

## **Final minutes of the 26<sup>th</sup> meeting of the EAC held on 15-16 February, 2018 for appraisal of Coal mining projects**

**A.** The 26<sup>th</sup> meeting of the Expert Appraisal Committee (EAC) for Thermal & Coal mining projects was held on 15-16 February, 2018 in the Ministry to consider the proposals relating to coal mining sector. The lists of participants and the project proponents are at Annexure-I & II respectively.

### **B. Confirmation of minutes**

There being no comments from any of the members of the Committee, minutes of the 24<sup>th</sup> meeting of the EAC held on 11<sup>th</sup> January, 2018 were confirmed.

**C.** Details of the proposals considered during the meeting, deliberations made and the recommendations of the Committee, are explained in the respective agenda items as under:-

### **Agenda No.26.1**

**Parsa Opencast Coal Mine Project of 5 MTPA and Pit Head Coal Washery of 5 MTPA of M/s Rajashtan Rajya Vidyut Utpadan Nigam Limited in a total area of 1252.447 ha at Hasdeo-Arand Coal Field in Districts Surguja & Surajpur (Chhattisgarh) - For EC**

**[IA/CG/CMIN/59215/2016, F No. J-11015/76/2016- IA.II(M)]**

**26.1.1** The proposal is for grant of Environmental clearance to Parsa Opencast Coal Mine Project of 5 MTPA and Pit Head Coal Washery of 5 MTPA of M/s Rajashtan Rajya Vidyut Utpadan Nigam Limited in a total area of 1252.447 ha at Hasdeo-Arand Coal Field in Districts Surguja & Surajpur (Chhattisgarh).

**26.1.2** The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- (i) The project was accorded ToR vide letter dated 23<sup>rd</sup> March, 2017.
- (ii) The latitude and longitude of the project are 22° 48'57.01" and 22°51'56.85" N, and 82° 45'10.50" and 82° 47'22.86" E respectively.
- (iii) Joint Venture: There is no Joint Venture
- (iv) Coal Linkage :

<b>Sr. No.</b>	<b>Name of Specified end use plant</b>	<b>Address</b>	<b>Configuration</b>	<b>Capacity</b>
1	Chhabra TPP (Unit 3, 4, 5 & 6)	MotipuraChoki, Chhabra, Baran district, Rajasthan	2 x 250 MW 2 x 660 MW	1820 MW
2	Kalisindh TPP (Unit 1 & Unit 2)	Village-Undal, Jhalrapatan tehsil, Jhalawar district, Rajasthan	2 x 600 MW	1200 MW
3	Suratgarh Supercritical TPP (Unit 7 & Unit 8)	Thukrana, Suratgarh tehsil, Shriganganagar district, Rajasthan	2 x 660 MW	1320 MW

(v) Employment generated / to be generated: The total manpower required for Parsa Opencast Coal Mine Project for 5 MTPA coal production, is assessed at 768 till 3<sup>rd</sup> year of mine operation (target achieving year).

(vi) Benefits of the project:

- Coal from this project will be used in power generation in Rajasthan, which will help in reducing gap in demand and production of electricity in the state.
- **Improvement in the Physical Infrastructure-** The basic requirement of the, local community needs will be strengthened by extending health care, educational facilities developed in the township to the community, providing drinking water to the villages, strengthening of existing roads in the area. RVUNL will initiate the above amenities either by providing or by improving the facilities in the area, which will help in uplifting the living standards of local communities.
- **Improvement in the Social Infrastructure-** Generation of indirect employment and improved standard of living; establishment of small and medium scale engineering ancillaries; increased revenue to the State by way of royalty, taxes and duties; and better communication and transport facilities etc.
- **Indirect benefit of the project-** Development of coal block will also boost the local economy and result in creation of new infrastructure facilities and establishment of commercial institution such as improvement in transportation, setting up hotel, banking, medical, education, construction and development of allied industries and mechanical workshops etc., these will create more employment opportunities for the local people. With improvement in local economy and with increase in employment opportunities there will be overall improvement in standard of living of the local people.
- **Corporate Social Responsibility-** Keeping in view the requirement of community around project, the CSR programmes under this project shall be implemented in the areas such as Rural Infrastructure development, Health & Sanitation, Education, Skill and entrepreneurship development, Livelihood Development & farmers productivity.

(vii) The total project area is 1252.447 ha. Mining lease area as per approved Mining Plan is 1252.447 Ha. The land usage of the project will be as follows:

Pre-Mining:

S.N.	LANDUSE	Within ML Area(ha)	Outside ML Area(ha)	TOTAL
1.	Agricultural land	365.366	Nil	365.366
2.	Wasteland			
3.	Grazingland			
4.	Settlements			
5.	Surface water Bodies			
6.	Forestland	841.538	Nil	841.538
7.	Others (Government Land)	45.543	Nil	45.543
	<b>TOTAL</b>	<b>1252.447</b>	<b>Nil</b>	<b>1252.447</b>

Post- Mining:

S. No.	Type	During Mining (ha)	End of Life (ha)	Land Use (ha)					
				Plantation	Water Body	Public Use	Agriculture land	Grass/ greenbelt	TOTAL
1.	External OB Dump	64.084	64.084	40.706	-	-	-	23.378	64.084
2.	Top soil Dump	2.600	2.600	-	-	-	-	2.600	2.600
3.	Excavation	1129.375	1129.375	371.513	317.767	-	440.095	-	1129.375
4.	Coal evacuation route and approach Roads	2.370	2.370	0.474	-	1.896	-	-	2.370
4.	Electric Line & infrastructure area	13.228	13.228	2.646	-	10.582	-	-	13.228
5.	CHP & Washery	13.586	13.586	2.718	-	8.694	-	2.174	13.586
6.	Diversion of Nala	14.801	14.801	-	-	14.801	-	-	14.801
7.	Settling Ponds	2.260	2.260	-	2.260	-	-	-	2.260
8.	GreenBelt	-	-	-	-	-	-	-	-
9.	Rationalization Area	10.143	10.143	10.143	-	-	-	-	10.143
	<b>TOTAL</b>	<b>1252.447</b>	<b>1252.447</b>	<b>428.200</b>	<b>320.027</b>	<b>35.973</b>	<b>440.095</b>	<b>28.152</b>	<b>1252.447</b>

Core area:

Sl. No.	Particular	Land (ha)
<b>A</b>	<b>Mining</b>	
	Excavation area & barrier	1129.375
<b>B</b>	<b>Infrastructure &amp; OB dump area</b>	
1	External dump	64.084
2	Top soil dump	2.600
3	Electric line & infrastructure area	13.228
4	Coal evacuation route & approach Road	2.370
5	CHP&Washery	13.586
6	Diversion of nala	14.801
7	Settling pond	2.260
8	Rationalization area	10.143
	Total (B)	<b>123.072</b>
	<b>Grand total (A + B)</b>	<b>1252.447</b>

(viii) The total geological reserve is 256.40 MT. The mineable reserve 184.26 MT, extractable reserve is 200.41 MT. The per cent of extraction would be 78.16%.

(ix) The coal grade is E to G. The stripping ratio is 6.12 Cum/tonne. The average Gradient is 2° to 6°. Three coal seams (Seam-VI, Seam-V & Seam-IV) with thickness ranging upto 8.62m shall be extracted.

(x) Total estimated water requirement is 2385 m<sup>3</sup>/day. The level of ground water ranges from 3m to 25m .

(xi) The mining would be done opencast. Overburden shall be removed by shovel-dumper combination and coal shall be extracted by surface miner.

(xii) There shall be two external OB dumps with quantity of 21.02 Mm<sup>3</sup> in an area of 64.084 ha with height of 60 m above ground level and two internal dump with Quantity of 1206.17 Mm<sup>3</sup> in an

area of 1059.092 ha. The final mine void would be in 70.278 ha with maximum depth of 30 m and the total quarry area shall be 1129.375 ha. Backfilled quarry area of 1059.092 ha shall be reclaimed with plantation. A void of 70.278 ha with max. depth 30 m which is proposed to be converted into a water body

(xiii) Baseline data was collected by consultant over a period of three months from March 2017 to May 2017 representing pre-monsoon season. Ambient Air Quality levels are within the prescribed limit of NAAQS. Summary of Data from March, 2017 to May, 2017 is given below-

Particulars	Concentration		NAAQS
	Min	Max	
<b>PM 2.5</b>	20.00	32.30	60 $\mu\text{g}/\text{m}^3$
<b>PM10</b>	31.80	61.50	100 $\mu\text{g}/\text{m}^3$
<b>SO<sub>2</sub></b>	8.70	13.70	80 $\mu\text{g}/\text{m}^3$
<b>NO<sub>2</sub></b>	10.20	16.80	80 $\mu\text{g}/\text{m}^3$
<b>CO</b>	0.396	0.24	2 $\text{mg}/\text{m}^3$

(xiv) The life of mine: For the rated output of 5.0 MTPA, the life of the mine has been estimated as 45 years including three years of construction period.

(xv) Transportation:

- i. **In pit:** Coal is proposed to be transported from in pit to surface (CHP & Washery) by belt conveyor after initial 4 years of mine development in which coal transportation will be done by dump trucks.
- ii. **Surface to siding:** It is envisaged to transport coal from CHP to Silo by belt conveyor.
- iii. **Siding at loading:** Wagon loading will be done through SILO with inbuilt Rapid Loading System.

(xvi) R&R cost shall be estimated during Land Acquisition process. There are 995 families are being affected, out of which 584 are land loser and 411 are homestead as well as land loser families from six villages namely Salhi, Ghatbarra, Hariharpur, Fatehpur of Udaypur Tehsil, Surguja District & Janardanpur & Tara of Premnagar Tehsil, Surajpur District.

(xvii) Total capital cost of the project is Rs. 1960 Crores. CSR Cost: Capital Cost- Rs. 5.85 Crore while recurring cost- Rs. 1.5 Crore from 2<sup>nd</sup> Year onward (Rs. 75 Lakh for first year). R&R Cost: R&R cost shall be estimated during land acquisition process. Environmental Management Cost: Capital Cost: Rs. 2514.60 Lakh & Recurring Cost: Rs. 677.60 Lakh

(xviii) Water body: AtemNadi flows at a distance of 1.9 Km from Northern Boundary of the block. The area is incised by a prominent nala flowing from SW to NE in the northern part of the block and joins the AtemNadi. The AtemNadi and this stream together control the drainage of the area. The southern part of the block is free from the presence of any prominent nala.

(xix) Ground water clearance applied on 3<sup>rd</sup> November 2017. Board's approval for Mine Closure Plan obtained on 11<sup>th</sup> May 2016. Mine Plan & Mine Closure Plan approved by Ministry of Coal vide letter File No. 34011/24/2016-CPAM dated 10<sup>th</sup> November 2016. Mine closure plan is an integral part of mining plan.

(xx) No wildlife sanctuary is present in 10 Km radius of the project. Wildlife Management Plan with a budgetary provision of Rs. 1216 Lakh has been approved by Wildlife Department, Government of Chhattisgarh vide letter dated 8<sup>th</sup> June 2017.

(xxi) Total forest area involved 841.538 ha for mining. Application for diversion of forest land submitted vide proposal number FP/CG/MIN/20742/2016 dated 4<sup>th</sup> August 2016. Proposal is being processed at State level.

(xxii) Total afforestation plan shall be implemented covering an area of 456.352 ha (428.200 ha plantation + 28.152 ha greenbelt/grass) at the end of mining. Green Belt over an area of 28.152 ha. Density of tree plantation shall be 2500 trees/ha.

(xxiii) There are no court cases/violation pending with the project proponent.

(xxiv) Public hearing was organized in two districts as per details mentioned below-

District	Place	Date
Surguja	Government Pre-Secondary School, Village-Basen	29 <sup>th</sup> October 2017
Surajpur	Government Senior Secondary School, Village-Tara	12 <sup>th</sup> November 2017

The issues raised during the PH includes Draft E.I.A.; permission from Gram Sabha is required for Project but no such permission sought from Gram Sabha for project, hence this public hearing is illegal; As livelihood of most of the population is dependent over agriculture and forests, it will be lost due to the mining and also tribal culture will be affected; danger for Wildlife residing in the forest area of the vicinity. This area is known for frequent visit of Elephants and this is an elephant corridor which is not mentioned in the EIA report ; Ground water will be affected due to 700 to 900 feet depth in operation of this coal mine and there will be shortage of drinking water in the area; proposed project would result in air and water pollution in the area which will impact residents and wildlife; Cumulative Impacts of adjacent Parsa East & Kanta Basan has not been considered in EIA/EMP Report of the proposed project; Nala diversion has been concealed for project; Information related to use of reject of coal from washery has not been mentioned in Draft EIA/EMP Report clearly.

**26.1.3** During deliberations on the proposal, the Committee noted the following:-

The proposal is for environmental clearance to Parsa Opencast Coal Mine Project of 5 MTPA and Pit Head Coal Washery of 5 MTPA of M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited in a total area of 1252.447 ha at Hasdeo-Arand Coal Field in Districts Surguja and Surajpur (Chhattisgarh).

