmarked(on the back filled of the mine voids of Ananta OCP) exclusively for stacking washery rejects in an environment friendly manner for onward disposal to prospective buyers either through e-auction or through MoU route
 - d. Water: MCL will supply water for operation of the plant at the washery site from Main Quarry of Ananta OCP, MCL which is 0.5 km away from the proposed washery/ any other mine water source depending on availability. New pipeline for this purpose will be laid by MCL from the source to the washery.
- xiii. The Grade of Coal is G11.
- xiv. The total estimated water requirement is 2271 KL/D at 0.084 KL/T of coal washed.
- xv. The life of Washery is 18 years for computation of economics.
- xvi. Transportation: By conveyor belt (for Raw coal, Washed coal & Reject).
- xvii. There is no R & R involved. There are no PAFs.

- xviii. Cost: The Total capital cost of the project is Rs. 265.35 Crores.
- xix. Water body: The Brahmani river at 6 km (E), Nandira jhar at 9 km (S), Singada jhar at 12 km (W) away from the mine boundary.
- xx. Approvals: Board's approval obtained on 5th November, 2014. Mining plan has been approved on 5th November, 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: FC for 2.55 ha forest Land for proposed temporary reject storage has been obtained for Ananta OCP and mined out.
- xxiii. Green Belt over an area approx. 3 Ha around washery premises. Density of tree plantation 1600 trees/ ha of plants.
- xxiv. There are no court cases/violation pending with the project proponent.
- **39.7.3** The EAC after detailed deliberation recommended the project for granting TOR subject to following terms/ scope of work as under:
 - i. Only backfilled area shall be used for washery.
 - ii. There shall no transportation by road. Transportation shall be only by conveyor belt.
 - iii. Mine water discharge. There shall be zero discharge.
- iv. Storm water to be used after treatment.

Pichri OCP (1.20 MTPA Normative to 1.50 MTPA Peak in a project Area 151.47 ha; of M/s Central Coalfields Limited, Dist. Bokaro, (Jharkhand)-(EC based on TOR granted on 18.06.2015)

- **39.8.1** The proposal is for EC to Pichri OCP (1.20 MTPA Normative to 1.50 MTPA Peak) in a project area 151.47 ha; (Latitude 23° 45′ 00" to 23° 45′ 50"N and Longitude 86° 01′ 00" to 86° 02′ 30"E) of M/s Central Coalfields Limited, Dist. Bokaro (Jharkhand).
- **39.8.2** The details of the project, as per the documents submitted by the Project Proponent (PP), and also as informed during the above said EAC meeting are reported to be as under:
 - i. The TOR was accorded to the project vide letter no. J-11015/02/2015-IA.II (M) dated 18.06.2015.
 - ii. The present proposal is to mine Bermo and Kargali seams.
 - iii. The latitude and longitude of the project are 23° 45' 00" to 23° 45' 50"N and 86° 01' 00" to 86° 02' 30"E respectively.
 - iv. Joint Venture: There is no Joint venture
 - v. Coal Linkage: Coking coal, miscellaneous consumers
 - vi. Employment generated: There will be generation of 200 employments.
 - vii. Benefits of the project: 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.
 - viii. The land usage of the project will be as follows: Land use details:

Pre- Mining:

Particulars	Area (Ha)
Agriculture	100.63
Scrub	14.16
Waste Land	12.15
Grazing	0.00
Surface Water Bodies	12.76
Others (Settlement)	11.77
Total	151.47

Post- Mining:

	Fost- Willing.					
SN	Particulars	Land use (Ha)				
		Plantation	Undisturbed	Water Body	Utilized for mining /	Total
				Dody	allied	
					activities	
1	Ext. OB dump	0.00	0.00	0.000	15.89	15.89
2	Excavation	0.00	0.00	0.00	14.97	14.97
3	Embankment	0.00	0.00	0.00	1.73	1.73
4	Built up Area	0.00	0.00	0.00	12.00	12.00
5	Green Belt	1.68	0.00	0.00	0.00	1.68
6	Unworked	21.67	83.53	0.00	0.00	105.20
	Area(Safety					
	zone)					
7	Total Area	23.35	83.53	0.00	44.59	151.47

Core area:

Oole alea.	
Particulars	Area (Ha)
Agriculture	100.63
Scrub	14.16
Waste Land	12.15
Grazing	0.00
Surface Water Bodies	12.76
Others (Settlement)	11.77
Total	151.47

- ix. The total geological reserve is 55.28 MT. The mineable reserve 1.50 MT, extractable reserve is 1.50 MT. The per cent of extraction would be 100 %.
- x. The coal grade is W-IV. The stripping ratio is 1.64 (Cum/Tonne) present proposal. The average Gradient is 15-20 deg. There will be four seams with thickness ranging 7-10 m.
- xi. The total estimated water requirement is 1455 m3 per day from mine water. The level of ground water ranges from 3.98 m to 5.54 m.
- xii. The Method of mining would be Opencast with shovel-dumper combination.
- xiii. There will be one external OB dump with Quantity of 2.46 Mbcm in an area of 15.89 ha

- with height of 30 meter above the surface level.
- xiv. The final mine void would be in 14.97 Ha with depth 50 m BGL after re-handling and the total quarry area is 14.97 Ha. No backfilling in present proposal, shall be reclaimed with plantation. A void of 14.97 ha with depth 50 m below ground level 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 3 Years.
- xvii. Transportation: Coal transportation in pit by Dumpers; Surface to Siding by trucks about 3.0 KM from project and loading at siding by Payloader.
- xviii. There is R & R involved. There are 200 PAFs.
- xix. Cost: Total capital cost of the project is Rs. 228.90 Crore. CSR Cost: As per CSR policy & Companies Act, 2013. R&R Cost Rs 6.00 Crore. Environmental Management Cost Rs 31.21 Crore.
- xx. Water body: Damodar River flows at a distance of 100 m from project site.
- xxi. Approvals: Applied for Ground water clearance in November, 2013, Board's approval obtained on 21.12.2014. Mining plan has been approved on 27.11.2010 original PR & 21.12.2014 (revised mine plan of Pichri OCP). 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 area involved in mining.
- xxiv. Green Belt over an area of 23.35 Ha of plantation will be raised during 3 years. Density of tree plantation 2500 trees/ ha of plants.
- xxv. There are no court cases/violation pending with the project proponent.
- xxvi. Public Hearing was held on 4.10.2013 The issues raised in the PH includes blasting impact; employment and compensation in lieu of land; rehabilitation of displaced person; medical facilities; pollution control measures; water sprinkling arrangements etc.
- **39.8.3** EAC received a representation from one of the NGOs requesting to address issues w.r.t. old mine; forest area; proximity to River Damodar; draft EIA/EMP report; public hearing etc. The parawisee response submitted by the PP is as under: -

i. The mine is very old and closed because of several issues:

The existing Pichri mine is of pre nationalization period. It was taken over at the time of nationalization by BCCL and later on transferred to CMAL (Coal Mines Authority Limited) and finally to CCL. Several small quarries in the incrop of Bermo and Karo seams were operated in past along with inclines for development of Bermo seam. The inclines were closed in 1968 (pre nationalisation period) after an accident in underground mine. Similarly the erstwhile quarries were operated till 2002 -03 when these were closed due to economic / safety reasons. These old quarries are presently water logged. Now to carry out coal mining operations in a planned and scientific manner taking into account old workings and additional coal reserves in the block (up to floor of Karo VI/VII seam) a project report of Pichri OCP was prepared and approved by CCL Board on 27.11.2010. The grade of coal is washery grade IV and will meet the demand of coking coal in country.

ii. The project includes forest area which has not been included in the mine plan merely to avoid forest clearance at the moment which may be requested later on when mining is under way: The project / mine was earlier planned for an area of 185.44 Ha which included 23.02 Ha of Jungle Jhari (Revenue forest land), i.e. there is no PF /RF in the project. In view of MoEF's OM No: J-11015/200/2008-IA.II (M), dated 31.03.2011 and related OMs the Revenue forest land of 23.02 was excluded and a revised feasibility report was approved by CCL Board. The revised Form I was prepared and submitted to MoEFCC for fresh ToR which was issued on 18th June 2015. Thus it is clear that forest land was mentioned in earlier project report and it was excluded subsequently in revised mine plan to abide by the MoEF's OM (mentioned above) and to start mining operations over non forest area.

iii. The coal mine is merely 100 m from Damodar River:

The boundary of the mine is fixed leaving a barrier of more than 100 m from River Damodar. To protect mine from inundation and also river from mine discharge an embankment of appropriate design will be constructed before mining operations. Services of competent technical agency will be utilized for design and construction of embankment. An amount of Rs 630.00 lakh has been earmarked for construction of embankment, garland drain, sedimentation pond, etc, to control and treat runoff / effluent from mine before its discharge to river. Further a green belt along mine periphery (between mine and river) will be developed for which Rs 15.0 lakh has been provided.

- iv. There is no draft and final EMP / EIA available in public domain and what about public hearing: The EIA EMP along with other relevant documents was uploaded in MoEF&CC online portal on 29/06/2015. The public hearing of project was held on 04/10/2013 and the latest status of issues raised in PH was presented before the EAC on 16/07/2015. During the presentation of ToR for the project on 14th 15th May 2015 it was requested by us to provide waiver from conducting fresh PH as it was held recently on 04/10/2013. The same was accepted by EAC and it was provided in the ToR issued on 18/06/2015 that revised EIA/EMP of project should be submitted without another Public Hearing.
- **39.8.4** The Committee, after detailed deliberations recommended the project for granting EC subject to following specific conditions:
 - i. There shall be mechanically covered trucks for transportation of coal.
 - ii. In future mining this OBD will be re-handled.
 - iii. The OBD shall be covered with the grass.
 - iv. Life of mine is only three years. EC is for life of mine.
 - v. After three years the employees shall be shifted/employed to the new mines.
 - vi. Social audit for CSR activities frm the reputed institute shall be carried out.

