

Minutes of the 32nd meeting of the EAC held on 28th June, 2018 for appraisal of Coal mining projects at Indira Paryavaran Bhawan, Ministry of Environment, Forest and Climate Change, New Delhi-3

A. The 32nd meeting of the Expert Appraisal Committee (EAC) for Thermal & Coal mining projects was held on 28th June, 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 30th meeting of the EAC held on 17-18 May, 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.32.1

Cluster XVII Kalyaneshwari OCP Project 5.20 MTPA (Peak) and Kalyaneshwari Washery 3.65 MTPA capacity in ML area of 1844.09 ha of M/s Bharat Coking Coal Ltd located at District Burdwan (West Bengal) - For EC

[IA/WB/CMIN/20226/2013, F.No.J-11015/373/2013-IA.II(M)]

32.1.1 The proposal is for environmental clearance to Cluster XVII Kalyaneshwari OCP Project 5.20 MTPA Peak and Kalyaneshwari Washery 3.65 MTPA capacity of M/s Bharat Coking Coal Ltd in ML area of 1844.09 ha located in District Burdwan (West Bengal).

32.1.2 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:-

32.1.3 The proposal is for grant of environmental clearance to Cluster XVII group of mines including Kalyaneshwari OCP of capacity 5.20 MTPA (Peak) and Kalyaneshwari Washery Project of 3.65 MTPA of M/s Bharat Coking Coal Ltd in an area of 1844.09 ha, located in District Burdwan (West Bengal) against ToR granted vide letter no. J-11015/373/2013-IA.II (M) dated 21 May, 2014 and extended on 25.12.2018. The details of Cluster-XVII is as under:

Sl. No.	Name of Colliery/Washery	Normative Prod. (MTPA)	Peak Prod. (MTPA)	Lease Hold (ha)
1	Begunia Colliery (Closed for Production)	0	0	306.00
2	Victoria West Colliery (Closed for Production)	0	0	310.00
3	Victoria Colliery (Closed for Production)	0	0	0 (223 ha merged in proposed Kalyaneshwari OC)

4	Damagoria Colliery (Closed for Production)	0	0	0 (620 ha merged in proposed Kalyaneshwari OC)
5	<u>Proposed Kalyaneshwari OCP (KOCP)</u>	4.00	5.20	1212.43 (223 ha in the LH of Victoria Colliery, 620 ha in the LH of Damagoria Colliery & 369.33 Ha outside LH (for external OB Dumping)
6	Proposed Kalyaneshwari Coal Washery with approach road	3.60	3.60	15.66
Cluster XVII (total)		4.00	5.20	1844.09

32.1.4 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) MoEF approved Cluster concept for Raniganj Coalfield vide letter dated J-11015/09/2010-IA.II(M), dated 27.04.2010 and directed to apply for ToR for cluster XVI and XVII accordingly . The EC to Cluster XVI was granted on 6th Feb 2013.

(ii) The Expert Appraisal Committee prescribed the 'Terms of Reference' for the cluster-XVII (vide letter J-11015/184/2010-IA.II(M), dated 28.05.2010)for normative capacity of 0.035 MTPA and Peak Capacity of 0.0455 MTPA for mining lease area of 833.13 ha. The environmental baseline data was generated and draft EMP was submitted to WBPCB in Nov 2011 for Conducting PH.

(iii) Meanwhile, the Kalyaneshwari Block that was transferred earlier to West Bengal Power Development Corporation vide Ministry of Coal Order No. 38306/46/2006-CA-1 dated 27th Feb 2009, was subsequently de-allocated by Ministry of Coal and has been allocated back to Coal India /BCCL .This Kalyaneshwari Block now falls under Cluster –XVII group of mines of BCCL.

(iv) Considering the above BCCL has applied for a fresh TOR for Peak production 5.2 MTPA and a washery of 3.65 MTPA capacity within the lease hold area of Cluster XVII. The earlier ToR was withdrawn by BCCL in October, 2013.

(v) The Expert Appraisal Committee prescribed the 'Terms of Reference' for the cluster which was issued by MoEF&CC vide letter no. J-11015/373/2013-IA.II (M) dated 21 May, 2014.