Out of the total project area, forest land involved is 841.538 ha. Stage-I forest clearance for the same was reported to be under process, and thus yet to be diverted for non-forestry purposes.

Mining Plan was approved by Ministry of Coal vide letter File No.34011/24/2016-CPAM dated 10<sup>th</sup> November, 2016. Mine closure plan is an integral part of the Mining Plan.

Terms of reference for the project was granted on 23<sup>rd</sup> March, 2015. Public hearing was conducted by SPCB in two districts, namely Surguja on 29<sup>th</sup> October 2017 and Surajpur 12<sup>th</sup> November 2017. Main issues raised during the public hearing included permission required from Gram Sabha, loss of agriculture and forests affecting livelihood, impact on ground water availability, pollution concerns, cumulative impact of nearby/adjoining mining projects, diversion of nala, etc. The project proponent has submitted the action plan along with the timeline and funding management, to address the issues, suggestions and the representations received during public consultations.

Baseline air quality values at ambient air quality monitoring stations, would be in the range of 20-32.30 ug/m<sup>3</sup> for PM<sub>2.5</sub>, 31.80-61.50 ug/m<sup>3</sup> for PM<sub>10</sub>, SO<sub>2</sub> from 8.70 -13.70 ug/m<sup>3</sup> and NO<sub>x</sub> from 10.20 -16.80 ug/m<sup>3</sup>, and thus meeting the prescribed standards.

**26.1.4** *The Committee, after deliberations and taking cognizance of the concerns raised during public hearing, desired for clarifications and details in respect of the following:-*

- (i) *The response of the project proponent ‘**MoEF&CC will grant Environment Clearance to the project only after thorough scrutiny of EIA/EMP Report through Expert appraisal Committee**’ to the queries raised during public hearing regarding authenticity of data and facts mentioned in the EIA/EMP reports, was not acceptable. The Committee asked for an undertaking in this regard to be furnished by the project proponent.*
- (ii) *Comments from the State Tribal Welfare Department regarding permission for the project from Gram Sabha, impact on livelihood of tribal population, and their concurrence as per the provisions of the Panchayats Extension to Scheduled Areas Act, 1996 (PESA Act) as applicable in the instant case.*
- (iii) *The State Water Resources/Irrigation Department of the State Government to assess the cumulative impact of diversion of streams, and existing and proposed mining operations on Hasdeo river.*
- (iv) *Opinion of the State Wild Life Board regarding impact of existing and proposed mining operations on elephant movement and other wild life species needs to be sought, in view of part of the area proposed for Lemru Elephant Reserve.*

## **Agenda No.26.2**

**Expansion of Tapin South Open Cast Coal Mine Project from 0.6 MTPA to 2.00 MTPA Normative/2.50 MTPA Peak with an increase in ML area from 134.56 ha to 188.66 ha for Phase-I and from 223.05 ha to 277.15 ha for Phase-II of M/s Central Coalfields Limited, located in District Ramgarh (Jharkhand)- For EC**

**[IA/JH/CMIN/18640/2013, F No. J-11015/155/2013- IA.II(M)]**

**26.2.1** The proposal is for grant of Environmental Clearance to expansion of Tapin South Open Cast Coal Mine project from 0.6 MTPA to 2.00 MTPA (Normative)/2.50 MTPA (Peak) with increase in mine lease from 134.56 ha to 178.06 ha in Phase-I and 223.05 ha to 277.15 ha in Phase-II of M/s Central Coalfields Limited located in District Ramgarh (Jharkhand).

**26.2.2** The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- (i) The project for Tapin South Expansion OCP from 0.06 MTPA to 2 MTPA (Normative)/2.50 MTPA (peak) was accorded TOR vide letter No.J-11015/155/2013-IA.II(M) dated 20<sup>th</sup> May, 2014 which was further modified vide letters dated 29<sup>th</sup> May, 2015 and 1<sup>st</sup> September, 2015.
- (ii) Project Report of Tapin South Expansion OCP was approved by CCL Board in August, 2012 with project area of 277.15 ha. The mining operations are to be expanded in two phases. During phase-I, all mining and allied activities shall be limited to 178.06 ha of non-forest

land/released and utilized forest land. The revised mining plan & mine closure plan of Tapin South OCP for 1<sup>st</sup> Phase was approved by CCL board on 24th May 2016 for an area of 178.06 Ha. In 2<sup>nd</sup> phase, mining shall be continued over remaining project area; the total project area of both phases is 277.15 ha including forest land as well as non-forestland.

(iii) The present proposal is limited to EC for first phase only (as per prescribed ToR).

(iv) Latitude and longitude of the project site are 23° 49' 27" to 23° 50'00"N and 85° 28' 17" to 85° 29' 27" E.

(v) Joint Venture: No Joint Venture

(vi) Coal Linkage: Basket linkage, coal from the mine will be transported to Charhi railway siding (5 km away) or proposed Tapin Coking Coal Washery adjacent to Kedla Washery by covered tipping trucks for onward rail transport.

(vii) Employment generated/to be generated: 110 already given. 72 to be given.

(viii) Benefits of the project: Improvements in Physical Infrastructure; Improvements in Social Infrastructure; Increase in Employment Potential; Contribution to the Exchequer; Meet energy and steel sector requirement; Productive utilization of existing manpower of project.

(ix) Land usage of the project will be as follow

Land use details:

Sl. No.	Particular	Land requirement (Phase I)		
		Forest Land (ha)	Non-Forest Land (ha)	Total Land (ha)
1	Quarry	0.0	89.78	89.78
2	Industrial area	0.0	6.75	6.75
3	Haul road	0.0	1.9	1.9
4	External OBDump	24.71*	17.59	42.30
6	Green Belt	0.0	18.64	18.64
7	Safety zone	0.0	18.69	18.69
Total		0.0	178.06	178.06

\* Note: External Dump includes 24.71 Ha released & utilized forest before 1980.

Pre-Mining:

Class of Land Use	Area(ha)	Area%
Agriculture Land	13.0	7.30
Forest Land (Scrub)	42.4	23.81
Waste Land	26.0	14.60
Grazing Land	13.0	7.30
Water Body	1.0	0.56
Settlement	1.0	0.56
Others (Mining area plantation)	81.66	45.86
<b>Total</b>	<b>178.06</b>	<b>100</b>

Land Reclamation upto 6<sup>th</sup> Year:

Particulars	Area(Ha)	
Quarry/Void	47.93	Mining will continue in Phase II
Internal Dump/Backfilled Area	41.85	Will be used further
Industrial area	6.75	-Do-
Haul road	1.9	-Do-
External OBDump	42.30	Grassland years 6 <sup>th</sup> year
Green Belt	18.64	Plantation
Safety zone	18.69	Plantation
Total	178.06	-

(x) Total geological reserve is 73.37 MT. The mineable reserve for Phase I is 8.67MT, extractable reserve is 8.67 MT. The percent of extraction would be 100%.

Name of seam	Thickness (m)
VIIIC	0.91-2.22
VIIIA	0.87-2.36
VIII	1.10-4.85
VIIA	0.52-3.72
VII	1.42-6.18
VI	0.15-3.45
VA	4.34-16.44
IV/V Combined	4.03-10.48
II	0.12-9.71

(xi) The coal grade is W-IV . The stripping ratio is 2.97 Cum/tonne. The average Gradient is 3-10 deg. A total number of 10 seams (VIIIC,VIIIA,VIII,VIIA,VII,VI,VA,IV/V Combined and II) with thickness ranging, shall be extracted.

(xii) Total estimated water requirement is 1412 m<sup>3</sup>/day (Potable: 366 m<sup>3</sup>/day; Industrial: 1046 m<sup>3</sup>/day). The level of ground water ranges from 3.77m to 9.67m.

(xiii) The Method of mining would be Opencast method of mining with shovel-dumper combination.

(xiv) There is one external OB dump with Quantity of 20.60 M.cum in an area of 42.30ha with height of 60 meter above the ground level and 1 internal dump with Quantity of 5.15 M.cum in an area of 41.85 ha.

(xv) The final mine void would be in 47.93ha with depth upto 105 m and the total quarry area is 89.78 ha. Backfilled quarry area of 41.85ha shall be reclaimed with plantation.

(xvi) The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.

(xvii) The life of mine is 6 years including 1 year construction period.

(xviii) Transportation: Coal transportation in the pit by Rear dumpers; Surface to Siding by trucks; loading by pay loader at siding.

(xix) There is R & R involved. There are 200 PAFs.



(xx) Cost: Total capital cost of the project is Rs.331.98 Crores. CSR Cost As per CSR policy & Companies Act, 2013. R&R Cost Rs.3750.33 lakhs. Environmental Management Cost Rs. 761.95 Lakhs.

(xxi) Water body: The drainage of the block is controlled by easterly flowing Bokaro river which flows through the south of the mine. Atributary of Bokaro River, Jharna Nala flows from north to south through the project and joins Bokaro River. Kajri nallah also flows from north to south along eastern side of project and joins Bokaro River.

(xxii) Application under preparation for ground water clearance. Board's approval obtained on 24.05.2016. Mining plan has been approved on May 2016. Mine closure plan is an integral part of mining plan.

(xxiii) Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.

(xxiv) Forestry issues: 24.71 ha (part of 47.06 ha released by DFO on 25.01.1978) and utilized for external OB dump.

(xxv) Total afforestation plan will continue beyond 6 years. Green Belt over an area of 18.64 ha. Density of tree plantation shall be 2500 trees/ha.

(xxvi) There are no court cases/violation pending with the project proponent.

(xxvii) Public Hearing was held on 27.02.2016 in Tapin South Officers Club, CCL, District Hazaribagh. The issues raised in the PH includes; arrangement for electricity, water. facilities; employment generation from this project; dust pollution; PAF's children should get excellent education facilities; trees plantation; sprinkling of water on the road;

### **26.2.3 During deliberations on the proposal, the Committee noted the following:-**

The proposal is for EC to the expansion project of Tapin South Opencast Coal Mine from 0.6 to 2.50 MTPA by M/s Central Coalfields Limited with increase in project area from 54.1 ha 178.06 ha in Phase-I and 277.15 ha in Phase-II located in District Ramgarh (Jharkhand).

For phase-I, total project area include 24.71 ha of forest land, which stands released and utilized before the Forest (Conservation) Act, 1980 and thus not requiring stage-I forest clearance.

Mining Plan for the phase-I of the proposed expansion has been approved by CCL Board on 24<sup>th</sup> May, 2016. Mine closure plan is an integral part of the Mining Plan.

The ToR for the expansion project was granted by the Ministry on 20<sup>th</sup> May, 2014, which was amended on 29<sup>th</sup> May, 2015 and then on 1<sup>st</sup> September, 2015. Public hearing was conducted by the State Pollution Control Board on 27<sup>th</sup> February, 2016 in District Ramgarh (Jharkhand).

The ToR dated 20<sup>th</sup> May, 2014, amended on 29<sup>th</sup> May, 2015 & 1<sup>st</sup> September, 2015, shows the present production capacity of 0.06/0.60 MTPA in an area of 134.56 ha in phase-I. Whereas, as per the details submitted and presented during the meeting, the present production capacity is 0.60 MTPA in an area of 54.10 ha.

As per the land use details, forest land involved is only 24.71 ha, which is reported to be released and utilized before promulgation of the Forest (Conservation) Act, 1980 and thus not requiring stage-I forest clearance. At the same time, during pre-mining, forest land shows a different figure of 42.4 ha in the same project area of 178.06 ha in phase-I.

Coal Mine is reported to be set up/established much before the issue of the EIA Notification, 1994, and thus requiring no prior environmental clearance. As such, there is no requirement of monitoring report on compliance status of existing EC conditions to consider the present proposal for expansion of the Coal Mine.

Last consent to operate under the Air/Water Act, for the project was issued by the SPCB on for the present production capacity of 0.60 MTPA, which was valid up to 30<sup>th</sup> June, 2002. Since then, SPCB has neither issued nor renewed the consent even after the proposal submitted by the project proponent from time to time. However, as per the production details, there was no production from 2002-03 to 2010-11. During subsequent years (from 2011-12 to 2015-16), the production is reported to be 0.109, 0.200, 0.319, 0.267 & 0.059 MTPA respectively.

**26.2.4** *The EAC, after deliberations, observed that there has been no inspection of the project carried out either by the MoEF&CC (due to no EC) or by the SPCB for the last 10 years, and the same is essentially required for onsite assessment by 2-3 of its members to consider the proposal. The Committee also insisted for the valid consent to operate from the SPCB for the present production of 0.60 MTPA.*

*In view of the above, and also for the anomalies reflected in the preceding para, the proposal was deferred for the needful.*

### **Agenda No.26.3**

**Expansion of Cluster-IV (5 mixed mines) Coal Mining Project from 3.706 MTPA (Peak) to 7.34 MTPA (Normative)/9.55 MTPA (Peak) in ML area of 1123.79 ha of M/s Bharat Coking Coal Ltd, District Dhanbad (Jharkhand) - For further consideration of EC**

**[IA/JH/CMIN/20227/2013, F.No.J-11015/372/2013-IA.II(M)]**

**26.3.1** The proposal is for environmental clearance to expansion proposal of Cluster-IV (5 mixed mines) Coal Mining Project from 3.706 MTPA (Peak) to 7.34 MTPA (Normative)/9.55 MTPA (Peak) in ML area of 1123.79 ha of M/s Bharat Coking Coal Ltd, District Dhanbad (Jharkhand).