Agenda 39.9

Expansion of Amlohri Opencast Mine Project Normative 10 MTPA to Peak 14 MTPA in ML area 2175 ha of M/s Northern Coalfields Limited, located at dist. Sidhi (Madhya Pradesh) – for further consideration.

39.9.1 The proposal is for expansion of Amlohri Opencast Mine Project of (Normative 10 MTPA to Peak 14 MTPA) in ML area 2175 ha of M/s Northern Coalfields Limited (NCL), at district. Sidhi,

(Madhya Pradesh). The proposal was earlier considered in 23rd EAC meeting held on 16th -17th October, 2014; 35th EAC meeting held on 14th -15th May, 2015 and 37th EAC meeting held on 11th - 12th June, 2015. The Committee sought following information for further consideration of the project:

- 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.

39.9.2 The proponent made the presentation and informed that:

- Mining Plan and Mine Closure Plan for Amlohri OCP for 14 MTY was approved by NCL Board in the 196th Board meeting of NCL held on 26.06.2015.
- ii. Final stage post-mining reclamation plan has been prepared taking into consideration height of the external and internal dump (90m from average original ground contour) and also by filling up of void up to average ground level by over burden from neighboring mines. Ultimately there will be no mine void at the end of mining.
- iii. Post mining land use of ML Area (ha) is proposed as under :-

SI. No.	Description	Plantation	Public Use	Undisturbed land	Total
1	External waste dump (OB Dump)	402.0	-	-	402.0
2	Excavation (backfill)	780.0	-	-	780.0
3	Roads	-	14.0	-	14.0
4	Built-up area	51.4	153.0	-	204.4
5	Afforestation (Green Belt)	484.0	-	-	484.0
6	Undisturbed area	-	-	290.6	290.6
Total		1717.40	167.0	290.6	2175.0

iv. Alternate post mining dumping plan has been considered as using the void for accommodating OB of Nigahi OC Project which is facing difficulty in space for OBR.

39.9.3 EAC received a representation from an NGO requesting to address issues w.r.t. monitoring report. In response, the PP submitted that :

- i. As per the certified compliance report dated 05.05.2015 from MoEF Regional Office Bhopal, all the EC conditions have been complied before going to EAC meeting. All the EC conditions were discussed in detail during EAC meeting and proof of compliance was given to the committee members.
- ii. CMPDI is our consultant and the actual swell factor is being considered as per norms.
- iii. The project started during year 1983-84. At that time the area did not contain any rare species of plants which needed transplantation. However, very good plantation has been done though Forest Deptt. of MP Govt. in the last 29 years.
- iv. Post mining land use has been discussed in detail during EAC meetings and it will be complied as per Mine Closure Plan.
- v. Ground water monitoring of dug wells is being done by CMPDI on regular basis as per the EC conditions and report are being submitted. For construction of piezometers, work order has been issued by NCL and work is under process.

39.9.4 The Committee, after detailed deliberations recommended the project for grant of EC subject to following specific conditions:

- i. All the measures detailed in Mining Plan and Mine Closure Plan shall be implemented.
- ii. The void will be backfilled with OB from the existing neighboring mines.
- iii. This EC supersedes the earlier EC, granted vide letter no. letter J–11015/364/2005–IA.II (M) dated 16.02.2006 for 10 MTPA in an area of 2175 Ha

Agenda 39.10

Kusmunda Opencast Mine Project for expansion (Normative 15 MTPA to 50 MTPA and Peak 18.75 MTPA to 62.50 MTPA in an ML area 3510.348 ha) of M/s South Eastern Coalfields Ltd., located at District. Korba (Chhattisgarh) - for further consideration of EC.

39.10.1 The proposal is for Environmental Clearance of Kusmunda Opencast Mine Project for expansion (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 District Korba, Chhattisgarh.

39.10.2 The proposal was last considered in 37th EAC meeting held on 11th -12th June, 2015. The Committee had sought following information for further consideration of the project:-

- 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 interalia 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.

39.10.3 The Parawise response along with the documents submitted by PP are summarized as under:

- i. The proposal for EC is being requested in two phases:
 - Phase I: Proposal without fresh forest land and total area of 1655.825 ha.
 - Phase II: Proposal with fresh forest land and total area of 3510.348 ha (including Phase I). Total revenue forest land covered under Phase II would be 376.922 ha, whereas additional land to be acquired is 1127.56 ha. The proposal for regularization of 324.840 ha is under consideration of MOEF for issue of Stage –I FC.
- ii. Land use pattern during Phase-I & Phase-II is as under:

Land Use Pattern Of Kusmunda Open Cast Project				
Pha	Phase - I			
Agriculture/ Tenancy Land	1045.597 Ha			
Revenue Forest Land	205.961 Ha			
Govt. Land				
A) Water Body	31.042 Ha			
B) Grazing Land	373.225 Ha			
C) Waste Land/ Others	00.00 Ha			
Sub-Total Of Govt.				
Land	404.267 Ha			
Total Land	1655.825 *			

^{*}There Is No Additional Land In Phase-I

PHASE – II		
Agriculture/ Tenancy Land	2532.365 Ha	
Revenue Forest Land	376.922 Ha	

Govt. Land		
A) Water Body	87.035 Ha	
B) Grazing Land	488.643 Ha	
C) Waste Land/ Others	25.383 Ha	
Sub-Total Of Govt.		
Land	601.061 Ha	
Total Land	3510 3/8 Ha	
Total Land	3510.348 Ha	

	Phase-I	Phase-II
Already acquired (ha.)	1655.825	2382.788
Additional land to be acquired (ha.)	Nil	1127.56
Total Land (ha.)	1655.825	3510.348

- iii. Fully mechanized facilities will be provided for coal transportation which inter-alia includes in-pit conveyor system to siding, wagon loading to silos, & from silo to consumers by rail,
- iv. Details of villages located outside the mine lease area with the direction and distance w.r.to the core zone and population,
- v. Green belt barrier for a width of (75-100 m) will be provided all around the periphery of the mine in safety zone area provision of Rs 2.00 crores has been made in the PR. 3 tier plantation will be done with native species (neem, semal, palash, amaltas, gulmohar, etc.)
- 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 groundwater recharge measures and monitoring of water table level. In addition to creating ponds, the feasibility of setting up of check dams,
- viii. Comparative statement on the EMP proposed for the current activities against the proposed expansion in respect of identified parameters namely coal transportation; solid waste disposal & its management; groundwater; groundwater inflow; cost of environmental control measures as per approved pr 15 mtpa, (jan 2008) have been submitted
- ix. Cumulative Impact Assessment of three mines namely Dipika, Gevra and Kusmunda, the monitoring locations have been finalized and area of the three mines have been joined in common grid. The modeling exercise was reported to be under progress and to be be submitted very shortly.
- x. Reclamation and Mine Closure Plan w.r.t implementation of conditions stipulated in earlier EC's for Kusmunda mine granted by MoEFCC (6 MTY dated 10-07-1986); 10 MTY dated 16-02-2006; 15 MTY03-06-2009); 18.75 MTY dated 19-02-2014).
- xi. Compliance of conditions in respect of external OBD and its rehandling, as stipulated in earlier ECs for the Kusmunda Mines.
- xii. Annual Operation Plan/ calender programme for kusmunda oc expansion (50 MTY).

39.10.4 Point wise reply to the representations of NGO:

- i. Response and action plan to the recommendations made by the sub-committee pursuant to the site visit held in October, 2014.
- ii. Updated Action Plan on issues raised in the public hearing including R&R issues.

iii. Mine Plan/Mine Closure Plan for intended capacity for which EC is being sought was approved on 03.08.2013.

Point No 1: EIA Report not in Public Domain: EIA report is available in the public domain i.e MoEF & CC website from 28th May 2015.

Point No 2: Expansion, More Expansion – from 6 MTPA to 60 MTPA in less than a decade: The project got environmental clearance on 19 February 2014 vide letter No.J-11015/374/2013-IA.II (M). It comes for more than three times expansion in no time – to be precise in just four months! Ministry of Coal applied for expansion vide letter No.43011/12/2014-CPAM dated 20.06.2014. This is clearly a clever manipulation.

The point raised in respect of Kusmunda OC is not correct and there is no manipulation at all. Kusmunda OC Project was granted EC for production capacity of 6.00 MTPA on 10.07.1986 and applied for production capacity of 50.00 MTPA normative and 62.50 MTPA peak on 20.06.2014, hence it is about 28 years time period. The facts are given below in chronological order.

- For Kusmunda Opencast project EC for production capacity of 6.00MTPA was granted vide MoEF letter No.J-11015/37/84-IA dtd. 10.07.1986.
- EC for production capacity of 10.00MTPA was granted vide MoEF letter No.J-11015/372/2005-IA-II (M) dtd. 16.02.2006
- EC for production capacity of 15.00MTPA was granted vide MoEF letter No.J-11015/1205/2007-IA.II (M) dtd. 03.06.2009.
- In order to meet the increasing power demand of the nation, application for enhanced production capacity of 18.75 MTPA was applied on 25.07.2013 under clause 7(ii) of EIA notification 2006 and EC was granted vide MoEFCC letter No.J-11015/374/2013-IA.II (M) dated 19.02.2014.
- In the mean time Project Report of Kusmunda OC Expansion 50.00 MTPA was approved by CIL Board on 03.08.2013.
- In accordance with approved Project Report of Kusmunda OC expansion 50.00 MTPA, SECL had applied for TOR for a capacity of 50.00 MTPA normative and 62.50 MTPA peak on 20.06.2014.

Hence the issue raised is not correct and tenable.

Point No 3: What is the status of Court Case?