(vi) Base Line Data for the project was generated from Jan-16 to March-16 by PDIL Sindri and M/s VRDS Consultants, Chennai.

(vii) Further MOEF&CC approved extension of validity of ToR for Cluster XVII vide letter no. J-11015/373/2013-IA.II (M)pt dated 25 Dec, 2017.

(viii) Public Hearing was held on 27.04.2018.

(ix) The latitude and longitude of the Cluster are as under-
Latitude - 23043'8" to 23046'26" North and
Longitude - 86047'46 to 86052'11" East

(x) Coal linkage: The major production from the project will be dispatched to Steel & Power plants after washing. Rest coking coal will be linked to the nearby coking coal washery. The jhama produced from the mine may be marketed as power grade coal of G7 to G8 depending on its calorific value.

(xi) Employment generated/to be generated: The direct employment generation is estimated to be 512. Other than this, indirect employment in secondary and tertiary sectors shall also be generated.

(xii) Benefits of the project: Mining in the area will provide direct and indirect employment opportunities. It will bridge the gap of demand and supply of coal in India and facilitate in meeting the requirement of Coking coal, substantial savings in foreign exchange. It will boost up the local and regional economy and will have direct contribution to the state exchequer. It will also bring enhanced Socio-economic benefits to local population as per CIL's CSR Policy.

(xiii) The total area of the Cluster/project is 1844.09 The details of land use of the cluster is as under:

Sl.No.	Type of land use		Present mining land use (in ha)	Post-mining land use (in ha)
1	Running Quarry	Backfilled	0.00	0.00
		Not Backfilled	0.00	0.00
2	Abandoned Quarry	Backfilled	48.12	0.00
		Not Backfilled	42.14	0.00
3	External OB dump		16.64	0.00
4	Service building/ Mine Infrastructure		27.20	0.00
5	Homestead land		197.91	93.26
6	Old Coal dump		3.31	0.00
7	Road and rail		64.86	48.76
8	Agricultural Land		557.81	164.32
9	Forest Land		0.00	0.00
10	Plantation		24.78	871.87
11	Water Body		130.08	136.52
12	Barren Land		731.24	529.36
	Total		1844.09	1844.09

(xiv) Total estimated water requirement is 1691 m³/day. The level of ground water ranges 0.45-3.37 m below ground level in pre-monsoon and 1.15-2.00 m below ground in post-monsoon period.

(xv) The Method of mining would be opencast.

(xvi) Total volume of OB to be generated is 418.73 Mm³ (including Alluvium) out of which internal dumping of 154.62 Mm³ has been proposed. The area used for external OB dump will be 474.22 ha.

(xvii) Out of total quarry area: 401.70 ha, Quarry area of 184 ha shall be biologically reclaimed, 156 ha of batter will be reclaimed through grass carpeting. A void of 24.87 ha at an average depth of 30-35 m will be left in post-mining period which is proposed to be converted into a water body.

(xviii) The life of Kalyaneshwari OCP is 39 years and that of Kalyaneshwari Washery is 31 years.

(xix) Transportation: Coal will be dispatched to Kalyaneshwari coal washery through conveyor belt. 90% of coal will be dispatched by rail to consumers and the remaining 10 % coal will be dispatched by roads.

(xx) Rehabilitation and Resettlement: As per Master Plan , a total of 88.231 ha of land has been affected with fire and subsidence. In this regard, for dealing fire , subsidence and rehabilitation in

the leasehold of BCCL, 3025 families from 8 unstable sites are to be rehabilitated at a cost of Rs. 28982.29 lakhs . For operation of Kalyaneshwari OC a total of 1123 families to be rehabilitated out of which 23 has already been covered under Master Plan and rest 1100 will be rehabilitated as per CIL R&R policy at a cost of Rs. 40568.32 lakhs

(xxi) Total capital cost of the Project (including Kalyaneshwari Washery) is Rs. 2080. 40 crores.

(xxii) Fund for CSR will be allocated based on 2% of the average net profit of the company for the three immediate preceding financial years or Rs. 2.00 per tonne of coal production of the previous year, whichever is higher and amounts to Rs. 918.58 crores.