**26.3.2** The proposal was earlier considered by the EAC in its 29<sup>th</sup> meeting held on 15 -16 January, 2015, 49<sup>th</sup> meeting held on 7-8 January, 2016 and 17<sup>th</sup> meeting held on 31<sup>st</sup> August, 2017. During the last meeting the committee made the following observations:

*“The EAC, after detailed deliberations and in view of the persistent/chronic fire conditions in the Jharia Coalfields, it is proposed that a sub-committee of EAC members shall visit the site of actual mining operations in cluster IV for on the spot assessment and the mine coordinates as reflected in KML file”.*

**26.3.3** The site visit of the sub-committee was carried out on 8<sup>th</sup>& 9<sup>th</sup> January 2018 by Dr. N.P.Shukla, Dr. Jai Krishna Pandey and Dr. S.K.Sinha. Based on the observation during the visit, following suggestion/recommendation are being made:

1. The fire dealing operations by excavating out fire should be expedited.

2. 05 points were randomly selected covering all the four sides of leasehold boundary of Cluster IV with the consultation of BCCL/CMPDI officials. The mine excavation appears within kml as shown with DGMS instruments by CMPDI, HQ team. Accordingly facts are being verified.
3. The mine lease is encroached at several places with habitation. Keeping in view fire & subsidence problems, the rehabilitation should be expedited.
4. EAC may like to consider the grant of environment clearance to expansion proposal of cluster IV.

#### **26.3.4 During deliberations, the EAC noted the following:-**

The proposal is for environmental clearance to the project for expansion of Cluster-IV (Group of 5 mixed mines) Coal Mining project of M/s Bharat Coking Coal Ltd from 3.706 MTPA to 7.34 MTPA (Normative)/9.55 MTPA (Peak) in ML area of 1123.79 ha in Tehsil Baghmara, District Dhanbad (Jharkhand). There is no forest land involved in the mine lease area of 1123.79 ha.

Mining Plan for the project was approved by the Board of M/s BCCL on 3<sup>rd</sup> August, 2017. Mine Closure Plan was approved on 2<sup>nd</sup> February, 2018 in the Board Meeting of M/s BCCL.

Earlier, Cluster-IV Coal Mining project for its capacity of 3.706 MTPA (Peak) in a total area of 1123.79 ha was accorded environmental clearance vide letter dated 6<sup>th</sup> February, 2013 based on the public hearing held on 21<sup>st</sup> January, 2012. The present compliance status against each of these issues was found to be satisfactory.

The Regional Office of the Ministry at Ranchi, has made site visits on 21<sup>st</sup> August, 2015 and then on 22<sup>nd</sup> August, 2016. In response to the observations of the EAC in its meeting held on 7-8 January, 2016, monitoring report on compliance status of the conditions stipulated in the EC dated 6<sup>th</sup> February, 2013 was submitted by the project proponent vide their letter dated 3<sup>rd</sup> August, 2017. The observations made therein and the action plan/taken report was deliberated during last meeting of the EAC held on 31<sup>st</sup> August, 2017. The Committee took serious note of the state of affairs as observed by the Regional Office, but preferred to push the present proposal for a limited period based on recommendations of the its sub-committee.

Consent to Operate for individual mines of the Cluster-IV has been obtained from the Jharkhand State Pollution Control Board vide their letter dated 16<sup>th</sup> August, 2016, which are presently valid up to 31<sup>st</sup> December, 2020.

The sub-committee of the EAC, after site visit during 8-9 January, 2018, has recommended for grant of environmental clearance to the project. Their observations as in the preceding para, were duly considered by the Committee.

**26.3.5** *The EAC, after detailed deliberations, recommended the proposal for grant of environmental clearance to the project for expansion of Cluster-IV (Group of 5 mixed mines) Coal Mining project from 3.706 MTPA to 7.34 MTPA (Normative)/9.55 MTPA (Peak) of M/s Bharat Coking Coal Ltd in ML area of 1123.79 ha located at Tehsil Baghmara, District Dhanbad (Jharkhand), under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms & conditions and environmental safeguards mentioned below:-*

- The environmental clearance shall be valid up to **31<sup>st</sup> March, 2019**. Further extension/continuance of the project shall be based on evaluation of the action taken on each of the observations of this Ministry's Regional Office during their site visit on 22<sup>nd</sup> August, 2016.
- The project proponent shall obtain Consent to establish from the State Pollution Control Boards of Jharkhand for the proposed peak capacity of 9.55 MTPA prior to commencement of the increased production.
- Transportation of coal from face to Coal Handling Plant and silos shall be carried out through conveyor belts, and then to the TPP by rail.
- Mitigative measures to be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers.
- Controlled blasting techniques should be adopted to control ground vibration and fly rocks.
- Sufficient coal pillars shall be left un-extracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.
- Solid barrier shall be left below the roads falling within the block to avoid any damage to the roads and no depillaring operation shall be carried out below the township/colony.
- Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains.
- Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures should be taken to avoid loss of life and materials. Cracks should be effectively plugged with ballast and clay soil/suitable materials.
- Garland Surface drains (Size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rain fall and maximum discharge in the area adjoining the mine sites. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rain fall.
- The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 9.55 MTPA.
- Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- The fire dealing operations by excavating out fire should be expedited.

#### **Agenda No.26.4**

**Coal Washery of 2.5 MTPA of M/s Hind Multi Services Pvt. Ltd in an area of 10.11 ha located in District Bilaspur (Chhattisgarh) - For further consideration of EC**

**[IA/CG/CMIN/20270/2013, F.No.J-11015/410/2013-IA.II(M)]**

**26.4.1** The proposal is for environmental clearance to the Coal Washery of 2.5 MTPA of M/s Hind Multi Services Pvt. Ltd in an area of 10.11 ha located in District Bilaspur (Chhattisgarh).

**26.4.2** The proposal was last considered in the 61<sup>st</sup> EAC meeting held on 28-29 July, 2016, wherein observations of the Committee were as under:-

*“In the context of different statements/contradictions between the EIA documents circulated prior to the meeting and the presentation circulated/made during the meeting, as well as the inconsistent statements/suspect data etc in both the documents, the EAC rejected the EIA/EMP report, and advised that a revised EIA/EMP report should be submitted rectifying the above and/or any other inconsistencies in the knowledge of the project proponent”.*

**26.4.3** In response to the observations of EAC, project proponent submitted the **updated** details of the project along with the para wise reply to the which are as under:

- (i) The project was accorded ToR vide letter No. J-11015/410/2013-IA.II (M) dated 30.12.2014.
- (ii) The project was earlier considered in 61<sup>st</sup> EAC meeting held on 28-29 July 2016.
- (iii) Latitude and longitude for the project site are:

Corner No.	Latitude	Longitude
	<b>Office, Weigh Bridge &amp; Railway Siding</b>	
1.	22°3'40.72" N	82°14'26.12" E
2.	22°3'33.40" N	82°14'22.93" E
3.	22°3'33.49" N	82°14'21.50" E
4.	22°3'35.33" N	82°14'21.15" E
5.	22°3'41.77" N	82°14'21.72" E
	<b>Plant Premises</b>	
1.	22°3'39.4" N	82°14'04.5" E
2.	22°3'38.4" N	82°14'07.7" E
3.	22°3'35.2" N	82°14'09.2" E
4.	22°3'38.4" N	82°14'11.5" E
5.	22°3'42.0" N	82°14'13.2" E
6.	22°3'37.2" N	82°14'13.2" E
7.	22°3'33.0" N	82°14'09.0" E
8.	22°3'24.8" N	82°14'06.4" E
9.	22°3'24.8" N	82°14'00.4" E
10.	22°3'31.6" N	82°14'00.8" E

- (iv) There is no joint venture.
- (v) M/s Hind Multi Services Pvt. Ltd has made MoU with M/s R.K.M. Powergen Pvt. Ltd. located at Ucchpinda, District Janjgir Champa (Chhattisgarh) for washing of 2.5 MTPA raw coal
- (vi) MoUs has been made with Prakash Industries Limited for utilization of washery rejects, with the details as under:-

S. No.	Name of the Industry	Location	MoU Capacity
1.	M/s R.K.M. Powergen Pvt. Ltd.	Village Ucchpinda, District Janjgir Champa (Chhattisgarh)	Washery of 2.5 MTPA raw coal

2.	M/s Prakash Industries Ltd.	Village Champa, District Janjgir, Champa, Chhattisgarh	Purchase of 0.5 MTPA washery reject coal
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(vii) Employment generated / to be generated: It is estimated to employ direct / indirect employment of 100 people of various skills.

(viii) Benefits of the project: The proposed project of coal washery at Gatora village would provide development of area and consequent indirect and direct job opportunities which would finally result in improvement in the quality of life of people in the central region and especially in the area around the coal washery site.

(ix) The land usage of the project will be as follows:

Sr. No.	Description	Area (in acres)	%
1	Plant Area	4.50	18
2	Storages Area		
2.1	Raw Coal	2.00	8
2.2	Washed Coal	1.60	6.4
2.3	Reject	1.50	6
3	Green Belt	8.40	33.6
4	Road Area	2.00	8
5	Parking Area	1.00	4
6	Slime Pond	1.50	6
7	Storm Water Settling Pond	1.00	4
8	Auxiliary Buildings & Others (admin, Building, Workshop, Canteen, Security Office, First Aid Centre)	1.00	4
9	Stores Area	0.50	2
Total		25.0	100

(x) The washery operation shall be a closed system with wagon loading arrangement

(xi) The data for ambient air quality for one month has been documented and all results at all stations are within prescribed limits.

(xii) Transportation: Raw coal will be transported by both mode i.e. Rail and Road. Washed coal shall be transported from Gatora railway siding. Reject Coal will be dispatched through Road/Rail depending upon quantity and location of consumer.

(xiii) There is no R & R involved. There are no PAFs.

(xiv) Cost: Total capital cost of the project is Rs. 41Crores. CSR Cost: 33 Lakhs. Environmental Management Cost (Capital cost Rs.391.7 Lakh, annual recurring cost Rs.104.0 Lakh).

(xv) Kharang Nadi flows at a distance of 2.1 km W and Arpa River flows at a distance of 2.5 km SW. Water requirement will be met from Kharang River.

(xvi) PP during presentation submitted MoM of Water Resources Department, Government of Chhattisgarh indicating the approval of water allocation.

(xvii) Daily water requirement for the proposed plant is 1000 m<sup>3</sup>/day. Proposed to obtain the requisite water from Kharang River (2.1 KM W).

(xviii) There are no national Parks, wildlife sanctuary, biosphere reserves in 10 km study area.

(xix) There is no forest area involved in the project site.

(xx) Total afforestation plan shall be implemented covering an area of 3.23 ha. Green Belt over an area of 3.23 ha. Density of tree plantation 2000 trees/ ha of plants.

(xxi) There are no court cases/violation pending with the project proponent.

(xxii) Public Hearing was held on 28th August, 2015 at premises of Govt. middle school, village Karra, Tehsil Masturi, District Bilaspur (Chhattisgarh). The issues raised during the public hearing include coal dust, pollution of water bodies, impact on agriculture etc.

<b>S. No.</b>	<b>Query Raised by the Ministry in its 61<sup>st</sup> EAC meeting held on 28-29 July, 2016</b>	<b>Response to the Query by PP</b>
1.	Coal linkage for the washery has to be clearly spelt out along with requirement of the M/s KSK Mahanadi Power Company Ltd, which has done MoU for 30% ash contained washed coal located within 40 km of the washery.	MoU has been made for 2.5 MTPA coal with R.K.M Powergen Pvt. Ltd to get its coal washed; the MoU has been attached as Annexure III in the EIA Report. The MoU has been done for ash content 34% (+/- 1%). The agreement between SECL and R.K.M Powergen Pvt. Ltd is attached as Annexure XIII with the EIA Report.
2.	It was informed by the project proponent that M/s KSK Mahanadi Power Company Ltd also have a requirement for washery rejects for their power plant usage. As such, the facilities available with the power plant for using rejects need to be clarified.	M/s Hind Multi Services Pvt. Ltd. has made MoU with Prakash Industries Ltd. for utilization of washery reject coal in their power plants. The copy of MoU is attached as Annexure VI in the EIA Report.
3.	There is a difference between the presentation circulated/made during the meeting and the background papers submitted i.e. EIA Report.	The point wise response for various queries are given below vide point no. 3 (a) to (g)
a.	Coal Characteristics	Submitted
b.	Yield of washed Coal	The yield of washed coal is 2.0 MTPA (80%).
c.	MoU in respect of raw coal and washed coal	MoU has been made for 2.5 MTPA raw coal with R.K.M Powergen Pvt. Ltd to get its coal washed; the MoU has been attached as Annexure III in the EIA Report.
d.	Source of Water (EIA report mentions only Kharang River, whereas in the presentation it is indicated as Apra River/ Kharang River).	The water demand will be met from Kharang River (2.1 Km, W).
e.	Different statements regarding water availability, for example in Table 1.4 item (V), it is stated that the application has already been submitted to the State Department for the permission and the same is in process and is attached at	Necessary permission has been taken by Jal Sansadhan Vibhag, Chhattisgarh for withdrawal of water from Kharang River vide there Letter dated 11.10.2017/ 41st Meeting.