Reply: Status of Court case is as under:

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

Point No 4: 135 schools & 90 hospitals would be impacted

Reply: There are no contradictions as such, the clause 3 of form-1 is for "Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health" which is with reference to the MSIHC Rules. In the coal mining process there is no substance in use which attracts the provisions of MSIHC Rules. However the presence of environmentally sensitive areas like hospitals, school etc. have already mentioned in point no 8 and 9 of para (iii) Environmentally Sensitivity of Form-1. The further details are given below:

- Among 90 hospitals, 17 are hospitals with facility for indoor patients and remaining are PHCs and majority of them are situated in buffer zone. Whereas only two hospitals are in core zone (i.e. Sonpari and Gevra) which are to be rehabilitated as per R&R provision.
- There will be no impact on remaining 88 Hospitals as they are further to the mine premises. Moreover, the project authority itself having own medical facility for the employees of SECL as well as for the public as part of CSR provision.
- Out of 17 villages 6 villages have already been rehabilitated and remaining 11 villages would be properly rehabilitated with proper school and other facilities as per R&R Policy.

Point No 5: Relocation of 10 villages

Reply: Names of all 17 villages involved in the project have been given in Form-1. As the mine is an opencast mine hence all 17 villages situated in core area will have to be shifted. The villages would be properly rehabilitated as per R&R Policy. The information regarding R &R of villages has already discussed in the EMP and hence all relevant information was provided.

Point No 6: Critically Polluted Area Korba and Expansion of Mining:

Reply: Korba Action Plan was prepared by Chattisgarh Environment Conservation Board (CECB). Action taken by Kusmunda OC is as under:

- 1. CAAQMS has been installed in Kusmunda OC, Gevra OC, Dipka OC and Manikpur OC Mines.
- 2. CMPDIL Ranchi has already been entrusted to prepare Feasibility Report and NIT for construction of a non –coking coal washery at Kusmunda. Preparation of Feasibility report is at advance stage.
- 3. Year-wise Plantation already done in Kusmunda OC is provided below:

Point No 7: Management Plan for Managing Voids, Over Burden and Evacuation System

Reply: ToR at point xv speaks for combined plan for the three mega mines i.e., Kusmunda, Gevra, Dipika. This issue can be addressed for the combined proposal of all the three mega mines under cluster concept only. In EIA/EMP of kusmunda OCP 50 MTPA Management Plan for Managing Voids, Over Burden and Evacuation System is given in details. In order to minimize the adverse mining impacts on environment and ecology of the area following major steps have been taken/proposed in EIA/EMP.

- External OB dumps are stacked at earmarked places with proper overall slope of 28 degree as per the conditions of the MoEFCC.
- About 159 Ha of external OB dumps area have already been afforested.
- Backfilling is in progress and from 2011-12 only internal dumping is being done.
- 85 Ha of the internal dump has been biologically reclaimed.
- Presently, the evacuation of coal is by tippers to siding and conveyor belts. The current system has a capacity to evacuate 25 MTPA of coal.

- In order to minimize the adverse mining impacts on environment and ecology of the area the transportation of coal from faces to CHP has been proposed through in-pit belt conveyors for the expanded capacity evacuation.
- Four nos. of silos with rapid loading arrangement have been proposed to dispatch coal by rail to distant consumers.

Point No 8: Management Plan for Wildlife.

Reply: No schedule 1 species have been found in the project area.

Initiative has been taken for preparation of "wildlife conservation plan particularly the rare and endangered species/schedule-1 fauna and endangered flora and species of medicinal importance" from an outside expert agency, i.e. TFRI (Tropical forest Research Institute), Jabalpur (MP) and work order has been issued on 02.04.2015.

For preparation of habitat restoration plan from an outside expert agency, SFRI, Raipur was approached for the preparation of habitat restoration plan & modalities are under study Point No 9: All Said 'No' to Expansion at Public Hearing.

Reply: SECL has taken all necessary steps for the implementation of the R&R policy, the compensation and employment are being provided to the eligible PAFs and PAPs as per R&R Policy.

- **39.10.5** The EAC took note of the court cases filed in the Court of Law for violation of the Air/Water Act amd the Environment (Protection) Act, 1986 and desired for the Ministry to take a comprehensive view in this regard.
- **39.10.6** After detailed deliberation The EAC recommended that pending a policy decision in respect of violation of Environmental Laws, duly endorsed by the Court of Law and also till the infrastructure proposed is put in place, no expansion beyond the sanctioned capacity to be permitted. In the mean time the Committee sought the following additional information for further consideration:
- i. Cumulative impact assessment of air quality and cumulative water balance to be assessed covering the entire area of three mines namely Gevera OC; Dipka OC and Kusmunda.
- ii. Latest status of forestry clearance shall be submitted to the MoEFCC.
- iii. Provision of grazing land shall be made in R&R Plan equal to the amount of grazing land in premining land use plan.
- iv. Water bodies shall be created equal to the area given in the pre-mining land use plan.
- v. A note on existing capacity of the coal evacuation system.
- vi. Three tier plantation shall be developed in such a way that the top canopy shall be at least 40 high and shall be developed within 4 to 5 years with fast growing native species.
- vii. Piezometer should be installed in some nearby villages also for monitoring ground water level.

Agenda 39.11

Expansion of Sonepur Bazari Mine Project from 8 MTPA to 12 MTPA in existing mine lease area 2405 ha of M/s Eastern Coalfields Ltd., in village Sonepur, Tehsil Pandaveswar Block, District Burdwan(West Bengal)—for Consideration of EC under 7(ii) of Notification, 2006.

- **39.11.1** The proposal is for expansion of Sonepur Bazari Mine Project from 8 MTPA to 12 MTPA in ML area of 2293.98 ha of M/s Eastern Coalfields Limited, located in village Sonepur, Tehsil Pandaveswar Block, District Burdwan (West Bengal) under 7(ii) of EIA Notification, 2006
- **39.11.2** The proposal was earlier considered in the 27th EAC meeting held on 18th -19th December, 2014. The EAC noted that based on its recommendations, Ministry granted EC for Cluster 12 comprising of 19 mixed mines with combined production capacity of 27.16 MTPA (Normative) and (Peak) production of 31.83 MTPA in a combined ML area of 13759.55 Ha (14047 Ha 287.45 Ha = 13759.55 Ha); Latitude 23⁰, 37', 30" N & 23⁰, 45' N and Longitude 87⁰, 11', 35" E & 87⁰, 24', 05" E of M/s Eastern Coalfields Limited, located in Raniganj Coalfields, in Tehsil Haripur Block, District. Burdwan, (West Bengal) vide letter No. J-11015/76/2011-IA-II (M) dated 9th February, 2015. Further, this EC was granted in supersession to the earlier EC's for individual mines (now a part of the Cluster 12).
- **39.11.3** The EAC, after detailed discussion, observed that removal of Sonepur Bazari one of the mines of Cluster 12, for which EC has already been granted, negates the very purpose of Cluster concept. The proposed expansion of an individual mine Sonepur Bazari, cannot be treated separately from rest of the mines of Cluster 12. The Committee suggested to the project proponent that expansion of the Sonepur Bazari in terms of production capacity can be done by amending the EC for Cluster 12. The project proponent may therefore submit a revised proposal for expansion of production capacity of Cluster 12 along with the revised mining plan in this regard.

Expansion of Cluster No. 2 group of Mixed Mines project from 0.45 MTPA to 1.10 MTPA in a combined ML area of 1018 ha of M/s Eastern Coalfield Limited, located at District Burdwan, (West Bengal) - for Consideration of EC under 7(ii) of Notification, 2006.

- **39.12.1** The proposal is for expansion under 7(ii) of Notification, 2006 of Cluster No. 2 group of Mixed Mines project from 0.45 MTPA to 1.10 MTPA in a combined ML area of 1018 ha; (Latitude 230, 44' N & 230, 46' N and Longitude 860, 46' E & 860, 49', E) of M/s Eastern Coalfield Limited, located at District. Burdwan (West Bengal).
- 39.12.2 There being no approved Mine Plan for the proposed enhancement capacity of 1.1 MTPA and no compliance report available from the RO of MOEFCC, the project was deferred.

Agenda 39.13

Restructuring of Mine-1 Lignite Mine for expansion in ML area from 3178.4 ha to 3635.4 ha; of M/s Neyveli Lignite Corp. Ltd. District. Cuddalore (Tamil Nadu)- (EC based on TOR granted on 20.05.2014 & TOR Modification on 22.10.2014) – for further Consideration.

39.13.1 The proposal is for restructuring of Mine-1 Lignite Mine for expansion in ML area from 3178.4 ha to 3635.4 ha; (latitude 11° 33′ 00″ N to 11° 35′ 00″ North and longitude 79° 28′ 00″ E to 79° 32′ 00″ East) of M/s Neyveli Lignite Corp. Ltd. District. Cuddalore (Tamil Nadu). The proposal

was last considered in 35th EAC meeting held on 14th - 15th May, 2015. The Committee had sought following information for further consideration of the project:

- i. Mine Plan approval
- ii. Rehabilitation plan for management old dump and system for reclamation
- iii. Project coal linkage as per original EC.
- iv. R&R Plan as the proposal for acquiring additional area involves displacement of 1400 PAFs
- v. Product plan for Mine I and Mine I-A
- vi. Impact of ground water pumping in the region and long term strategy for reducing the impacts such as subsidence
- vii. Current water table monitoring report to be submitted
- viii. Quality of mine water and quality of ground water
- ix. Mine closure plan.
- x. Justification for additional opening of area instead of adopting of phased approach.
- xi. Action plan for addressing Public Hearing issue.