(xxiii) Capital cost for environment Management will be Rs. 2247.94 lakhs and revenue cost Rs. 107.07 lakhs/year

(xxiv) The main drainage of the area is controlled by Barakar River which is flowing along west boundary of cluster from north to south

(xxv) Approvals: Mining Plan and Mine Closure Plan for Kalyaneshwari OCP was approved in 342nd BCCL Board Meeting held on 4th May, 2018. Application for NOC from CGWA is submitted on 16.06.2018

(xxvi) Wildlife issues: There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 10 km buffer zone.

(xxvii) Forestry issues: There is no forest land involved in the mine lease area.

(xxviii) There is no court case/violation pending with the project proponent in respect to the project.

(xxix) Baseline data has been generated from January 2016 to March 2016. All parameters are within limit.

(xxx) Public hearing was held on 27th April, 2018 at New Kali Mandir Premises in Damagoria Colliery. Main issues raised during the public hearing include CSR, employment, rehabilitation and resettlement, environment protection, development of infrastructure in the area etc. Project proponent has assured for compliance under R&R policy & CSR policy and environmental norms.

32.1.5 During deliberations, the Committee noted the following:-

The proposal is for environmental clearance to Cluster XVII Kalyaneshwari OCP of capacity 5.20 MTPA (peak) and Kalyaneshwari Washery of 3.60 MTPA of M/s Bharat Coking Coal Ltd in a total area of 1844.09 ha located in District Burdwan (West Bengal). The proposal involves merger of mine lease holds of Victoria Colliery and Damagoria Colliery with that of Kalyaneshwari OCP. With the proposed restructuring, mine lease holds within the Cluster would be reduced from four to three (includes Begunia Colliery, Victoria West Colliery and Kalyaneshwari OCP).

Total area envisaged for Kalyaneshwari OCP of 1212.43 ha includes mine lease holds of Victoria Colliery (223 ha), Damagoria Colliery (620 ha) and additional land of 369.33 ha outside the lease holds.

It was informed that Begunia Colliery closed its operations in the year 2012, Victoria West Colliery in 2001-02 and Damagoria Colliery in 2009. Neither there are any mine closure plans/status reports prepared for any of these mines nor any future plans for the same. No information regarding earlier environmental clearances from the concerned regulatory authority enabling operation of these mines and/or consent to operate were made available. Mine lease holds of Begunia Colliery, Victoria West Colliery, Victoria Colliery and Damagoria Colliery, are in existence as separate entities, although reported to be closed for production for the present.

32.1.6 *The Committee, after deliberations and especially in view of the order dated 2nd August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014, asked for annual coal production in the past (from 1994-95 onwards) as submitted to the Coal Controller, separately from all the mines in*

the Cluster boundary. The Committee also desired for clarification and/or comments from Ministry of Coal regarding applicability of Mine Closure Plans for the individual mines in the Cluster, presently reported to non-producing.

Agenda No.32.2

Cluster XI group of mines (5.08 MTPA with a peak capacity of 6.604 MTPA) in a combined ML area of 3447.14 ha and Moonidih Washery (1.6 MTPA peak capacity) of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand)-Further consideration for amendment in EC

[IA/JH/CMIN/9513/2011, F.No.J-11015/77/2011-IA.II(M)]

32.2.1 The proposal is for amendment in environmental clearance for Cluster XI group of mines (5.08 MTPA with a peak capacity of 6.604 MTPA) in a combined ML area of 3447.14 ha (3527.58 ha - 80.44 ha of forest land = 3447.14 ha) and Moonidih Washery (1.6 MTPA peak capacity) of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand)

32.2.2 The proposal was considered by the EAC in its 26th EAC held on 15-16 February, 2018, wherein the Committee deferred the proposal for want of duly approved revised Mining Plan and Mine Closure Plan for the cluster.