	Annexure – V. However, on page no. 30 of the EIA report, in para 2.8.2, contradictory statement has been given, where it has been stated “Copy of permission for drawl of water from Kharang River is given in Annexure – V.	
f.	Mode of transport of washed Coal (Slide No. 35).	The washed coal will be transported by Rail from Gatora Railway Siding. Gatora Railway Siding is the private Railway Siding constructed by proponent, dedicatedly for dispatch/receipt of coal and it is situated adjacent to the proposed washery site. However for local supply if any it will be transported by Tarpaulin covered Trucks.
g.	Budgetary allocation out of CSR capital funds of Rs. 2.0 Crore as proposed at item (ix) page 211 of EIA documents against Rs. 33 Lacs as proposed by the PP in their presentation (Slide no. 72).	The Project Proponent has earmarked Rs. 33.00 Lacs as Capital Cost and Rs. 29.1 Lacs as Recurring Cost towards Corporate Social Responsibility.
4.	Data on air prediction for PM 2.5 is inadequate. Neither the emission factors for controlled and uncontrolled fugitive emissions, nor the mitigation measures for controlling emission from the washery were provided.	<p>The GLC is calculated considering the worst scenario i.e. uncontrolled fugitive emissions. For PM<sub>2.5</sub> the GLC concentration are very low so we have calculated for PM<sub>10</sub>.</p> <p>Air Pollution Control Measures</p> <p>M/s Hind Multi Services Pvt. Ltd. has adopted a wet process of coal washery. Hence, no dust emissions are generated from coal washing process. However to control fugitive dust emissions from coal handling, storage, crushing and transport activities, following control measures will be adopted:</p> <ul style="list-style-type: none"> <li>• The proposed coal washery includes coal crushing, screening &amp; wet coal beneficiation (coal washing). Bag house will be provided with crusher house.</li> <li>• Plantation of trees along haul road and periphery of the project location in order to reduce the impact of dust in the nearby villages;</li> <li>• Planning transportation routes so as to reach the nearest paved roads by shortest route (minimize transportation over unpaved road).</li> </ul>



		<ul style="list-style-type: none"> <li>• Concreting of unpaved internal roads will be adopted to avoid generation of dust due to transportation. Permanent water sprinklers have been installed at railway sidings where unloading / loading of coal will be carried out.</li> <li>• Continuous water sprinkling will be applied to cover railway wagons during unloading. Continuous water sprinkling will be applied at all plant areas where materials are loaded / unloaded and on internal roads to avoid dust generation during transportation;</li> <li>• The speed of dumpers plying on the internal roads will be limited to avoid generation of dust; Provision of bag filters of adequate capacity for coal crushers.</li> <li>• Use of covered conveyors for internal transport of coal.</li> <li>• Provision of dust extraction / water sprinkling arrangement at all transfer points.</li> <li>• Provision of dust mask to workers working in Plant.</li> <li>• Periodic monitoring of ambient air quality in plant premises and in nearby villages to assess efficacy of adopted air pollution control measures and adoption of additional air pollution control measures, if required.</li> </ul>
5.	It is proposed to take water from the river Kharang i.e.1 MLD for washery for which permission is not yet available as the letter at Annexure-V of the EIA documents is only a recommendatory letter to the State Government. As it is proposed to withdraw water from the said river of the order of 1 MLD, and the river is reported to be utilized for irrigation, there is a need of study for carrying out impact of such withdrawal on downstream users. Such study should be conducted through reputed organization.	<p>Necessary permission has been taken by Jal Sansadhan Vibhag, Chhattisgarh for withdrawal of water which is attached as Annexure VII in the EIA Report.</p> <p>The Hydrogeological study has been carried out and the details are explained below.</p>
6.	The surface water, ground water and soil quality data provided	As per the suggestions of Respected EAC Members, fresh baseline data for a period of

	indicates that chloride levels are exactly the same (Slides 49, 50 & 61), which is highly unlikely and raises question on authenticity of the data. Similarly, the values for sulphate and nitrate are exactly the same in respect of ground water and soil quality which again is highly unlikely and therefore suspect.	one month i.e. November' 2016 has been carried out. The revised monitoring data of Surface and Ground water is given below
7.	The cumulative impact assessment for air quality had not been carried out. While data for the existing industries appeared to have been incorporated in the base line data, however the likely impact of any new industrial activities that may be coming up in that area, were not taken for the purpose of cumulative air impact assessment study.	The GLC study has been carried out considering other washery in operation.
8.	Regarding supply of raw coal, the MoU with M/s KSK Mahanadi Power Company Ltd (para 2.5 on page 25 of the EIA report) indicates that while 2.4 MTPA of raw coal would be sourced from M/s KSK Mahanadi, the balance 0.1 MTPA would be obtained through e-auction from SECL or from nearby operating industries. In this regard, the EAC found it necessary that the PP should attach the linkage letter issued by the Ministry of Coal to M/s KSK Mahanadi at least in respect of 2.4 MTPA, since the MoU indicates that M/s KSK would be receiving this coal from SECL. Clearly, without such a linkage, M/s KSK Mahanadi would not be in a position to supply SECL coal to the PP.	MoU has been made for 2.5 MTPA raw coal with R.K.M Powergen Pvt. Ltd to get its coal washed; the MoU has been attached as Annexure III. The MoU has been done for ash content 34% (+/- 1%). The agreement between SECL and R.K.M Powergen Pvt. Ltd is attached as Annexure XIII with the EIA Report.
9.	The EAC also enquired about the mode of transportation of both raw coal, as well as washed coal, particularly since in para 2.5 on page 25 of the EIA document contradictory statements have been made. For example while at one place in para 2.5, it is stated that raw coal will be transported by	Transportation Plan 1) For raw Coal:- Raw coal will be transported by both mode i.e. Rail and Road. 1a) Rail transportation is always convenient & feasible for proponent but it depends upon the loading capacity of SECL. 1b) Possibilities will be explore for transportation of raw coal by rail majorly and occasionally by road in case of emergency and condition of

	<p>rail/road up to Gatora railway siding, at another place, it is stated that “washed coal from the plant will be transported by road in covered trucks directly to the different customers or by road up to Gatora railway siding and from thereby rail/road’. Further, the same para quotes “since most of the coal transport will be through railway wagons, there will not be any significant addition on road for coal transportation from the proposed coal washery”.</p>	<p>FSA. 2) For washed Coal:- Washed coal shall be transported from Gatora railway siding. 3) For Reject: Reject Coal will be dispatched through Road/Rail depending upon quantity and location of consumer.</p>
10.	<p>In any case, it would be highly unadvisable and incorrect for 2.5 MTPA of coal transport by road either in its raw form or any washed/rejects form. Therefore, if the PP was indeed planning to go ahead, then there should be a clear plan for maximum possible transportation by rail, with the balance being done only through closed conveyor system and wagon loading through silo/pre weigh bin.</p>	
11.	<p>Different issues raised during the public hearing on 28th August, 2015 have not been suitably addressed. It simply shows certain lack luster approach towards vital issues raised during public hearing. The same need to be furnished along with the detailed action plan for redressal for the issues raised during PH need to be mentioned depicting budgetary allocation. Out of the CSR capital funds of Rs 2 crores as proposed at item (ix) page 211 of EIA documents against Rs 33 lakhs as proposed by the PP in their presentation at slide No.72</p>	<p>Public hearing was conducted on 28.08.2015 at the premises of Government Middle School, Village – Karra, Tehsil – Masturi, District – Bilaspur (Chhattisgarh).</p>

**26.4.4** During deliberations on the proposal, the Committee noted the following:-

The proposal is for environmental clearance to the Coal Washery project of 2.5 MTPA by M/s Hind Multi Services Pvt Ltd in an area of 10.11 ha at village Gatora, tehsil Masturi, District Bilaspur (Chhattisgarh). There is no forest area involved.

The ToR for the expansion project was granted by the Ministry on 30<sup>th</sup> December, 2014. Public hearing was conducted by the State Pollution Control Board on 28<sup>th</sup> August, 2015. Main issues raised during public hearing included coal dust, pollution of water bodies, adverse impact on agriculture, etc.

Total fresh water requirement is estimated to be 700 cum/day i.e. nearly 0.7 cum per tonne of raw coal. The same is observed to be meeting the norms of <1.5 cum/tonne of raw coal.

The State Water Resources Utilization Committee of Water Resources Department of the State Government in its meeting held on 11<sup>th</sup> October, 2017, has recommended for allocation of 0.33 MCM of water per annum from Kharang river to meet the fresh water requirement of 700 cum/day for the project. Any formal letter in this regard, is however, yet to be issued.

**26.4.5** *The Committee, after deliberations, recommended the proposal for grant of Environmental clearance to the proposed Coal Washery of 2.5 MTPA of M/s Hind Multi Services Pvt. Ltd in an area of 10.11 ha located in District Bilaspur (Chhattisgarh), subject to submission of formal letter from the concerned regulatory authority for allocation of 0.33 MCM of surface water, and the terms & conditions as applicable, along with the additional conditions as under:-*

- *The project proponent shall obtain consent to establish from the State Pollution Control Boards of Chhattisgarh for the coal washery of 2.5 MTPA prior to commencement of the industrial operations.*
- *Transportation of raw coal, washed coal and the rejects shall be through rail.*
- *The technology so chosen for the washery should conform to 'Zero Liquid Discharge'.*
- *Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.*
- *Disposal of washery rejects shall be in accordance with the extant policy and guidelines, and environment friendly.*
- *Thick green belt of adequate width to be provided around the washery to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.*
- *Total fresh water requirement shall be <1.5 cum/tonne of raw coal.*
- *Withdrawal of water from river should not exceed 15% of the monthly flow during the lean season.*

## **Agenda No.26.5**

**Tubed Coal Mine Project of 6 MTPA in ML area of 460 ha of M/s Damodar Valley Corporation located in District Latehar (Jharkhand) - For ToR**

**[IA/JH/CMIN/65302/2017, F No. J-11015/54/2017- IA.II(M)]**

**26.5.1** The proposal is for grant of Terms of Reference to Tubed Coal Mine Project of 6 MTPA in area of 460 ha of M/s Damodar Valley Corporation located in District Latehar (Jharkhand)

**26.5.2** The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- (viii) It is a green field project for 6 MTPA capacity in an area of 460 ha.
- (ix) The latitude and longitude of the project are 23°48'20" to 23°50'09" and 84°34'09" to 84°35'45"E respectively.
- (x) Joint Venture: There is no JV
- (xi) Coal Linkage : This project is linked to 1250 MW thermal power plants (i) Mejia Thermal Power Station (MTPS) (Unit 7 & 8, 2 x 500 MW = 1000 MW) at West Bengal and (ii) Chandrapura Thermal Power Station (CTPS) Unit – 8 ( 1 x 250 MW = 250 MW) at Jharkhand.
- (xii) Employment generated / to be generated: About 400 nos. highly skilled labored will be deployed in the project from different parts of the country and about 800 nos. person (Semi-skilled / unskilled) will be from nearby areas.
- (xiii) Benefits of the project: Mining of coal is essential for the nation's growth. The project will prove beneficial in terms of socio-economic development as it will provide employment to locals, it will improve the standard of living of the local people.
- (xiv) The total land area is 460ha. Mining lease area as per approved Mining Plan is 460.0 ha. The land usage of the project will be as follows:

**Pre-Mining:**

S. No.	Land use	Within ML Area (HA)	Outside ML Area (HA)	Total
1.	Agricultural Land	235.24 (Private Land)	Nil	235.24 (Private Land)
2.	Forest Land	162.39	Nil	162.39
3.	Wasteland	62.37	Nil	62.37
4.	Grazing Land	-	Nil	-
5.	Surface Water Bodies	-	Nil	-
6.	Settlements	-	Nil	-
7.	Other (Specify)	-	Nil	-
<b>Total</b>		<b>460</b>	<b>Nil</b>	<b>460</b>

**Post- Mining:**

S. No.	Land use during Mining	Land Use (ha)				Total
		Plantation	Water Body	Public Use	Undisturbed	
1.	Mining	330	12	8	--	350
2.	Dump outside the quarry	63	--	--	--	63
3.	Mine Infrastructure	7		3		10

4.	Nalla Diversion	4	10	--	--	14
5.	Peripheral Road	3	--	4	--	7
6.	Safety Zone	16	--	--	--	16
7	Undisturbed Area	--	--	--	--	--
<b>Total</b>		<b>423</b>	<b>22</b>	<b>15</b>	<b>--</b>	<b>460</b>

Core area :

(xv) The total geological reserve is 189.8228 MT. The mineable reserve 170.838 MT, extractable reserve is 139.654 MT. The per cent of extraction would be 81.7%.