39.13.2 The parawise response along with the documents submitted by PP are summarized as under:

- i. Ministry of Coal issued Mining Plan approval vide their letter dated 16.06.2015.
- ii. All the care for restoring the mined out area to the original condition through knowledge acquired by scientific studies for environment restoration.
- iii. Mine-I was working with the production capacity of 6.50 MTPA. Environmental Clearance for 10.5 MTPA capacity was obtained on 06.03.1989 (letter no. J-11015/11/88IA). The coal Linkage of Mine-I (10.50 MTPA) is given below:

SI. No	Existing units	Lignite requirement in MTPA
İ	Power Station-I (600 MW, 62.8% PLF)	4.82 MTPA
ii	Briquetting and Carbonization (B&C) Plant (2,62,000 Ton/Annum)	1.10 MTPA
iii	Process steam plant (Fertilizer Plant)	0.40 MTPA
	Total	6.32 MTPA

SI. No	Existing units	Lignite requirement in MTPA
İ	Power Station-I Expansion Two 210 MW Units (420 MW, 62.8% PLF)	2.46 MTPA
ii	Modernization of Existing Briquetting and Carbonization (B&C) Plant	0.71 MTPA

	(Additional 1,74,000 Ton/Annum)	
iii	Extra for Process steam plant (Fertilizer Plant)	0.22 MTPA
	Total	3.39 MTPA

Grand total = 6.32 + 3.39 = 9.71 MTPA
Assuming 90% capacity utilization
Mine capacity should be @ 85% capacity Say = 10.50 MTPA

Present Status

TPS-I (75% PLF) = 5.6 MTPA TPS-IE (85% PLF) = 3.2 MTPA Total = 8.8 MTPA @ 85% Capacity utilization of 10.5 MTPA

- iv. The total number of households in the Expansion area are 1409. Apart from R&R assistance, suitable land compensation will be issued based on prevailing rules and Regulation of appropriate Government & Indexation based on the consumer price index will be applied on 2013-14 rates, when benefits are disbursed.
- v. Production plan for Mine-I submitted.
- vi. The Report on "Effect of Ground water pumping on the Environment in Neyveli Basin" and the Report on "Subsidence due to Ground water pumping" prepared by Dr. Mohan, IIT Chennai Professor, is submitted. The recommendations are as follows:
 - 1. The aquifers subjected to mine pumping are still under confined conditions exerting an upward pressure of 3 to 8 kg/cm² and hence chances for subsidence on large scale is remote.
 - 2. It is recommended that the detailed study on the estimation of subsidence using remote sensing SAR interferometry may be taken up to accurately estimate the subsidence due to mining, along with field monitoring.
 - 3. Differential interferometry using SAR data over several time periods may be used to assess the potential of L-band repeat-pass SAR for these applications.
- vii. The water table monitoring report is submitted.
- viii. Quality of Mine water and quality of ground water of Mine-I, certified by Tamilnadu Pollution Control Board (TNPCB) and Tamilnadu Water supply and Drainage Board (TWSADB) is submitted. The results are well within the limit of BIS.
- ix. It is proposed to fill the final void of Mine-I to restore the landscape to ground level.
- x. Justification for additional opening of area instead of adopting of phased approach has been submitted.
- xi. Action plan for addressing Public Hearing issue along with the budgetary provision submitted.
 - 1. Royalty to Project Affected persons given as per the present rules.
 - 2. Compensation will be paid as per LA Act in force by the appropriate Government.
 - NLC is extending medical facilities by conducting periodical medical camps for the surrounding villages. The Medical treatment is being given to the surrounding villagers in NLC General Hospitals.

- 4. NLC is carrying out all the genuine demands of surrounding public through CSR scheme. Repair of Thenkuthu public road under CSR will be carried out with the approval of District Administration.
- 5. Construction of compound wall around Vellayankuppam Village school under CSR will be done with Administrative approval of District Administration.
- 6. In order to alleviate the sufferings of land affected families, NLC is providing employment through contract agencies with minimum wages protection and about 50% of the vacancies arising in various contract works are allotted to PAP. In addition to that monetary assistance will also be provided in lieu of employment, as per the R&R policy/act
- 7. Regarding bore wells, it is informed that NLC is establishing 8" or higher diameter pump well under Peripheral Development Scheme to supply the Drinking water to the villages as per guidance of District Administration Cuddalore.

39.13.3 During appraisal of the proposal, EAC noted the following:

- i. Earlier PP requested for reduction in the production capacity. And in 39th EAC meeting held in July, 2015 informed that they do not want to go for change in the production capacity. Now they want expansion in the production area only. PP did not optimized the land during planning stage and therefore this problem arose.
- ii. The project was accorded EC by this Ministry vide letter dated 06.03.1989 with no capacity, mine lease area or mine life mentioned therein. There being no previous records available, the PP needs to verify the figures from the EIA/EMP reports submitted at that stage.
- iii. Earlier, the project envisaged reduction in capacity from 10.5 MTPA to 8.0 MTPA and expansion of Mine Lease area from 3178.4 ha to 3635.4 ha. Accordingly, the TOR for the project was issued on 20.05.2014 and modified on 22.10.2014.
- iv. Now, the PP proposes to keep the production capacity at 10.5 MTPA intact, but in a larger area of 3635.4 ha (increase of 457 ha), and seeks amendment in EC in terms of the provisions contained in para 7(ii) of the EIA Notification, 2006.
- v. All the issues raised during Public hearing were resolved.
- vi. The proposal was earlier considered in the earlier EAC meeting held in May, 2015. The parawise response submitted by the PP were in respect of mine plan approval, Rehabilitation plan; Impact on ground water; Public Hearing issue etc were found to be in order and convincing.

39.13.4 The Committee, after detailed deliberations recommended the project for grant of EC subject to following specific conditions:

- i. Long-term monitoring studies on the bioaccumulation of heavy metal in crops grown on OBDs and irrigated with mine area should be carried out.
- ii. There should be thick Green Belt.
- iii. Increase in the no. of water sprinkling system.
- iv. A research study needs to be undertaken to delineate the recharge zone in this area. Preliminary study is to be taken up to conduct the electrical resistivity survey, possibly with the help of GSI and modeling study may be taken up by IIT Madras
- v. Adequate number of observation wells may be made in the eastern boundary of recharge zone and also on the south western part of the study area to monitor the

- water fluctuations both in upper-confined and lower-confined aquifers. Similarly, more number of wells at closer interval, with the existing GW monitoring system, may be required in the coastal area to delineate the flux.
- vi. Detailed study on the estimation of subsidence using remote sensing SAR interferometry may be taken up to accurately estimate the subsidence due to mining, along with field monitoring. Differential interferometry using SAR data over several time periods may be used to assess the potential of L-band repeat-pass SAR for these applications.
- vii. Method may be implemented to prevent the encroachment of seawater, in case it is needed at any point of time, if it is predicted that there may be a threat of seawater intrusion in the future years.
- viii. A scientific study using Remote sensing techniques on identification of location of potential sites for artificial recharge and also to assess the suitability of rainwater harvesting structures may be taken up.
- ix. Field research study may be taken up to understand the hydrology of the back filled areas so that necessary methods for enhancing the water storage and further utilization of available water in these back filled sites may be planned effectively.

Expansion of Mine-1A from 3 MTPA to 7 MTPA in a total project area of 2005.8 ha (existing area 1623.8 ha + additional area 382.0 Ha); by M/s Neyveli Lignite Corp. Ltd. Dist. Cuddalore, (Tamil Nadu) - (EC based on TOR granted on 20.05.2014) – for Further Consideration.

- **39.14.1** The proposal is for expansion of Mine-1A from 3 MTPA to 7 MTPA in a total project area of 2005.8 ha (existing area 1623.8 ha + additional area 382.0 Ha); latitude 11° 32′ 0″ N to 11° 36′ 0″ North and longitude 79° 31′ 0″ E to 79° 32′ 30″ East) by M/s Neyveli Lignite Corp. Ltd. Dist. Cuddalore (Tamil Nadu).
- **39.14.2** The proposal was last considered in 35th EAC meeting held on 14th 15th May, 2015. The Committee had sought following information for further consideration of the project:
 - i. Mine Plan approval
 - ii. Rehabilitation plan for management old dump and system for reclamation
 - iii. Project coal linkage as per original EC.
 - iv. R&R Plan as the proposal for acquiring additional area involves displacement of 695 PAFs
 - v. Product plan for Mine I and Mine I-A
 - vi. Impact of ground water pumping in the region and long term strategy for reducing the impacts such as subsidence
 - vii. Current water table monitoring report to be submitted
 - viii. Quality of mine water and quality of ground water
 - ix. Mine closure plan.
 - x. Justification for additional opening of area instead of adopting of phased approach.
 - xi. Action plan for addressing Public Hearing issue.

39.14.3 The parawise response along with the documents submitted by PP are as under:

- i. Ministry of Coal issued Mining plan approval vide their letter dated 16.06.2015.
- ii. All the care for restoring the mined out area to the original condition through knowledge acquired by scientific studies for environment restoration.
- iii. The Environmental Clearance for 3.0 MTPA of Mine-IA was obtained vide letter no. J-11015/18/98-IA II (M) dated 03.01.1999. As per the EC, the Coal / lignite Linkage for 3.0 MTPA of Mine-IA is:

Downstream units	Lignite requirement in MTPA
ST-CMS Power plant at 83% PLF	1.90 MTPA
For the operation of NLC power plant at higher PLF and for the best commercial advantage of NLC	1.10 MTPA
Total	3.00 MTPA

- iv. Out of 695 households Apart from above R&R assistance, suitable land compensation will be issued based on prevailing rules and Regulation of appropriate Government
- v. Product plan for Mine-IA submitted.
- vi. The Report on "Effect of Ground water pumping on the Environment in Neyveli Basin" and the Report on "Subsidence due to Ground water pumping" prepared by Dr. Mohan, IIT Chennai Professor, is submitted. The recommendations are as follows:
 - 1. The aquifers subjected to mine pumping are still under confined conditions exerting an upward pressure of 3 to 8 kg/cm² and hence chances for subsidence on large scale is remote.
 - It is recommended that the detailed study on the estimation of subsidence using remote sensing SAR interferometry may be taken up to accurately estimate the subsidence due to mining, along with field monitoring.
 - 3. Differential interferometry using SAR data over several time periods may be used to assess the potential of L-band repeat-pass SAR for these applications.
- vii. The water table monitoring report is submitted.
- viii. Quality of Mine water and quality of ground water of Mine-I, certified by Tamilnadu Pollution Control Board (TNPCB) and Tamilnadu Water supply and Drainage Board (TWSADB) is submitted. The results are well within the limit of BIS.
- ix. It is proposed to fill the final void of Mine-I to restore the landscape to ground level.
- x. Justification for additional opening of area instead of adopting of phased approach has been submitted.
- xi. Action plan for addressing Public Hearing issue along with the budgetary provision submitted.