(xvi) The coal grade is D to G. The stripping ratio is 2.15 Cum/tonne. The average Gradient is 1:9 to 1:4. There will be twelve seams with thickness ranging upto 12 m.

(xvii) The total estimated water requirement is 830 m<sup>3</sup>/day. The level of ground water ranges from (Dug wells depth 12-15 m and Bore wells depth 30-50 m).

(xviii) The Method of mining would be mechanized opencast & High wall method of mining.

(xix) There are two external OB dump with quantity of 55.51 Mm<sup>3</sup> in an area of 63 ha with height of 110 m above the surface level and two internal dump with Quantity of 175 Mm<sup>3</sup> in an area of 63.0 ha.

(xx) There will be no mine void in the total quarry area of 350 ha. Backfilled quarry area of 350 ha shall be reclaimed with plantation. A void of 12 ha is proposed to be converted into a water body. Green belt will be developed in an area of 423 ha.

(xxi) The life of mine is 30 Years.

(xxii) Transportation: Coal transportation in-pit to surface by dumpers, by covered conveyer from stack yard to siding and loading by payloader on Railway wagons.

(xxiii) There is R & R involved. There are 201 PAFs.

(xxiv) Cost: Total capital cost of the project is Rs. 1300 Crores. CSR Cost: as per companies Act, 2013. R&R Cost Rs. 35.43 crores. Environmental Management Cost (capital cost Rs 80 crore and recurring cost Rs 10 crore).

(xxv) Water body: River Sukri flows through the ML area. In-principle approval for River diversion was issued to the prior allottee by Office of the Chief Engineer, Design Master Planning & Hydrology, Jharkhand vide letter No. 50 dated 18.01.2011 but fresh approval has to be obtained by Damodar Valley Corporation. River Auranga flows at a distance of 8.0 km in South direction from mine site

(xxvi) Approvals: Ground Water Clearance was issued to the prior allottee by Central Ground Water Authority, Ministry of Water Resources vide letter No. 2262 dated 17.09.2010 but it has to be obtained afresh by Damodar Valley Corporation (New allottee). Mining Plan/Mine closure plan approved from Ministry of Coal vide letter No. 13016/19/2009-CA-I dated 12.10.2009 & Mine Closure Plan vide Letter No. 34011-03-2011-CPAM dated 10.08.2011 and the both have been transferred in the name of Damodar Valley Corporation.

(xxvii) Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.

(xxviii) Forestry issues: Total forest area of 162.394 ha is involved for mining lease.

(xxix) Total afforestation plan shall be implemented covering an area of 423 ha at the end of mining with development of green belt over the area having density of tree plantation 2500 trees/ha.

(xxx) There are no court cases/violation pending with the project proponent.

**26.5.3** During deliberations on the proposal, the Committee noted the following:-

The proposal is for ToR to Tubed Opencast Coal Mine project of 6 MTPA of M/s Damodar Valley Corporation (DVC) in an area of 460 ha located in District Latehar (Jharkhand).

Total project area includes 162.394 ha of forest land. Application for Stage-I FC has been made online FP/JH/MIN/29167/2017 dated 12<sup>th</sup> July, 2017.

Mining Plan along and the Mine Closure Plan for the project was earlier approved by Ministry of Coal on 12<sup>th</sup> October, 2009 & 10<sup>th</sup> August, 2011 respectively transferred in the name of the present incumbent M/s Damodar Valley Corporation in pursuance of the allotment order dated 7<sup>th</sup> October, 2016 issued by O/o the Nominated Authority in the Ministry of Coal.

**19.4.4** *The EAC, after detailed deliberations, recommended the proposal for grant of ToR to the Tubed Opencast Coal Mine project of 6 MTPA of M/s Damodar Valley Corporation in an area of 460 ha located in District Latehar (Jharkhand), and for preparation of EIA/EMP reports with public consultation subject to compliance of all conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-*

- *Mining operations shall be carried out at a distance from the periphery as per the norms applicable, stipulated by the concerned regulatory authority and also per the safety regulations mandated with Director General of Mines Safety (DGMS).*
- *Stage-I forest clearance for diversion of 162.394 ha of forest land shall be obtained from the concerned regulatory authority.*
- *For proper baseline air quality assessment, adequate monitoring stations (4-5 nos) in the downwind areas need to be set up and included in the air quality modelling.*
- *Ecological restoration and mine reclamation plan to be prepared with local/native species found in the area.*
- *In-pit belt conveyor should be installed from the pit bottom up to the silo loading point/rapid loading system.*
- *Proposed external dump of 63 ha should be reduced to minimum and involvement of coal bearing area to be minimized for external OB dumps.*

## **Agenda No.26.6**

**Kedla Colliery (Kedla OCP and Kedla UGP) of capacity 1.18 MTPA (Normative)/1.57 MTPA (Peak) of M/s Central Coalfields Ltd in an area of 1417.99 ha in District Ramgarh (Jharkhand) - Further consideration for ToR**

**[IA/JH/CMIN/ 65553/2017, F.No.J-11015/60/2017-IA.II(M)]**

**26.6.1** The proposal is for grant of TOR to Kedla Colliery (consisting of Kedla OCP and Kedla UGP) of capacity 1.18 MTPA (Normative)/1.57 MTPA (Peak) of M/s Central Coalfields Ltd in an area of 1417.99 ha in District Ramgarh (Jharkhand).

**26.6.2** The proposal was last considered in the 13<sup>th</sup>EAC meeting held on 29<sup>th</sup> June, 2017 wherein observations of the Committee were as under:-

*“The EAC, after detailed deliberations, asked to project proponent to sort out the discrepancies, revise the Form-I accordingly and obtain necessary approval of the competent authority. The proposal was, therefore, deferred”.*

**26.6.3** During deliberations on the proposal, the Committee noted the following:-

The proposal is for grant of ToR to Kedla Colliery in a total area of 1417.99 ha, comprising Kedla OCP of 1.35 MTPA in an area of 1084.49 ha and Kedla UGP in an area of 333.50 ha.

Total forest area involved under the project is 631.29 ha (Kedla OCP-512.45 ha, Kedla UGP-118.84 ha). Status of diversion of forest land is reported to be as under:-

Forest land & status of diversion	Land area (ha)		
	Kedla OCP	Kedla UGP	Total
Notified forest land stage-I diverted	168.50	29.19	197.69
Forest land released before 1980	69.57	0.00	69.57
NPV paid for notified forest land	139.00	29.82	168.82
NPV paid for JJ in project area	135.38	59.83	195.21
Total	512.45	118.84	631.29

Earlier, separate Mining Plans for the Kedla OCP and Kedla UGP were approved by the Board of M/s Central Coalfields Ltd and accordingly there are separate mining leases also for the respective mines. The instant proposal has the approval of the Board of M/s CCL in its meeting held in December, 2017 without envisaging any unified Mining Plan and/or mining lease.

**26.6.4** *The EAC, after deliberations, was not convinced about the requirement of single EC to the Kedla Colliery project, involving two mines having separate Mining Plans and mining leases, and thus independent existence, both in terms of technical and administrative perspective. Further, in case of diversion of forest land, there was no clarity on the proposals for stage-I forest clearance and/or regularization of forest areas.*

**26.6.5** *The Committee found no rationale/merit in the proposal and insisted for the two mines to continue with the separate ECs. The proposal was, therefore, not recommended.*

### **Agenda No.26.7**

**Gare Palma Sector I, Phase-I, Integrated Coal Mining Project of 15 MTPA with a captive coal washery of 15 MTPA in an area of 3583.81 ha of M/s Gujarat State Electricity Corporation Limited in Tehsil Tamnar, District Raigarh (Chhattisgarh) - Amendment in ToR**



**[IA/CG/CMIN/60771/2016, F.No.J-11015/84/2016-IA.II(M)]**

**26.7.1** The proposal is for amendment in ToR granted to Gare Palma Sector I, Phase-I, Integrated Coal Mining Project of Production Capacity 21 MTPA (15 MTPA OC and 6 MTPA UG) with a captive coal washery of capacity 21 MTPA in an area of 3583.81 ha of M/s Gujarat State Electricity Corporation Limited in Tehsil Tamnar, District Raigarh (Chhattisgarh) vide letter No. J-11015/84/2016-IA-II(M) dated 19<sup>th</sup> May, 2017

**26.7.2** The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

(i) The TOR was granted to the project vide letter No. J-11015/84/2016-IA-II(M) dated 19<sup>th</sup> May, 2017 to Gare Palma Sector I, Phase-I, Integrated Coal Mining Project of Production Capacity 21 MTPA (15 MTPA OC and 6 MTPA UG) with a captive coal washery of capacity 21 MTPA in an area of 3583.81 ha of M/s Gujarat State Electricity Corporation Limited in Tehsil Tamnar, District Raigarh (Chhattisgarh)

(ii) Since MOC has restricted the rated production capacity of the project to Open Cast area only i.e 15 MTPA on 31<sup>st</sup> August, 2017, therefore requested for change in the capacity of the project to 15 MTPA each for OC and washery. However, the total area of the project remains same.

**26.7.3** *The EAC, after deliberations, recommended for amendment in the ToR in respect of capacity of the coal mining project from 21 MTPA to 15 MTPA (Opencast) and captive coal washery also from 21 MTPA to 15 MTPA with the total project area remaining the same i.e. 3583.81 ha. The terms and conditions stipulated in the ToR dated 19<sup>th</sup> May, 2017 for underground mining shall not be applicable, whereas all the other conditions shall remain unchanged.*

**Agenda No.26.8**

**Cluster No.4 (3 Mines of a combined prod. capacity of 6.35 MTPA (Normative) and 7.71 MTPA (Peak) in a combined ML area of 3350.02 of M/s Eastern Coalfields Limited, located in Raniganj Coalfields, District Burdwan, (West Bengal) - For amendment in EC**

**[IA/WB/CMIN/7370/2012, F.No.J-11015/106/2011-IA.II(M)]**

**26.8.1** The proposal is for amendment in Environmental clearance of Cluster No. 4 (group of 3 mines) project having EC capacity 7.71 MTPA (Peak) and Mine Lease Area of 3350.02 Ha (3353 Ha – 2.98 Ha forest land) of M/s Eastern Coalfields Limited, located in Raniganj Coalfields at Dist. – PaschimBardhaman (West Bengal).

**26.8.2** Cluster No. 4 (group of 3 mines) project having EC capacity 7.71 MTPA (Peak) and Mine Lease Area of 3350.02 Ha (3353 Ha – 2.98 Ha forest land) of M/s Eastern Coalfields Limited, located in Raniganj Coalfields at District Paschim Bardhaman (West Bengal) was granted Environmental Clearance vide Letter No.J-11015/106/2011-IA-II.(M) Dated 21<sup>st</sup> July, 2015.The project proponent has now requested for amendment in the said EC due to restructuring in individual mines of cluster, with the details as under:

SI No.	Name of the Mine	Type	Lease Area (Ha)	EC Capacity (MTY)	Life (Years)	SI No.	Proposed Change	Lease Area (Ha)	Proposed EC Capacity (MTY)	Change in Capacity (MTY)	Revised Life (Yrs)
As per EC						Revised Proposal for Amendment of EC					
1	Khoirabad UG	UG & OC	380.0	No UG potential. Coal at the in-crop is left which can be extracted by opencast only.		The mining lease has been transferred to other agency. Hence, the project has been dropped in this report.			0.0	(-) 0.13	-
	Khoirabad OC Patch (new proposal for extracting available reserves in about 10 Ha)			0.13	4						
2	Gaurandih UG	UG & OC	1865.0	0.08	> 50	1	No further underground mining possible in view of safety. Developed reserves to be extracted by OC method	1865.0	0.0	(-) 0.08	0
	Gaurandih Block – D Phase – I OC Patch			0.50	5		Amalgamated as Gaurandih and Gaurandih Begunia OC –		4.21	(+) 1.71	15
	Gaurandih-Begunia Phase – I OC Patch			2.0	7						
3	Itapara OC	OC	1108.0	5.0	26	2	Capacity and area reduced	855.87	3.50	(-) 1.50	26
	<b>Total</b>		<b>3353.0</b>	<b>7.71</b>	<b>-</b>		<b>No overall change in capacity. Area of cluster reduced.</b>	<b>2720.87</b>	<b>7.71</b>	<b>-</b>	<b>-</b>

It was informed by the project proponent that the Mining Plan was duly revised on the above lines and subsequently approved by the Board of M/s Eastern Coalfields Ltd.