- **39.14.4** The Committee, after detailed deliberations recommended the project for grant of EC subject to following specific conditions:
 - i. This EC This EC supersedes the earlier EC, granted vide letter no. letter J-11015/18/98-IA II (M) dated01.03.1999 for 3 MTPA in an area of 1623.8 Ha
 - ii. Four villages/hamlets on the border have to be relocated.
 - iii. Mine should be restricted to 500 m.
 - iv. A research study to be undertaken to delineate the recharge zone in this area. Preliminary study is to be taken up to conduct the electrical resistivity survey, possibly with the help of GSI and modeling study may be taken up by IIT Madras
 - v. Adequate number of observation wells may be made in the eastern boundary of recharge zone and also on the south western part of the study area to monitor the water fluctuations both in upper-confined and lower-confined aquifers. Similarly, more number of wells at closer interval, with the existing GW monitoring system, may be required in the coastal area to delineate the flux.
 - vi. Detailed study on the estimation of subsidence using remote sensing SAR interferometry may be taken up to accurately estimate the subsidence due to mining, along with field monitoring. Differential interferometry using SAR data over several time periods may be used to assess the potential of L-band repeat-pass SAR for these applications.
 - vii. Method may be implemented to prevent the encroachment of seawater, in case it is needed at any point of time, if it is predicted that there may be a threat of seawater intrusion in the future years.
 - viii. A scientific study using Remote sensing techniques on identification of location of potential sites for artificial recharge and also to assess the suitability of rainwater harvesting structures may be taken up.
 - ix. Field research study may be taken up to understand the hydrology of the back filled soils so that necessary methods for enhancing the water storage and further utilization of available water in these dumping sites may be planned effectively.

Coal Beneficiation Plant of 1 MTPA capacity in a project area of 3.5 ha; of M/s Shree Nakoda Ispat Limited, located in Plot No. 109 and 75 in Siltara Industrial Growth Centre, district Raipur (Chhattisgarh) – (EC amendment)– further consideration.

- **39.15.1** The proposal is for amendment in EC for Coal Beneficiation Plant of 1 MTPA capacity in a project area of 3.5 Ha; Latitude 21°21'33.12"N and Longitude 81°39'22.02"E) of M/s Shree Nakoda Ispat Limited, located in Plot No. 109 and 75 in Siltara Industrial Growth Centre, district Raipur (Chhattisgarh).
- **39.15.2** The proposal was earlier considered in 27th EAC meeting held on 18th 19th December, 2014 and 35th EAC meeting held on 14th 15th May, 2015, wherein the Committee sought following information for further consideration of the project:
 - Confirmation from units with whom MoU has been signed for taking the rejects from Coal Washery having CFBC boiler.

ii. Confirmation that the units are operating with a valid consent to operate from Chhattisgarh SPCB and valid EC under EIA Notification, 2006.

39.15.2 The proponent made the presentation and informed that:

- i. Confirmation from units with whom MoU has been signed for taking the rejects from Coal Washery that they have a CFBC boiler submitted.
- ii. Confirmation that the units are operating with a valid consent to operate from Chhattisgarh SPCB and valid EC under EIA Notification, 2006 submitted
- **39.15.3** The Committee after detailed deliberations, and considering the submissions as above recommended the project for amendment in EC, in respect of the following:
 - a. The Specific Condition No. 2(A) (ii) & 2 (A) (X) in Environmental Clearance granted vide letter no. J-11015/473/2008-IA-II(M dated 10.02.2010 may be read as deleted.
 - b. The rejects now will be supplied to the MOU having operating CFBC Boiler.
 - c. The rejects from the washery will be loaded all to the trucks by bunkers. The rejects to the TPP shall be transported by 20 Tonner trucks covered with tarpaulin.
 - d. All other conditions stipulated in the EC shall remain unchanged.

Agenda 39.16

Coal Washery of 2 x 2 MTPA capacity (wet process) in an area of 8.195 ha of M/s CG Coal & Power Ltd. Dist. Korba (Chhattisgarh) – for further consideration of TOR

- **39.16.1** The proposal is for coal washery 2 x 2 MTPA capacity (wet process) in an area of 8.195 ha) of M/s CG Coal & Power Ltd. Dist. Korba, Chhattisgarh. The proposal was earlier considered in 27th EAC meeting held on 18th 19th December, 2014 and 37th EAC meeting held on 11th -12th June, 2015. The Committee found that the site was environmentally unsuitable for the proposed coal washery, and due to other considerations, the Committee did not agree for grant of TOR for the present site and recommended that alternate site may be explored.
- **39.16.2** It is noted that coal washeries are generally not located in the notified industrial areas, but in coal mine lease areas or nearby. Since the project site has been acquired by Chhattisgarh State Industrial Development Corporation, and other coal washries are already operating nearby, the matter was again placed before EAC for re-consideration for issue of TOR. The proponent made the presentation and submissions as under: -
- i. The information on location of existing mines of SECL within the 10 km radius area i.e. Gevra OCP & Dipka OCP mines and two coal washeries i.e. Gevra Coal washery and Aryan Coal washery was already submitted in Application Form I, PFR and was also presented to the committee during its meeting held on 19.12.2014 & subsequently on 12.05.2015. The list of major industries such as coal mines, coal washeries & TPP existing within the 10 km radius study area from the proposed washery site is given below:
 - 1. Aryan Coal washery, Binjhari (0.96 MTPA): 2.7 km, E

- 2. Aryan Coal Washery, Gevra (5.0 MTPA): 4.3 km, E
- 3. Aryan Coal Washery, Dipka (12 MTPA): 3.1 km, SE
- 4. Spectrum Coal Washery, Ratija (11 MTPA): 2.7 km S
- 5. Maruti Coal Washery, Ratija (3.33 MTPA): 3.3 km S
- 6. ACB Coal washery, Chakabura: 4.8 km NE
- 7. ACB TPP, Chakabura (270 MW): 4.1 km NE
- 8. SV Coal Washery, Renki (2.5 MTPA): 7.0 km SE
- 9. Dipka OC Coal Project, Dipka: 2.5 km SE
- 10. Gevra OC Coal Project, Gevra: 4.9 km SE
- 11. KJSC Coal washery, Dhatura (1.20 MTPA): 12 km, SE

The mode of coal transport for most of these coal washeries is through road.

- ii. The Chhattisgarh State Industrial Development Corporation (CSIDC) has not yet notified any industrial area in the vicinity of the proposed project site and there is also no defined coal policy of the CSIDC for the said area. The proposed site was selected by CSIDC through survey and considered the suitability for setting up coal washery considering the vicinity of coal mining area, transportation route, land availability and willingness of the people to handover the land for setting up washery. The CSIDC has adopted proper procedure related to the land acquisition and also obtained consent of Gram Sabha of the area for establishment of Coal washery etc. The CSIDC has acquired and allotted 20.25 acre of land on 99 year lease on 15th February 2008 and 2nd June 2014 in village Batari, Tehsil Katghora, District Korba, Chhattisgarh to M/s C. G. Coal & Power Ltd. for the specific purpose for establishment of Coal benefication, coal dust, power plant etc.
- iii. The current land use is an agriculture land: The Chhattisgarh State Industrial Development Corporation (CSIDC) has allotted 20.25 acre of land on 99 year lease on 15th February 2008 and 2nd June 2014 in village Batari, Tehsil Katghora, District Korba, Chhattisgarh to M/s C. G. Coal & Power Ltd. for the specific purpose for establishment of Coal benefication, coal dust, power plant etc. The 20.25 acre of said lease hold lands are in possession of M/s C. G. Coal & Power Ltd. and there is no agriculture activity on the land since more than 10 years and presently, the said lands are uncultivated waste land. Some occasional agriculture activities are being carried out by one or two local people outside the project site based on availability of impounded ground water seepage.
- iv. The site is in proximity to a number of villages who would be affected by the pollution from the coal washery: There is no habitation / settlement / village along 0.50 Kms long connecting road between proposed site and adjoining Korba-Bilaspur state highway (SH-04). The 20.25 acre of land for the proposed washery project was acquired from the local people by CSIDC informing the facts related to the establishment of washery. A Gram sabha was also conducted at the prevailing time, presided by the then District Collector, who has obtained consent from majority of the villagers for establishment of proposed coal washery. There was no objection from the local people for establishment of the coal washery at the proposed site and thereafter procured the land by CSIDC and was handed over to M/s C. G. Coal & Power Ltd for establishment of coal washery etc.
- v. 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: Major coal mines of SECL viz., Dipka and Gevra opencast mines are located at about 2.5 5.0 km SE of the proposed washery site. Groundwater accumulated in the mines is used for dust suppression,

plantation, etc activities in the mining project & in nearby existing coal washeries. There is no excess water availability in these mines. There are rivers, ponds and streams available within 15 km distance from the project site. M/s C. G. Coal & Power Ltd. has submitted an application before the State Investment Promotion Board, Raipur, for grant of permission for drawal of 1300 m3/day water for use in proposed coal washery from existing surface water sources. Whatever may be the selected source given by SIPB, will be applicable to the project. It is to be mentioned here that the project proponent has not insisted on using ground water for the project.