**26.8.3** *The EAC was not convinced with the presentation, not reflecting the individual mine wise details in the present scenario vis-a-vis the proposed arrangement in the cluster. The project proponent was asked to rectify the same. The Committee also insisted for compliance status of the conditions stipulated in the EC dated 21<sup>st</sup> July, 2015, and consent to operate for the project from the State Pollution Control Board, against the said EC.*

*The proposal was, therefore, deferred.*

## **Agenda No.26.9**

**Cluster No. 9 group of 15 mines project of 6.25 MTPA (Normative)/8 MTPA (Peak) in ML area of 7145.4 ha M/s Eastern Coalfields Limited in District Burdwan (West Bengal) - For amendment in EC**

**[IA/WB/CMIN/8807/2011, F.No.J-11015/38/2011-IA.II(M)]**

**26.9.1** The proposal is for amendment in Environmental clearance of Cluster No.9 (group of 15 mines) project having EC capacity 8.00 MTPA (Peak) and Mine Lease Area of 7145.4 Ha of M/s Eastern Coalfields Limited, located in Raniganj Coalfields at District Paschim Bardhaman (West Bengal).

**26.9.2** Cluster No. 9 (group of 15 mines) project having EC capacity 8.00 MTPA (Peak) and Mine Lease Area of 7145.4 Ha of M/s Eastern Coalfields Limited, located in Raniganj Coalfields at Dist. – PaschimBardhaman (West Bengal) was granted Environmental Clearance vide Letter No. J-11015/38/2011.IA-II(M) Dated 23<sup>rd</sup> January, 2015 and further amended on vide even letter no. dated 23<sup>rd</sup> March 2017. As per EC Amendment, the number of mines in the cluster has been reduced from 15 to 12 owing to amalgamation of some mines. The project proponent has informed that the issue of 1 BT target of CIL and the contribution from mines of ECL towards achieving the target was deliberated in the meeting held at ECL on 30.12.2017, and based on the existing conditions, the project proponent has decided to introduce a new project, namely, Narainkuri OCP with a capacity of 2.5 MTPA in place of the non-starter Narainkuri UGP and to raise production from one other mine of the cluster, while, correspondingly, lowering the capacity of other mines of the cluster in which present conditions are not conducive to achieving the targeted production within the next few years, so as to achieve higher production from the cluster while keeping the overall capacity and area unchanged. In this regard, the capacities of Chapuikhas UG & OC, Tirat – Kuardih UG & OC, Nimcha UG & OC, J K Nagar UG & OC & Mahabir UG & OC have been reduced since the OC patches are either exhausted or could not be started owing to delays in land acquisition and, thus, dropped from the mining plan. The project proponent has now requested for amendment in the said EC due to restructuring in individual mines of cluster, with the details as under:

SI No.	As per Existing EC				As per Revised Proposal		
	Name of the Mine	Lease Area (Ha)	Production Capacity (MTY)	Mine Life (Years)	Proposed Amendment / New Proposal	Production Capacity (MTY)	Mine Life (Years)
1	Ratibati UG	249	0.04	> 40	No change	0.04	> 40
2	Chapuikhas UG	412	0.06	> 50	No change	0.06	> 50
	Chapuikhas OC Patch		0.15	1	Proposal dropped due to land acquisition problem; may be taken up in future	-	-
3	Amritnagar UG	279	0.60	> 50	No change	0.60	> 50
4	Tirat UG	214.5	0.15	> 10	No change	0.15	> 10
5	Kuardih UG	615	0.25	2	Proposal dropped due to techno-economic non-viability (higher stripping ratio); may be taken up in future	-	-
	Kuardih OC Patch						
6	Nimcha UG	890.2	1.08	> 40	No change	1.08	> 40
	Damalia OC Patch		0.40	1	Reserves Exhausted and is being backfilled	-	-
	Amkola/Nimcha OC Patch		0.25	3	Expansion in capacity and life	0.35	7
7	Ghusick UG & OC	376	1.93	> 25	No change	1.93	> 25
8	Kalipahari UG	299.5	0.10	> 50	Total output from KalipahariUG & OC patches taken together kept as 0.40 MTY instead of	0.40	UG > 50 years
	Kalipahari OC Patch A		0.30	Sequential			

Sl No.	As per Existing EC				As per Revised Proposal		
	Name of the Mine	Lease Area (Ha)	Production Capacity (MTY)	Mine Life (Years)	Proposed Amendment / New Proposal	Production Capacity (MTY)	Mine Life (Years)
	Kalipahari OC Patch B			operation for 4 years	assigning separate capacities for UG unit and OC units		OC = 4 years
	Kalipahari OC Patch C						
Kalipahari OC Patch D							
9	Muslia UG	948	Merged with mine at Sl. No. 7.		No change		
	Muslia OC Patch						
10	New Ghusick UG	224					
11	Jemehari UG	118	0.04	> 10	No change	0.04	> 10
12	J K Nagar UG	1237	0.20	> 50	No change	0.20	> 50
	J K Nagar OC Patch		0.40	3	Capacity Reduction as the Patch will not attain the desired capacity	0.22	3
	Pure Searsole OC Patch		0.12	1	Proposal dropped due to land acquisition problem; may be taken up in future	-	-
	MallickBasti OC Patch		0.26	1	Reserves exhausted and some portion backfilled; remaining area will be left as void filled with water and the water is being used by the local people	-	-
13	Damra UG	249	0.05	> 10	No change	0.05	> 10
14	Mahabir UG	241.2	0.03	> 25	No change	0.03	> 25
	MahabirOC		0.30	3	Reserves exhausted and is being backfilled	-	-
	Narainkuri OC Patch		0.40	4	Merged with mine at Sl. No. 15	-	-
	Egara OC Patch		0.35	5	No change	0.35	5
15	Narainkuri UGP	793	0.54	> 25	Capacity Enhancement.Narainkuri OCP.	2.50	24
Total		7145.40	8.00		No overall change in area and capacity	8.00	

It was informed by the project proponent that the Supplementary Mining Plan on the proposals for conversion of Narainkuri UGP to Narainkuri OCP and capacity and life enhancement in Amkola/Nimcha OC Patch was duly revised on the above lines and subsequently approved by the Board of M/s Eastern Coalfields Ltd.

**26.9.3** *The EAC was not convinced with the presentation, not reflecting the individual mine wise details in the present scenario vis-a-vis the proposed arrangement in the cluster. The project proponent was asked to rectify the same. The Committee also insisted for compliance status of the conditions stipulated in the EC dated 23<sup>rd</sup> January, 2015, amended on 23<sup>rd</sup> March, 2017, and consent to operate for the project from the State Pollution Control Board, against the said EC.*

*The proposal was, therefore, deferred.*

### **Agenda No.26.10**

**Cluster No.10 of 19 mines (expn. from 2 MTPA (Normative)/7.2 MTPA (peak) in a combined ML area of 6349 ha of M/s Eastern Coalfields Limited, located in Raniganj Coalfields, District Burdwan (West Bengal) - For amendment in EC**

**[IA/WB/CMIN/30610/2010, F.No.J-11015/180/2011-IA.II(M)]**

**26.10.1** The proposal is for amendment in environmental clearance of Cluster No.10 group of 19 mines (7.2 MTPA (Peak) in a combined ML Area of 6349 Ha) project of M/s Eastern Coalfields Limited, located in Raniganj Coalfields, District Paschim Bardhaman (WB).

**26.10.2** The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

(i) Cluster No.10 group of 19 mines (7.2 MTPA (Peak) in a combined ML Area of 6349 Ha) project of M/s Eastern Coalfields Limited, located in Raniganj Coalfields at District Paschim Bardhaman (West Bengal) was granted Environmental Clearance vide Letter No. J-11015/180/2011-IA-II.(M) dated 20<sup>th</sup> January, 2015.

(ii) In view of the revised production targets set by CIL, a re-assessment of mine capacities has been carried out for the cluster keeping the overall capacity of the cluster unchanged.

(iii) However, total lease hold area has been reduced from 6349 ha to 5979 ha due to overlapping of a Non-CIL Block (Andal Babuisol Block). Re-assessment / rationalization has been done based on present condition and capability of the mines for achieving optimum production levels.

(iv) The details of amendment sought in the said EC are as under:

Sl. No.	Name of Mine	Type	Lease hold Area (Ha)	EC Capacity (MTY)		Life (Years)	Proposed Change	Revised Lease hold Area (Ha)	Proposed EC Capacity (MTY)	Revised Life (Years)
		As per EC					Revised Proposal for Amendment of EC			
1	North Searsole UG	UG	360	0.20	2.0	>25	Amalgamated as North Searsole OCP	360	2.0	19
	North Searsole (East) OC Patch	OC		0.90		6				
	North Searsole (West) OC Patch	OC		0.90		7				
2	Kunustoria UG	UG	383	0.24		> 25	Capacity Reduction	383	0.15	> 25
3	Amrasota UG	UG		0.15		> 25	Capacity Reduction		-	-
4	Belbaid UG	UG	384	0.48	0.48	> 25	Capacity Reduction	384	0.12	> 25
	Belbaid OC Patch	OC		0.20		5	Capacity Reduction		-	-
5	Bansra UG	UG	611	0.735	0.735	> 25	Capacity Reduction	611	0.235	> 25
	Bansra OC Patch	OC		0.15		1	Capacity Enhancement		0.50	5
6	Parasea UG	UG	481	0.36	0.61	> 25	Capacity Reduction	481	0.30	> 25
	Parasea OC Patch	OC		0.25		3	No Change in capacity		0.25	5
7	Parasea 6 & 7 UG	UG			0.06		> 25		Capacity Reduction	
8	Jambad OC	OC	323	0.80		> 25	No Change in capacity	323	0.80	8
9	Jambad UG	UG		0.24		> 25	Capacity Reduction		0.20	> 25
10	Nabakajora UG	UG	703	0.30	0.80	> 25	Capacity Enhancement	336	0.10	> 15
11	Madhabpur UG	UG		0.50		15	Capacity Enhancement	367	1.13	> 25
	Madhabpur OC Patch	OC							1.00	>10
12	Lachipur UG	UG	570	0.06		> 25	Capacity	419	-	-

Sl. No.	Name of Mine	Type	Lease hold Area (Ha)	EC Capacity (MTY)	Life (Years)	Proposed Change	Revised Lease hold Area (Ha)	Proposed EC Capacity (MTY)	Revised Life (Years)
						Reduction			
13	Central Kajora UG	UG	291	0.15	> 25	Capacity Reduction	291	0.12	> 25
14	KhasKajora UG	UG	188	0.35	> 25	No Change	188	0.35	> 25
15	Moirra UG	UG	455	0.12	> 25	Capacity Reduction	455	0.06	2
16	Madhusudanpur UG	UG	338	0.24	> 25	Capacity Reduction	338	0.12	2
17	Madhujore UG	UG	463	0.12	> 25	Capacity Reduction	463	-	-
18	Ghanshyam UG	UG	451	0.12	> 25	Capacity Reduction	232	-	-
19	Parascole East & West	UG	348	0.39	> 25	Capacity Reduction	348	0.26	> 25
<b>Total</b>			<b>6349</b>	<b>7.70</b>			<b>5979</b>	<b>7.70</b>	

It was informed by the project proponent that the Mining Plan was duly revised on the above lines and subsequently approved by the Board of M/s Eastern Coalfields Ltd.

**26.10.3** *The EAC was not convinced with the presentation, not reflecting the individual mine wise details in the present scenario vis-a-vis the proposed arrangement in the cluster. The project proponent was asked to rectify the same. The Committee also insisted for compliance status of the conditions stipulated in the EC dated 20<sup>th</sup> January, 2015, and consent to operate for the project from the State Pollution Control Board, against the said EC.*

*The proposal was, therefore, deferred.*

#### **Agenda No.26.11**

**Coal Washery of 2.5 MTPA in an area of 9.93 ha of M/s Phil Coal Beneficiation Pvt Ltd at Village Ghutku Tehsil Takhatpur, District Bilaspur (Chhattisgarh) - For Amendment in EC**

**[IA/CG/CMIN/34509/2015, F.No.J-11015/418/2015-IA.II(M)]**

**24.7.1** The proposal is for amendment in EC granted vide letter No. J-11015/418/2015-IA-II(M) dated 31<sup>st</sup> July, 2017 to Coal Washery of 2.5 MTPA in an area of 9.93 ha of M/s Phil Coal Beneficiation Pvt Ltd at Village Ghutku Tehsil Takhatpur, District Bilaspur (Chhattisgarh)

**24.7.2** The project proponent has requested for amendment in the said Environmental Clearance in respect of one of the specific condition with the details as under:-

Condition No. in EC	Condition	Reason & Amendment required
Specific Condition	Transport of raw coal, clean coal,	During the presentation held on 30 <sup>th</sup> May, 2017, the Expert Appraisal Committee (EAC) was informed as under:-

Condition No. in EC	Condition	Reason & Amendment required
No. vi	middling and rejects shall be by rail with wagon loading through silo	<ul style="list-style-type: none"> <li>➤ ROM Coal from SECL mines, washed coal and washery rejects will be transported by road/rail.</li> <li>➤ Railway siding is envisaged in the proposed project.</li> <li>➤ Transportation of raw coal from the SECL mines in the region depends on their rail connectivity, availability of rakes for short distance and permission from SECL to do so.</li> <li>➤ Washed coal from the plant will be transported by rail/road in covered trucks directly to the customer. The mode of transport of washed coal will depend on the MoU with the customers who may have either road transport or rail transport.</li> <li>➤ Wagon loading through silo is a system adopted in big integrated steel plant/mega power Plant of 4000 MW or above, which will have coal washery attached to the main plant of the size of 10 MTPA or more. The minimum capacity of the loading through silo is 7-10 rakes per day, whereas our total project it would be around 1-2 rakes per day.</li> <li>➤ Wagon loading through silo is itself a big project, with an investment of around Rs.75 crores, whereas our total project cost itself is Rs 25 Crores.</li> <li>➤ Hence wagon loading through silo is not feasible for a project like ours, with an investment of Rs.25 Crores.</li> </ul>

In view of the above, amendment in EC has been sought for

- 60% rail transport and 40% road transport.
- Wagon loading through silo to be exempted due to not feasible for the project.