- vi. Transportation is proposed by road: The proposed 2x2MTPA coal washery will be established in two phases of 2 MTPA each. 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 only washed coal to the user industries. The rejects will be transported to the CFBC based power plants located in the vicinity as per the demand. Thus, there will not be any addition to existing 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 are several issues raised by the South Eastern Koyala Mazdoor Congress (INTUC) vii. dated 13.12.2014 which need to be addressed: The land acquisition process by the CSIDC was completed under the prevailing rules and regulation, and during the acquisition of private land, a Gram sabha was conducted presided by the then District Collector, who has obtained consent from majority of the villagers for establishment of proposed coal washery. There was no objection from the local people for establishment of the coal washery at the proposed site and this procured land by CSIDC was handed over to M/s CGC&PL. The issues raised by INTUC is a sort of question mark after having public opinion under the then District Collector. The public opinion was positive at that time and INTUC did not raise any issues whatever it has raised in its letter dated 13.12.2014. It would have been raised earlier. Had it been raised during gram sabha, the question would not have been arising today. Moreover, it is to be mentioned here that the villagers are in favor of the project and the interest of INTUC in this matter is a question-mark because they are not the part of the villagers representative. Had INTUC been so sensitive towards the welfare of the local people (which is not its role), it would have raised similar questions during the establishment of other projects/industries in the area. The project proponent feels that the INTUC would have played a positive role in establishment of industries in the area, so it will generate the employment for the surrounding unemployed populations and the CSR activities shall further improve their life style. The project proponent feels that some of the office bearers of the INTUC were having some mala fide intention and might have played with the hand of some other stake holders of coal washery / industrialist therefore without any valid reason they are opposing the establishment of new coal washery near to pit head of coal mine. However, the response to the issues raised by INTUC vide letter dated 13.12.2015 was already submitted to MoEF and presented during the meeting held on 12.06.2015.

39.16.3 The Committee, after detailed deliberation, recommends the project for TOR with the following additional TORs besides the usual ones prescribed for Coal washeries:-

i. The EIA should contain the details on source of water and permission of the concerned authorities for the use of water from the designated source.

- ii. Cumulative impact assessment of air and water quality in the radius of 15 km.
- iii. The project proponent should explain in EIA the action plan for combating air pollution in tandem with the action plan proposed by CSPCB for mitigating air pollution load in the Korba area.

Reviewing of Environmental Clearances of the Cluster Mines of M/s Bharat Coking Coal Limited (BCCL) on the basis of production capacity of the Cluster as a whole.

39.17.1 The proposal is for reviewing of the Environmental Clearances of the Clusters of M/s Bharat Coking Coal Limited (BCCL) mines on the basis of production capacity of the Cluster as a whole.

39.17.2 During the meeting, the project proponent informed the EAC about the genesis and the reasons for review of ECs to cluster Mines, with the details as under:-

i. Ministry approved cluster concept for grant of environmental clearances to mines of BCCL vide letter no. J-1015/24/2009-IA.II(M) dated 2nd December, 2009, in which Committee agreed with 17 clusters. The committee desired that clusters should be dovetailed with the Jharia Action Plan, as clustering would ensure environmental benefits and address the environment of problems of abandoned mines through integrated reclamation. Accordingly, BCCL obtained 17 TORs for each cluster; generated 17 sets of baseline data; EMP contained comprehensive impact of various pollutants; processes and other factors affecting the environment for the cluster; conducted one Public Hearing for each cluster; obtained one EC for each cluster and conducting environmental monitoring for each cluster and submitting environmental compliance also cluster wise. Details in respect of production capacity and mine lease area are as under:-

Name of the	Production(MTPA)		Mining lease area
Cluster	Normative	Peak	In Ha.
Cluster-I	0.900	1.170	575.00
Cluster-II	15.550	20.215	2025.71
Cluster-III	2.769	3.600	1420.61
Cluster-IV	7.34	9.55	1123.79
Cluster-V	4.854	6.311	1957.08
Cluster-VI	5.870	7.631	876.55
Cluster-VII	6.227	8.161	2127.70
Cluster-VIII	4.310	5.603	1200.4
Cluster-IX	6.548	8.513	1942.12
Cluster-X	1.762	2.289	2057.47
Cluster-XI	5.080	6.604	3527.58
Cluster-XII	2.400	3.120	809.60
Cluster-XIII	0.180	0.234	1898.62
Cluster-XIV	0.405	0.526	1577.22
Cluster-XV	0.325	0.423	1696.55
Cluster-XVI	1.510	1.963	1964.21
Cluster-XVII	4.000	5.200	833.13
GRAND TOTAL	65.541	85.269	27613.30

- ii. MoEFCC granted environmental clearances to BCCL mines under cluster concept for 16 nos. of clusters out of 17 clusters. EC's were granted for "clusters" with normative and peak capacities of the respective cluster, in a combined mining lease area for group of mines. However, in the specific conditions of the EC, the normative and peak production of the individual mines within the cluster and the total normative and peak production of the cluster is also mentioned and has been quoted "the maximum production shall not exceed beyond that for which environmental clearance has been granted for the mines of clusters".
- iii. Minutes of 47th EAC meeting dated. 23rd-24th April, 2012, while deliberating EMP of Cluster-IV of BCCL, the Committee desired that:

"the peak capacity in all the clusters of mines should refelect the highest achievable production capacity from the project with sufficient cushion available for enhancing production for offsetting shortfall in others".

- iv. The 15th EAC meeting dated. 27th -28th June, 2014 following suggestions were deliberated by Ministry of Coal on "cluster approach" for coal mining:
 - In case production is hampered in any of the producing unit, the same should be permitted to be compensated by enhancing production from the other mine while keeping the overall production limit of the cluster within the EC granted for that particular cluster.
 - 2. Further, as EC is presently being granted for an individual mine, it becomes redundant after closure of the said mine. But in case of Cluster/Group EC, the company would be able to open new mines in place of closed ones within the group and modalities of permission of such replacement mines could be accordingly formulated.
 - 3. While granting EC of the cluster of mines, limit of pollution parameters in the area may be laid down instead of restricting production limit of the cluster mines. It would facilitate enhancement of production of the cluster/mines by taking additional pollution mitigating measures to offset the impact of additional production on environment or suitable environment friendly modern technology in order to keep the pollution parameters within the permissible limits as prescribed.
- v. The EAC had only suggested, in the past, in case of mines of M/s BCCL, (a subsidiary of CIL) there were 17 numbers of clusters which were subsequently made and the BCCL had prepared EIAs/EMPs report for consideration of EACs. These were subsequently considered by the EAC with due diligence and recommended for granting of ECs. The EAC in this process had deliberated on the comprehensive impact of various pollutants, processes and other factors affecting the environment.

After examining the cluster approach suggested by Ministry of Coal, EAC recommended for alternate scenarios to predict environmental impacts to enable to decide if

- One mine produces less and the other(s) produces more but within the stipulated production limit of the cluster,
- One mine is closed and the other mines produces more but within the stipulated production limit of the cluster,

 There should be interplay of production among mines in a cluster but within the stipulated production limit of the cluster.

Accordingly, MoC was advised to encourage Coal India Ltd. and SCCL to submit proposals.

39.17.3 The M/s BCCL made the following additional submission:-

- 1. One of the basic objectives of the "Cluster Concept" of obtaining environmental clearance is exploring integration of small mines into a large project by taking out barrier (on the boundary of mine lease), which are prone to fire, and thus implementing fire dealing and rehabilitation activities of the Master Plan more comprehensively.
- 2. Considering the entire cluster lease as one and single project will provide a more comprehensive fire fighting and reclamation of degraded and mined out lands all over the cluster rather than for individual mines and stop further spread fire to nearby areas.
- 3. Enhancement of production from any UG mine/s or any OC mine/s within a cluster will not contribute any further environmental degradation as long as total UG production and total OC production of that cluster remains same as stipulated in EC.
- 4. Effective large scale reclamation is possible. Voids, dumps and unstable sites in closed mines can be reclaimed at cluster level.
- 5. Common utilization of resources and better management and supervision at cluster level will increase efficiency and cost effectiveness.
- 6. Single set of environmental base line data was generated for each cluster ,one Public hearing was conducted for one cluster and not colliery/ mine wise and one EIA-EMP was prepared and approved by MOEF for one cluster.
- 7. Environmental effects are considered at Cluster level, accounting for cumulative environmental effects of all the mines within the cluster. The comprehensive impact of various pollutants, processes and other factors affecting the environment was considered. AQIP was prepared & submitted for whole cluster, not separately for individual mines.

39.17.4 Some of the benefits of considering Cluster as a whole are:

- 1. Effective fire dealing: As per the approved Cluster concept, all the EMPs of clusters are to be dovetailed. Fire travels from one mine to another and in such cases, boundaries/barriers between mines have also to be removed. Where rehabilitation restricts fire dealing operations, fire may propagate but after implementing rehabilitation from that area on priority basis, immediate action needs to be taken to excavate out fire. By giving flexibility within cluster, fire dealing will be facilitated without substantially affecting the environment, in fact, there will be improvement due to liquidation of fire.
- 2. Conservation of coal (from barriers): Liquidation of fire and unstable areas will fetch coal which otherwise will be lost forever. The recovery of barrier coal between mines within cluster will add to conservation of coal.
- 3. Transport improvement: With integration of smaller collieries into the cluster, new transport routes may be developed which is facilitated by new mine layout, reducing transport distance, thereby reducing the pollution load.
- 4. Integrated reclamation: integrated reclamation of cluster will facilitate better post mining land profile and thus better land use in post mining scenario.

39.17.5 The EAC after detailed deliberations, agreed to the submissions made by M/s BCCL regarding benefits of cluster concept leading to ease in mining operations and suitably addressing environmental concerns. The committee was of the opinion that the project proponent may apply for amendment in EC of the Cluster if a change in the production capacities of one or other mine within the cluster is required. Mining plan approval for changed capacities is also needed for amendment in EC.

Agenda 39.18

Environmental Clearance for expansion of coal mining projects involving one time production capacity expansion by 50 % in existing operation under Clause 7(ii) of EIA Notification, 2006.

39.18.1 In a meeting held between the Hon'ble Minister for MOEFCC and the Hon'ble Minister of State for Coal in the Ministry on 10.07.2015, a request was made by Coal India Limited (CIL) to allow them to increase the production capacity by 50 % without Public Hearing under the clause 7(ii) of EIA Notification, 2006.