**24.7.3** During deliberations, the EAC noted the following:-

The proposal is for amendment in environmental clearance dated 31<sup>st</sup> July, 2017 to the coal washery of 2.5 MTPA of M/s Phil Coal Beneficiation Pvt Ltd in an area of 9.93 ha at village Ghutku, Tehsil Takhatpur, District Bilaspur (Chhattisgarh).

One of the specific conditions (vi) stipulated in the EC reads as under-

*‘Transport of raw coal, clean coal, middling and rejects shall be by rail with wagon loading through silo.’*

The amendment has been sought in respect of the above specific condition for the reasons explained in para 24.7.2 above.

**24.7.4** *The EAC, after deliberations on the proposal and the justification for revision in the specific condition (vi), recommended for exempting the project from wagon loading through silo for a period of two years only, and to review its requirement from February, 2020 onwards.*

*Similarly, in case of coal transportation, the Committee agreed for dual system of transport (road/rail) depending upon connectivity of the coal mine and/or the washed coal user, for a period of two years. However, the Committee insisted for maximum transport of raw coal through rail. Accordingly, the specific condition shall be replaced with and read as under-*

*'Transport of raw coal, washed coal and the rejects shall be through road/rail (60% by rail and 40% by road) with the exemption from wagon loading through silo, for a period of two years i.e. up to January, 2020 only.*

### **Agenda No.26.12**

**Bellampalli OC-II expansion from 0.40 MTPA to 1.0 MTPA in an area of 191.98 ha by M/s SCCL located near village AbbapurTandur Mandal of Komaram Bheem in Districts Asifabad & Mancherial (Telangana) - Further Consideration for ToR**

**[IA/TG/CMIN/64565/2017, F.No.J-11015/46/2017-IA.II(M)]**

**26.12.1** The proposal is for grant of ToR to Bellampalli OC-II expansion from 0.40 MTPA to 1.0 MTPA in an area of 191.98 ha by M/s SCCL located near village AbbapurTandur Mandal of Komaram Bheem in Districts Asifabad & Mancherial (Telangana).

**26.12.2** The proposal was last considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Projects in its 15<sup>th</sup> EAC meeting held on 25<sup>th</sup> July, 2017. The EAC, after detailed deliberations, opined for first resolving the following issues:-

- If the project proponent SCCL, although NABET accredited, can prepare the EIA/EMP report for its own project to refrain from any conflict of interest.
- The discrepancy in respect of forest areas, i.e. 117 ha reflected in the earlier EC and 137.40 ha proposed now in the same mine lease area 191.98 ha.

**26.12.3** *The EAC, after detailed deliberations, recommended the project for grant of ToR exempting public hearing to the proposal for expansion of Bellampalli OC-II from 0.40 MTPA to 1.0 MTPA by M/s Singareni Collieries Company Limited (SCCL) in an area of 191.98 ha located near village Abbapur Tandur Mandal of Komaram Bheem in District Asifabad & Mancherial (Telangana), and for preparation of EIA/EMP reports, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-*

- *For proper baseline air quality assessment, adequate monitoring stations as per the extant guidelines/norms, in the downwind areas need to be set up and included in the air quality modelling.*
- *Ecological restoration and mine reclamation plan to be prepared with local/native species found in the area.*





### **Agenda No.26.13**

**Kakatiya Khani Opencast-III Phase-I (KTK OC-III Phase-I) coal mining project for production capacity of 2.50 MTPA (Normative)/3.00 MTPA (Peak) in an area of 1555.31 ha of M/s Singareni Collieries Company Limited (SCCL) located in village Baswarajupalli, Mandal Ghanpur, Districts Jayashankar & Bhoopalpalli (Telangana) - Further consideration of ToR**

**[IA/TG/CMIN/67085/2017, F.No.J-11015/65/2017-IA.II(M)]**

**26.13.1** The proposal is for terms of reference to the Kakatiya Khani Opencast –III Phase –I (KTK OC-III Phase –I) coal mining project for production capacity of 2.50 MTPA (Normative) /3.00 MTPA (Peak) in the project area of 1555.31 ha of M/s Singareni Collieries Company Limited (SCCL) located in villages Baswarajupalli, Mandal Ghanpur, Districts Jayashankar & Bhoopalpalli (Telangana) by converting Underground mine to Opencast mine.

**26.13.2** The proposal was last considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Projects in its 17<sup>th</sup> meeting held on 31<sup>st</sup> August, 2017. During the meeting, the EAC, after detailed deliberations and given the proposed conversion of coal mine from UG to Opencast, preferred for the prior Mining Plan duly approved by the competent authority namely, Ministry of Coal, which was reported to be under process. The Committee further opined that the Ministry may also indicate its stand on preparation of EIA/EMP Reports by the project proponent.

**26.13.3** *The EAC, after detailed deliberations, recommended the project for grant of ToR to the Kakatiya Khani Opencast-III Phase-I (KTK OC-III Phase-I) coal mining project for production capacity of 2.50 MTPA (Normative)/3.00 MTPA (Peak) of M/s Singareni Collieries Company Limited (SCCL) in an area of 1555.31 ha located in village Baswarajupalli, Mandal Ghanpur, Districts Jayashankar & Bhoopalpalli (Telangana), and for preparation of EIA/EMP reports with public consultation, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-*

- *For proper baseline air quality assessment, adequate monitoring stations as per the extant guidelines/norms, in the downwind areas need to be set up and included in the air quality modelling.*
- *Ecological restoration and mine reclamation plan to be prepared with local/native species found in the area.*

### **Agenda No.26.14**

**Expansion of Kakatiya Khani-5 (KTK-5) Incline UG Coal Mine project from 0.6 MTPA to 1.44 MTPA along with increase in project area from 316.65 ha to 516.39 ha of M/s Singareni Collieries Company Limited (SCCL) located in village Bhoopalpalli, Mandal Bhoopalpalli, District Jayashankar Bhoopalpalli (Telangana) - Further Consideration for TOR**

**[IA/TG/CMIN/67087/2017, F.No.J-11015/67/2017-IA.II(M)]**

**26.14.1** The proposal is for granting TOR to expansion project of Kakatiya Khani -5 (KTK-5) Incline UG Coal Mine from 0.6 MTPA to 1.44 MTPA along with increase in project area from

316.65 ha to 516.39 ha of M/s Singareni Collieries Company Limited (SCCL) located in village Bhoopalpalli, Mandal Bhoopalpalli, District Jayashankar Bhoopalpalli (Telangana).

**26.14.2** The proposal was last considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Projects in its 17<sup>th</sup> meeting held on 31<sup>st</sup> August, 2017. During the meeting, the Committee, after detailed deliberations and given the proposed conversion of coal mine from UG to Opencast, preferred for the prior Mining Plan duly approved by the competent authority namely, Ministry of Coal, which was reported to be under process. The Committee further opined that the Ministry may also indicate its stand on preparation of EIA/EMP Reports by the project proponent.

**26.14.3** *The EAC, after detailed deliberations, recommended the project for grant of ToR to the Expansion of Kakatiya Khani-5 (KTK-5) Incline UG Coal Mine project from 0.6 MTPA to 1.44 MTPA along with increase in project area from 316.65 ha to 516.39 ha by M/s Singareni Collieries Company Limited (SCCL) located in village Bhoopalpalli, Mandal Bhoopalpalli, District Jayashankar Bhoopalpalli (Telangana), and for preparation of EIA/EMP reports with public consultation, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-*

- For proper baseline air quality assessment, adequate monitoring stations as per the extant guidelines/norms, in the downwind areas need to be set up and included in the air quality modelling.*
- Ecological restoration and mine reclamation plan to be prepared with local/native species found in the area.*
- Since the mine is working in forest area though by UG method but the coal seams being highly incline and are in succession it is quite likely that subsidence may accure due to longwall mining on caving. Therefore it is proposed that a study about its impact on forest area flora and fauna may be conducted on the area affected by the coal mining activities. if there is any impact on surface water drainage pattern may also be included in the study.*

#### **Agenda No.26.15**

**Discussion on any other item.**

**PARTICIPANTS IN 26<sup>th</sup> EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 15<sup>th</sup> - 16<sup>th</sup> February, 2018 ON COAL SECTOR PROJECTS.**

Sl. No.	List Of Participants Expert Appraisal Committee (Coal Mining)	
1.	Dr. Navin Chandra	Chairman
2.	Dr. Narmada Prasad Shukla	Member
3.	Dr.Sharachchandra Lele	Member
4.	Dr. Jai Krishna Pandey	Member
5.	Sh. N.S. Mondal	Member
6.	Shri S D Vora	Member
7.	Prof. S.K.Sinha	Member
8.	Dr.R.K.Gir	Member
9.	Shri S.K.Srivastava	Member Secretary

**PARTICIPANTS IN 26<sup>th</sup> EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 15<sup>th</sup> - 16<sup>th</sup> February. 2018 ON COAL SECTOR PROJECTS.**

**26.1 Parsa OCP of M/s Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.**

- 1.Shri Prakash Isa
- 2.Shri Uma Shankar
- 3.Shri Cheruku Dayanand
- 4.Shri K.R.Singh
5. Shri Pramod Kumar
- 6.Shri Brzish Kr.Singh
- 7.Shri N.K.Prasad
- 8.Shri Abinash
- 9.Shir Sohin 2
- 10.Shri Manmohan
- 11.Shri Raghav

**26.2 Tapin South Exp.OCP of M/s Central Coalfields Limited**

**26.6 Kedla Colliery OCP &UG Mine of M/s CCL**

1. Shri A.K.Das
- 2 Shri S.Singh
- 3.Shri J.Chakravorty
- 4.Shri Pushkar
5. Shri Ravi Ranjan
- 6.Shri Laxmideep G.
- 7.Shri Kishore Chaudhary
- 8.Shri Debasi Bandyopadhyay

**26.3 Cluster –IV (5 Mixed Mine) of M/s BCCL**

1. Shri D.Gangopadhyay
2. Shri Dr.Evr Raju
- 3.Shri A.Prasad
- 4.Shri Kumar Ranjeev
5. Shri Rajeev Kr. Singh
6. Shri Amit Raj Mishra
- 7.Shri Pallavi Priya

**26.4 M/s Hind Multi Services Pvt.Ltd.**

1. Shri Pawan
2. Shri Rajeev Agarwal
3. Shri Rajesh S.Shriwastava
4. Shri N.K.Prasad
- 5..Shri Abhik Mukherjee

**26.5 Tubed Coal Mine of M/s Damodar Velly Corporation (DVC)**

- 1. Shri Mohan Jha
- 2. Shri J.K.Mandiye
- 3.Shri Prerna Sharma
- 4.Shri A.K Jadav

**26.7 Gare Palma Sector - 1 of M/s GSECL.**

- 1. Shri H.N.Baxi
- 2. Shri H.D.Joshi
- 3.Shri A.B.Jaiswal
- 4.Shri C.G.Parekh
- 5. Shri Nandni Chaudhary
- 6. Shri K.D.Choudhary

**26.8 Cluster No - 4 (Group of 3 Mines) of M/s ECL**

**26.9 Cluster No -9 (Group of 15 Mines of M/s ECL**

**26.10 Cluster No -10 (Group of 19 Mines of M/s ECL**

- 1. Shri S.K.Jha
- 2. Shri B.N.Prasad
- 3.Shri P.Choudhary
- 4.Shri A.Shekhar
- 5. Shri S.Kundu
- 6. Shri S.Kurdu
- 7.Shri S.K.Pashmira
- 8.Shri S.Chakrasty

**26.11 M/s Phil Coal Beneficaiation Pvt Ltd.**

- 1. Shri Pradip Jha
- 2. Shri Y.M.Reddy

**26.12 Bellampalli of M/s SCCL**

**26.13 Kakatiya Khani –III OCP of M/s SCCL**

**26.14 Kakatiya Khani –5 OCP of M/s SCCL**

- 1. Shri B.Bhaskara Rao
- 2. Shri P.Satharah
- 3. Shri P.Ravi Kiran
- 4. Shri V.Srinivasa Rao

**26.15 Discussion on any other item**

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### **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 Govt.
- viii. Data of one-season (non-monsoon) primary- base-line data on environmental quality of air (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub> and NO<sub>x</sub>, 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-II013/25/2014-IA.I dated 11<sup>th</sup> August, 2014 to be followed with regard to CSR activities.
  - xv. Details of Public Hearing, Notice(s) issued in newspapers, proceedings/minutes of Public Hearing, points raised by the general public and response/commitments made by the proponent along with the Action Plan and budgetary provisions be submitted in tabular form. If the Public Hearing is in the regional language, an authenticated English translation of the same should be provided. Status of any litigations/ court cases filed/pending, if any, against the project should be mentioned in EIA.
  - xvi. Analysis of samples indicating the following be submitted:
    - Characteristics of coal prior to washing (this includes grade of coal, other characteristics of ash, S and heavy levels of metals such as Hg, As, Pb, Cr etc).
    - Characteristics and quantum of coal after washing.
    - Characteristics and quantum of coal rejects.
  - xvii. Details of management/disposal/use of coal rejects should be provided. The rejects should be used in TPP located close to the washery as far as possible. If TPP is within a reasonable distance (10 km), transportation should be by conveyor belt. If it is far away, the transportation should be by rail as far as possible.
  - xviii. Copies of MOU/Agreement with linkages (for stand-alone washery) for the capacity for which EC is being sought should be submitted.
  - xix. Corporate Environment Responsibility:
    - a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
    - b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
    - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
    - d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
  - xx. A detailed action Plan for Corporate Social Responsibility for the project affected people and people living in and around the project area should be provided.
  - xxi. Permission of drawl of water shall be pre-requisite for consideration of EC.
  - xxii. Wastewater /effluent should 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.