39.18.2 During the meeting, Coal India Limited/CMPDI made the presentation and informed that:

- i. As per Govt Directive, CIL has prepared a production programme of 908 Mt in 2019-20.
- ii. Key requirements: Major increase from ongoing & future projects; Timely completion of Railway lines; Timely acquisition of land; Timely clearances of EC & FC; Time bound implementation of Master Plan by JRDA & ADDA.
- iii. Group Wise Production Projection of CIL:

Group/Year	Existing	Ongoing	Future	Total *
2015-16	228.61	317.42	2.75	548.78
2016-17	185.03	399.76	12.81	597.60
2017-18	177.24	437.56	45.89	660.69
2018-19	177.64	502.65	93.40	773.69
2019-20	164.96 (18%)	561.48 (62%)	181.66 (20%)	908.10

iv. Major Issues for achieving 908 Mt: Projects have already been identified; 172 projects require land acquisition / possession of land; 73 projects have R&R issues; 121 projects require development of Railway Infrastructure for coal evacuation; 212 projects require Environment Clearance; 154 projects require Forestry Clearance.

- Present Status & Future Outlook: Due to recent de-allocation of coal blocks as per Hon'ble ٧. Supreme Court Judgment, responsibility of enhancement of coal production has given to CIL to meet country's coal demand. Only 4 blocks is in operation at present after fresh allocation which has produced only 3.771 Mt till May'15. In 1st Qtr of 2014-15 production from captive blocks was to the tune of 13.043 Mt. Progress of three major Railway Infrastructure projects for evacuation of coal in the identified coal fields of CIL is not commensurate with the projected timelines. Delay in authentication of land, improper land records with State Government, delay in identification of R&R sites by State Authorities, exorbitant demand from PAPs beyond the norms, delay in obtaining NoC from State Authorities (FR Act & FC Act) as well as handover of forest land delaying the commissioning of future projects. Only option left with CIL is to enhance its production from existing and on-going projects. This will be achieved by preponing the project activities and resources without deviating with the environmental norms. Dispensation for 50% enhancement of Production Capacity of all category of projects.
- vi. Issues of 50% Capacity Enhancement: Prior environmental clearance available; No increase in mine leasehold; No acquisition of Private Land; No R&R issue; No change in hydrogeology; Change in only in the calendar plan of production and OB removal; No change in overall mine layout and final mine closure plan.
- vii. Environmental Issues: Impact confined to only additional dust generation due to increase in production; The total quantum of OB removal and backfilling will not be affected; The other environmental parameters remain within prescribed standards due to mitigation measures undertaken; No additional component in the public hearing as no increase in leasehold and all the issues of Public Hearing remain addressed.
- viii. Mitigation Measures: Air quality modeling to assess the impact of increased air pollution load at various receptors around the mine; Mitigation of dust by way of dust suppression/mist spray/dust extraction; Strengthening of water spraying arrangement at strategic points to contain the air pollution load within permissible limit from surplus mine water without any further extraction. All the other environmental issues including MCP and CSR to be taken as planned; All the issues of public have been taken into account at different stages; The environmental monitoring is being done as per Environment (Protection) Amendment Rules, September, 2000 and reports are being submitted to State Pollution Control Board; Annual Environmental Statement is submitted every year before 30th September to State Pollution Control Board; Consent to operate from respective State Pollution Control Board obtained for the mine; MoEF may direct to take additional or strengthen the existing environmental control measures as special conditions. Accordingly, CIL will give the commitment to implement the same.

39.18.3 The EAC after detailed deliberation suggested the following:-

- i. Enhancement in production capacity will automatically reduce the mine life and adversely impact livelihood of the local communities. While considering any such proposal, a detailed sample study for socio-economic aspects needs to be carried out to assess the extent of impact.
- ii. The enhancement may also impact the air quality, coal handling and transportation. Blanket permission for 50 % expansion without public hearing under 7(ii) of EIA Notification, 2015 and without Capping for sustainable mining cannot be given.

PARTICIPANTS IN 39^{th} EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 16^{th} – 17^{th} July 2015 ON COAL SECTOR PROJECTS.

SI.	LIST OF PARTICIPANTS	
No.	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.	Shri S. K. Shrivastva	Member Secretary

PARTICIPANTS IN 39^{th} EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 16^{th} – 17^{th} July 2015 ON COAL SECTOR PROJECTS.

- 39.1 Custodian for operating in the Dharmasthal Coal Mine to M/s Western coalfields Limited.
 - 1. Shri R. M. Wanare
 - 2. Shri S. K. Sinha
 - 3. Shri D. M. Gokhale
 - 4. Shri Chakraborty
 - 5. Shri Pawan Kumar
 - 6. Shri Praveen Kumar Maurya
 - 7. Shri K. Chakraborty
- 39.2 Custodian for operating in the Marki Mangli II coal mine project to M/s Western Coalfields Limited.
 - 1. Shri R. M. Wanare
 - 2. Shri S. K. Sinha
 - 3. Shri D. M. Gokhale
 - 4. Shri Chakraborty
 - 5. Shri Pawan Kumar
 - 6. Shri Praveen Kumar Maurya
 - 7. Shri K. Chakraborty
- 39.3 Custodian for operating in the Marki Mangli Coalmine Project to M/s Western Coalfields Limited.
 - 1. Shri R. M. Wanare
 - 2. Shri S. K. Sinha
 - 3. Shri D. M. Gokhale
 - 4. Shri Chakraborty
 - 5. Shri Pawan Kumar
 - 6. Shri Praveen Kumar Maurya
 - 7. Shri K. Chakraborty
- 39.4 Urdhan Opencast Project of M/s Western Coalfields Limited.
 - 1. Shri R. M. Wanare
 - 2. Shri S. K. Sinha
 - 3. Shri D. M. Gokhale
 - 4. Shri Chakraborty
 - 5. Shri Pawan Kumar
 - 6. Shri Praveen Kumar Maurya
 - 7. Shri K. Chakraborty

- 39.5 Junad Deep Extension Project of M/s Western Coalfields Limited.
 - 1. Shri R. M. Wanare
 - 2. Shri S. K. Sinha
 - 3. Shri D. M. Gokhale
 - 4. Shri Chakraborty
 - 5. Shri Pawan Kumar
 - 6. Shri Praveen Kumar Maurya
 - 7. Shri K. Chakraborty
- 39.6 Pakri Barwadih Coal Mine Project of M/s National Thermal Power Corporation Ltd
 - 1. Shri R. K. Baderia
 - 2. Shri S. Anand
 - 3. Shri P. M. Prasad
 - 4. Shri Ajay Kumar
 - 5. Shri A. K. Das
 - 6. Dr. P R Rao
 - 7. Shri Ranjeet Prasad
- 39.7 Jagannath coal Washery of M/s Mahanadi Coalfields Ltd.
 - 1. Shri R. K. Shrivastawa
 - 2. Shri P. K. Mishra
 - 3. Shri R. P. Gupta
 - 4. Shri Y. Mishra
 - 5. Dr. NLNS Prasad
 - 6. Dr. Vinita
 - 7. Shri D. K. Shah
 - 8. Shri Kusuma Kumar
- 39.8 Pichri OCP of M/s Central Coalfields Limited,
 - 1. Shri P.K. Guin
 - 2. Dr. A. Sinha
 - 3. Shri Alok Kumar
 - 4. Shri Soumitra Sinha
 - 5. Shri Pushkar
 - 6. Shri J. Charkraborty
- 39.9 Amlohri Opencast Expansion Project of M/s Northern Coalfields Limited.
 - 1. Ms. S. Saha
 - 2. Shri B. K. Sharma
 - 3. Shri U. C. Dumka
 - 4. Shri V. N. Dupattawall
 - 5. Shri Sunil Kumar

- 6. Shri Atal Bihari
- 39.10 Kusmunda Opencast Expansion Project of M/s South Eastern Coalfields Ltd.
 - 1. Shri R. P Thakur
 - 2. Shri Manoj Kumar
 - 3. Shri I. D. Narayan
 - 4. Shri U. T. Kanzaokar
 - 5. Dr. A. Tiwari
 - 6. Shri Amit Saxena
 - 7. Shri S. R. Tripathi
 - 8. Shri T. Chakraborty
 - 9. Shri Siddhartha Sharma
 - 10. Ms. Charu Sharma
- 39.11 Sonepur Bazari Opencast (Combined) Project of M/s Eastern Coalfields Ltd.
 - 1. Shri B. R. Reddy
 - 2. Shri S. K. Sinha
 - 3. Shri J. N. Prasad
 - 4. Shri S. Chakraborty
 - 5. Shri G. Prasad
 - 6. Shri A. Shekhar
- 39.12 Cluster no. 2 group of Mixed mines project of M/s Eastern Coalfield Limited
 - 1. Shri B. R. Reddy
 - 2. Shri S. K. Sinha
 - 3. Shri J. N. Prasad
 - 4. Shri S. Chakraborty
 - 5. Shri G. Prasad
 - 6. Shri A. Shekhar
- 39.13 Restructuring of Mine-1 Lignite Mine of M/s Neyveli Lignite Corp. Ltd.
 - 1. Md. Shakil Ahmad
 - 2. Shri Ratna Chowah
 - 3. Shri S Brahma
 - 4. Shri R. Paramasivan
 - 5. Shri M. Krishnan
 - 6. Ms.Rashmi Gupta
 - 7. Ms Marisha Sharma
 - 8. Prof. S. Mohan
 - 9. Shri Subir Das
- 39.14 Expansion of Mine-1 A of M/s Neyveli Lignite Corp. Ltd.