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**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:

Sl. No.	Landuse	Within ML area (ha)	Outside ML area (ha)	Total
1.	Agricultural land			
2.	Forest land			
3.	Wasteland			
4.	Grazing land			
5.	Surface water bodies			
6.	Settlements			
7.	Others (specify)			
	TOTAL			

- (xii) Break-up of lease/project area as per mining plan should be provided.
- (xiii) Impact of changes in the land use due to the project if the land is predominantly agricultural land/forestland/grazing land, should be provided.
- (xiii) One-season (other than monsoon) primary baseline data on environmental quality - air (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, NO<sub>x</sub> and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.
- (xiv) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.
- (xv) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.
- (xvi) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should

be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.

- (xvii) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
- (xviii) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- (xix) Detailed water balance should be provided. The break-up of water requirement for the various mine operations should be given separately.
- (xx) Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users in the upstream and downstream of the project site. should be given.
- (xxi) Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
- (xxii) Impact of blasting, noise and vibrations should be given.
- (xxiii) Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
- (xxiv) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
- (xxv) Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
- (xxvi) 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.
- (xxvii) 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.
- (xxviii) 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.
- (xxix) 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 <sup>st</sup> Year)	5 <sup>th</sup> Year	10 <sup>th</sup> Year	20 <sup>th</sup> Year	24 <sup>th</sup> Year (end of mine life)*
1.	Backfilled Area(Reclaimed with plantation)					
2.	Excavated Area (not reclaimed)/void					
3.	External OB dump Reclaimed with plantation)					
4.	Reclaimed Top soil dump					
5.	Green Built Area					
6.	Undisturbed area (brought under plantation)					
7.	Roads (avenue plantation)					
8.	Area around buildings and Infrastructure					
	TOTAL					

\* As a representative example

Table 2 : Stage Wise Cumulative Plantation

S.N.	YEAR*	Green Belt		External Dump		Backfilled Area		Others(Undisturbed Area/etc)		TOTAL	
1.	1 <sup>st</sup> year										
2.	3 <sup>rd</sup> year										
3.	5 <sup>th</sup> year										
4.	10 <sup>th</sup> year										
5.	15 <sup>th</sup> year										
6.	20 <sup>th</sup> year										
7.	25 <sup>th</sup> year										
8.	30 <sup>th</sup> year										
9.	34 <sup>th</sup> year(end of mine life)										
10.	34- 37 <sup>th</sup> Year										

	(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 Mining	Land Use (ha)				
		Plantation	Water Body	Public Use	Undisturbed	TOTAL
1.	External OB Dump					
2.	Top soil Dump					
3.	Excavation					
4.	Roads					
5.	Built up area					
6.	Green Belt					
7.	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 socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.

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

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26/02/2018

[https://mail.gov.in/iwc\\_static/layout/shell.html?lang=en&3.0.1.2.0\\_15121607](https://mail.gov.in/iwc_static/layout/shell.html?lang=en&3.0.1.2.0_15121607)

Subject: **Approved Minutes of the EC Meeting.**

To: Srivastava Additional Director <sk.smree66@nic.in>,  
"S.K Srivastava" <sk.smree66@gov.in>,  
Purushottam Ramdas Sakhare <sakhare.pr@nic.in>

Date: 02/26/18 10:04 AM

From: navin chandra <navinchandrarrl@yahoo.com>

Draft MOM of 26th EAC 15-16 Feb 2018 as on 24.02.2... (170kB)

26/02/2018

Dear Dr. Shrivastava Ji,

I have gone through the minutes sent by you. There are two minor corrections as discussed also with you on the phone. The finalized document of the Minutes is attached with this e-mail.  
Regards,

yours sincerely,

(NAVIN CHANDRA)

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Dr. Navin Chandra,  
Director General  
M P Council of Science and Technology (MPCST),  
Vigyan Bhawan, Nehru Nagar, Bhopal - 462003 (M.P.) India  
Phone : 91-755- 2671800 (Office)  
e-mail : dg@mpcost.nic.in  
navinchandrarrl@yahoo.com, navinchandraampri@gmail.com

**26<sup>th</sup> EAC (THERMAL & COAL MINING PROJECTS) MEETING  
SCHEDULED FOR 15-16 February, 2018.**

**AGENDA**

Venue: Teesta Conference Hall, 1<sup>st</sup> 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 send soft copies of all project-related documents that have been uploaded onto the MOEFCC website to EAC members by e-mail [indicating agenda item numbers] immediately upon receiving this communication, and send hard copies of the same documents [indicating agenda items] to all the EAC members, at least one week prior to the meeting and ensure the receipt of same.
  - iii. Non receipt of the project will lead to deferment of the project.
  - iv. Please also provide a hard copy of presentation to the EAC Members during the meeting.
  - v. The Project Proponent should carry the KML/Shape Files of the mine lease area at the time of presentation before EAC and to present on the details of mine lease online to show the present status of mine lease
  - vi. The KML/Shape files should be emailed on the below mentioned email addresses at least 10 days prior to the meeting
  - vii. The Project Proponent to show the transportation route of minerals on maps during presentation.
  - viii. Without this information, EAC has discretion to invite the proponent for the meeting.
  - ix. No consultant is permitted into the meeting who has no accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) as per the MoEF OM dated 2nd December, 2009
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**COAL MINING PROJECTS**

**Time: 10.00 AM: Thursday: 15 February, 2018**

- 26.1** Parsa Opencast Coal Mine Project of 5 MTPA and Pit Head Coal Washery of 5 MTPA of M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited in a total area of 1252.447 ha at Hasdeo-Arand Coal Field in Districts Surguja & Surajpur (Chhattisgarh) – For EC

**[IA/CG/CMIN/59215/2016, F No. J-11015/76/2016- IA.II(M)]**



- 26.2** Tapin South Expansion OCP (0.06 MTPA to 2.00 MTPA Normative & 0.6 MTPA to 2.50 MTPA Peak in an ML area 134.56 ha to 188.66 ha for Phase-I and 223.05 ha to 277.15 ha for Phase-II; of M/s Central Coalfields Limited, located in District Ramgarh (Jharkhand)- For EC

**[IA/JH/CMIN/18640/2013, F No. J-11015/155/2013- IA.II(M)]**

- 26.3** Expansion of Cluster-IV (5 mixed mines) Coal Mining Project from 3.706 MTPA (Peak) to 7.34 MTPA (Normative)/9.55 MTPA (Peak) in ML area of 1123.79 ha of M/s Bharat Coking Coal Ltd, District Dhanbad (Jharkhand) - For further consideration of EC

**[IA/JH/CMIN/20227/2013, F.No.J-11015/372/2013-IA.II(M)]**

- 26.4** Coal Washery of 2.5 MTPA of M/s Hind Multi Services Pvt. Ltd in an area of 10.11 ha located in District Bilaspur (Chhattisgarh) - For further consideration of EC

**[IA/CG/CMIN/20270/2013, F.No.J-11015/410/2013-IA.II(M)]**

- 26.5** Tubed Coal Mine Project of 6 MTPA in ML area of 460 ha of M/s Damodar Valley Corporation located in District Latehar (Jharkhand) - For TOR

**[IA/JH/CMIN/65302/2017, F No. J-11015/54/2017- IA.II(M)]**

- 26.6** Kedla Colliery (consisting of Kedla OCP and Kedla UGP) of capacity 1.18 MTPA (Normative)/1.57 MTPA (Peak) of M/s Central Coalfields Ltd in an area of 1417.99 ha in District Ramgarh (Jharkhand) - Further consideration for TOR.

**[IA/JH/CMIN/ 65553/2017, F.No.J-11015/60/2017-IA.II(M)]**

- 26.7** Gare Palma Sector I, Phase-I, Integrated Coal Mining Project of Production Capacity 21 MTPA with a captive coal washery of capacity 21 MTPA, of M/s Gujarat State Electricity Corporation Limited in Tehsil Tamnar, District Raigarh (Chhattisgarh) – Amendment in TOR

**[IA/CG/CMIN/60771/2016, F.No.J-11015/84/2016-IA.II(M)]**

- 26.8** Cluster No.4 (3 Mines of a combined prod. capacity of 6.35 MTPA (Normative) and 7.71 MTPA (Peak) in a combined ML area of 3350.02 (3353 Ha - 2.98 ha) of M/s Eastern Coalfields Limited, located in Raniganj Coalfields, District Burdwan, (West Bengal) - For amendment in EC

**[IA/WB/CMIN/7370/2012, F.No.J-11015/106/2011-IA.II(M)]**

**Time: 10.00 AM: Friday: 16 February, 2018**

**26.9** Cluster No. 9 group of 15 mines project of 6.25 MTPA (Normative)/8 MTPA (Peak) in ML area of 7145.4 ha M/s Eastern Coalfields Limited in District Burdwan (West Bengal) - For amendment in EC

**[IA/WB/CMIN/8807/2011, F.No.J-11015/38/2011-IA.II(M)]**

**26.10** Cluster No. 10 of 19 mines (expn. from 2 MTPA(Normative) to 7.2 MTPA (peak) in a combined ML area of 6349 ha of M/s Eastern Coalfields Limited, located in Raniganj Coalfields, District Burdwan (West Bengal) - For amendment in EC

**[IA/WB/CMIN/30610/2010, F.No.J-11015/180/2011-IA.II(M)]**

**26.11** Coal Washery of 2.5 MTPA in an area of 9.93 ha of M/s Phil Coal Beneficiation Pvt Ltd at Village Ghutku Tehsil Takhatpur, District Bilaspur (Chhattisgarh) – For Amendment in EC

**[IA/CG/CMIN/34509/2015, F.No.J-11015/418/2015-IA.II(M)]**

**26.12** Bellampalli OC-II expansion from 0.40 MTPA to 1.0 MTPA in an area of 191.98 ha by M/s SCCL located near village Abbapur Tandur Mandal of Komaram Bheem in District Asifabad & Mancherla (Telangana)- Further Consideration for TOR

**[IA/TG/CMIN/64565/2017, F.No.J-11015/46/2017-IA.II(M)]**

**26.13** Kakatiya Khani Opencast-III Phase-I (KTK OC-III Phase-I) coal mining project for production capacity of 2.50 MTPA (Normative)/3.00 MTPA (Peak) in an area of 1555.31 ha of M/s Singareni Collieries Company Limited (SCCL) located in village Baswarajupalli, Mandal Ghanpur, Districts Jayashankar & Bhoopalpalli (Telangana) – Further Consideration for TOR

**[IA/TG/CMIN/67085/2017, F.No.J-11015/65/2017-IA.II(M)]**

**26.14** Expansion of Kakatiya Khani-5 (KTK-5) Incline UG Coal Mine project from 0.6 MTPA to 1.44 MTPA along with increase in project area from 316.65 ha to 516.39 ha of M/s Singareni Collieries Company Limited (SCCL) located in village Bhoopalpalli, Mandal Bhoopalpalli, District Jayashankar Bhoopalpalli (Telangana) - Further Consideration for TOR

**[IA/TG/CMIN/67087/2017, F.No.J-11015/67/2017-IA.II(M)]**

**26.15 Discussion on any other item.**