- 1. Md. Shakil Ahmad
- 2. Shri Ratna Chowah
- 3. Shri S Brahma
- 4. Shri R. Paramasiyan
- 5. Shri M. Krishnan
- 6. Ms. Rashmi Gupta
- 7. Ms Marisha Sharma
- 8. Prof. S. Mohan
- 9. Shri Subir Das
- 39.15 Coal Beneficiation Plant of M/s Shree Nakoda Ispat Limited.
 - 1. Shri Arvind Kumar
 - 2. Dr. D. S. Ramteke
 - 3. Shri Rajendra W Korde
 - 4. Shri Parag Khajnare.
- 39.16 Coal Washery of M/s CG Coal &Power Ltd.
 - 1. Shri Arvind Kumar
 - 2. Dr. D. S. Ramteke
 - 3. Shri Rajendra W Korde
 - 4. Shri Parag Khajnare
- 39.17 Reviewing of Environmental Clearances of the Clusters of M/s Bharat Coking Coal Limited(BCCL) mines on the basis of Production Capacity of the Cluster as a whole.
 - 1. Shri Jitendra Kumar Singh
 - 2. Shri Amit Roy
 - 3. Shri D. C. Jha
 - 4. Shri V. K. Singh
 - 5. Dr. EVR Raju
- 39.18 Environmental Clearance for expansion of coal mining projects involving one time productioncapacity expansion by 50 % in existing operation under Clause 7(ii) of EIA Notification, 2006
 - 1. Shri N. Kumar
 - 2. Shri T. K Sinha
 - 3. Shri A. K. Debnatt
 - 4. Shri Niranjan Das
 - 5. Shri Pawan Kumar.

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 Repot 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}, SOx and NOx, 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-llOl3/25/2014-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:
 - 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 confirm 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 (ha)	ML	Area	Outside Area (ha)	ML	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 though 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.
- (xxiv) 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 24 th life
						life) *
1.	Backfilled Area(Reclaimed with					
	plantatio n)					
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					
	plantatio n)					
7.	Roads (avenue plantation)					
8.	Area around buildings and					

Infrastructure			
TOTAL			

As a representative example.

Table 2: Stage-wise Cumulative Plantation

S.N	YEAR*	Gree	en Belt	External		Backfilled		Other s		TOTAL	
				Dump		Area		(Undisturbe d			
									Area/etc)		
		Are a	No. of	Are a	No. of	Area	No. of	Area	No. of	Area	No. of
		(ha)	trees	(ha)	Trees	(ha)	Tree s	(ha)	Trees	(ha)	Tree s
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.	34th year (end of mine life)										
10.	34- Yea 37 th r										

	(Post- mining)											
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^{*} 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	Land Use (ha)						
	Mining							
1.	External OB Dump	Plantatio n	Water	Public Use	Undisturbed	TOTAL		
			Body					
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.

⁽xxxi)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.

⁽xxxii) Risk Assessment and Disaster Preparedness and Management Plan should be provided.

⁽xxxiii) Integration of the Env. Management Plan with measures for minimizing use of natural resources - water, land, energy, etc. should be carried out.

⁽xxxiv) Cost of EMP (capital and recurring) should be included in the project cost and for

progressive and final mine closure plan.

(xxxv) Details of R&R. Detailed project specific R&R Plan with data on the existing socioeconomic 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.

(xxxvi) 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.

(xxxvii) 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.
- (xxxviii) 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.
- (xxxix) 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	TOTAL	Date of FC	Extent of	Balance area for	Status	of
ML/PROJECT	FORESTLAND		forestland	which FC is yet to	appl.	for
AREA (ha)	(ha)			be obtained	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	Area	under	Area Under Mining	Area under
	Land use	Surface	Rights	Rights (ha)	Both (ha)
		(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 though 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 socioeconomic 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:

		Dat	Extent	Balance area	Status of appl.
TOTAL	TOTAL	e of	of	for	for
ML/PROJEC T	FORESTLA ND	FC	forestlan d	which FC is yet to	diversion of
AREA (ha)	(ha)			be obtained	forestland
		If more tha n 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.

39^{th} EAC (THERMAL & COAL MINING PROJECTS) MEETING SCHEDULED FOR 16^{th} – 17^{th} July, 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 sk.smree66@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 email 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 QualityCouncil of India (QCI) /National Accreditation Board of Education and Training (NABET) as per the MoEF OM dated 2nd December, 2009.

COAL MINING PROJECTS

Thursday, 16th July, 2015

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

- **45.1 Transfer of EC** granted vide letter no. J-11015/327/ 2008-IA.II (M) dated 31.12.2008 (for expansion from 0.24 MTPA to 0.30 MTPA in an area of 249.24 ha) in favour of M/s BLA Industries Limited to M/s Western Coalfields Limited as a custodian for operating in the Dharmasthal Coal Mine Project located in villages Chargaon Khurd, Gatitoria (Mohapani), Richhai, Tehsil Gadarwada, District Narsimhapur, Madhya Pradesh in pursuance of Gazette Notification of Ministry of Coal No. F No. 13016/2015-CA-III(Part) dated 30.03.2015.
- **45.2 Transfer of EC** granted vide letter no. J-11015/425/2007-IA.II (M) dated 27.01.2011 (for 0.30 MTPA in an area of 273 ha) in favour of M/s Shree Veerangana Steel Private limited to M/s Western Coalfields Limited as a custodian for operating in the Marki Mangli II coal mine project located in District, Yavatmal, Maharashtra **in pursuance of Gazette Notification of Ministry of Coal No. F No. 13016/2015-CA-III(Part) dated 30.03.2015.**

- **45.3 Transfer of EC** granted vide letter no J-11015/256/2006-IA.II (M) dated 17.05.2007 (for 0.30 MTPA in an area of 731.42 Ha) in favour of M/s B. S. Ispat Limited to M/s Western Coalfields Limited as a custodian for operating in the Marki Mangli Coalmine Project located in villages Marki Buzurg, Pandharkavda, Ganeshpur, Pardi, Tehsil Jhari Jamni, District Yavatmal, Maharashtra in pursuance of Gazette Notification of Ministry of Coal No. F No. 13016/2015-CA-III(Part) dated 30.03.2015.
- **45.4** Urdhan Opencast Project (0.70MTPA in 315 ha); Latitude N 22° 17' to N 22° 18' and Longitude E 78° 55' 50" to E 78° 59' 30") of M/s Western Coalfields Limited (WCL) located in Chhindwara district in Madhya Pradesh- **Modification in EC.**
- **45.5** 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 79⁰ 03'.09" E to 79⁰ 05'.00" E) of M/s Western Coalfields Limited, located at district Yavatmal, Maharashtra- **for further Consideration**
- **45.6** Pakri Barwadih Coal Mine Project (15 MTPA) of M/s National Thermal Power Corporation Ltd. (NTPC) Ltd. located in District Hazaribagh, Jharkand request for Change in mining sequence & land use and transportation of coal by road to Banadag railway siding for Pakri Barwadih Coal Mine Block- **for further Consideration**.
- **45.7** Jagannath Washery (10.0 MTPA in an area of 29.94 Ha) of M/s Mahanadi Coalfields Ltd. Longitudes 85°09' 10" E to 85°11' 37" E and latitudes 20°57' 59" N to 20°58' 43"N, located in villages Hensmul District Talcher, Orissa- **for consideration of ToR**.

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- **45.8** Pichri OCP (1.20 MTPA Normative to 1.50 MTPA Peak in a project Area 151.47 Ha; Latitude 23° 45′ 00″ to 23° 45′ 50″N and Longitude 86° 01′ 00″ to 86° 02′ 30″E) of M/s Central Coalfields Limited, Dist. Bokaro, Jharkhand **(EC based on TOR granted on 18.06.2015)**
- 45.9 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 for Consideration of EC under 7(ii) of Notification, 2006–for further consideration.
- **45.10** 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) for Further Consideration.

Friday, 17th July, 2015

- **45.11** Sonepur Bazari Opencast (Combined) Project (from 8 MTPA to 12 MTPA and lease area from 1523.70 ha to 2293.98 ha) of M/s Eastern Coalfields Ltd., located in village Sonepur, Tehsil Pandaveswar Block, District Burdwan, West Bengal **for Consideration of EC under 7(ii) of Notification, 2006.**
- **45.12** Cluster no. 2 group of Mixed mines project (0.36 MTPA with a peak prod. of 0.45 MTPA in a combined ML area of 1018 ha) of M/s Eastern Coalfield Limited, located at dist. Burdwan, West Bengal. for Consideration of EC under 7(ii) of Notification, 2006.
- **45.13** Restructuring of Mine-1 Lignite Mine (reduction from 10.5 MTPA to 8 MTPA and expansion in ML area from 3178.4 ha to 3635.4 ha; latitude 11° 33′ 00″ N to 11° 35′ 00″ North and longitude 79° 28′ 00″ E to 79° 32′ 00″ East) of M/s Neyveli Lignite Corp. Ltd. Dist. Cuddalore, Tamil Nadu- (EC based on TOR granted on 20.05.2014 & TOR Modification on 22.10.2014) **for further Consideration.**
- **45.14** Expansion of Mine-1 A (from 3 MTPA to 7 MTPA in and expansion in a total project area of2005.8 ha (existing area 1623.8 ha +additional area 382.0 Ha); latitude 11° 32′ 0″ N to 11° 36′ 0″ North and longitude 79° 31′ 0″ E to 79° 32′ 30″ East) of M/s Neyveli Lignite Corp. Ltd. Dist. Cuddalore, Tamil Nadu- (EC based on TOR granted on 20.05.2014) **for Further Consideration**.

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- **45.15** Coal Beneficiation Plant of 1 MTPA capacity in a project area of 3.5 Ha; Latitude 21°21'33.12"N and Longitude 81°39'22.02"E) of M/s Shree Nakoda Ispat Limited, located in Plot No. 109 and 75 in Siltara Industrial Growth Centre, district Raipur, Chhattisgarh (EC amendment)– further consideration.
- **45.16** 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 **for further consideration**
- **45.17 Reviewing of Environmental Clearances** of the Clusters of M/s Bharat Coking Coal Limited (BCCL) mines on the basis of Production Capacity of the Cluster as a whole.
- **45.18** Environmental Clearance for expansion of coal mining projects involving one time production capacity expansion by 50 % in existing operation **under Clause 7(ii) of EIA Notification, 2006.**
- 45.19 Discussion on any other matters with the permission of the Chair.