32.2.3 In response to the observations of EAC, the details submitted by the project proponent and/or as informed during the earlier meeting, are as under:-

(i) The amendment in the EC in respect of capacities of individual mines in the cluster and lease hold areas for implementation of Master Plan for dealing with fire and Subsidence, with the details as under:-

S. No	As per Existing EC				Amendment Sought			
	Mine	Peak Production Capacity (MTPA)	Project Area (ha)	Mine Life (Yrs)	Name of the Mine	Peak Production Capacity (MTPA)	Project Area (ha)	Mine Life (Yrs)
1	Gopalichuck UG Project	0.143	241.94	30	Gopalichuck Colliery Mixed	0.65	241.94	> 25
2	Kachi Balihari 10/12 Pit UG Mine	0.117	60	19	Kachi Balihari 10/12 Pit UG Mine	0.117	60	9
3	PB Project UG	1.04	89	30	PB Project UG	1.04	89	> 30
4	Bhagabandh UG Mine	0.104	581.17	10	Bhagabandh UG Mine	0.104	581.17	5
5	Kendwadih UG Mine	0	217.54	0	Kendwadih OC	0.26	217.54	>25

	(Non-Producing)							
6	Pootkee UG Mine (Non-Producing)	0	153.77	0	Pootkee UG Mine (Non-Producing)	Nil	153.77	--
7	Kachi Balihari 5/6 Pit UG Mine (Non-Producing)	0	120.71	0	Kachi Balihari 5/6 Pit UG Mine (Non-Producing)	Nil	120.71	--
8	Moonidih UG Mine	5.2	1983.01 (2063.45-80.44)	50	Moonidih UG Mine	5.2	1983.01 (2063.45-80.44)	>50
	Total	6.604	3447.14 ha (3527.58-80.44)		Total	6.604*	3447.14 ha (3527.58-80.44)	
9	Moonidih Washery	1.6	25.6	18	Moonidih Washery	1.6	25.6	18

*Peak of Cluster will remain same, as peak of individual mine will be achieved in different years to offset loss of production in other mines.

(ii) There will be no change in the peak production capacity of 6.604 MTPA and the total area of 3447.14 ha (3527.58- 80.44) ha of the cluster XI group of mines.

(iii) Approvals of Mining Plans along with mine closure Plans for the Kendwadiah colliery and Gopalichak Colliery, undergoing changes for implementation of GOI approved Master Plan for dealing with fire and subsidence, has been submitted vide letter dated 19th May, 2018 .

32.2.4 During deliberations, the Committee noted the following:-

The proposal is for amendment in environmental clearance dated 26th August, 2013 granted by the Ministry in favour of M/s Bharat Coking Coal Limited for Cluster XI group of mines of combined capacity 5.08 MTPA (normative)/6.604 MTPA (peak) and Moonidih Washery of 1.6 MTPA in a total 3527.58 ha (includes 80.44 ha of forest land) located in Jharia Coalfields, District Dhanbad (Jharkhand). Stage-1 forest clearance for diversion of 80.44 ha of forest land is yet to be obtained.

The amendment has been sought for increase in capacity of two individual mines namely, Gopalichak Colliery (from 0.143 MTPA UG to 0.65 MTPA Mixed) and Kendwadiah colliery (closed to 0.26 MTPA OC) without any change in combined peak production capacity of 6.604 MTPA and in the same mine lease area of 3527.58 ha. The proposal is mainly for implementation of Master Plan dealing with fire and subsidence. Revised Mining Plan for the changed capacities of individual mines namely, Kendwadiah colliery and Gopalichuck Colliery has been approved by the Board of M/s BCCL on 4th May, 2018 & 4th November, 2017 respectively.

The Committee observed that forest land of 80.44 ha being a part of mine lease area and/or Mining Plan of Moonidih UG Mine of capacity 5.2 MTPA, remains an integral component of the Cluster XI

and necessarily requires stage-1 FC for grant of environmental clearance to the said Cluster and/or amendment therein. The same may be exempted only if the Mining Plan for Moonidih UG Mine is revised to exclude the forest land.

32.2.5 *The Committee, after deliberations and especially in view of no forest clearance available for 80.44 ha of forest land, was not agreed for the proposed amendment in the above said environmental clearance dated 26th August, 2013.*

Agenda No.32.3

Expansion of Tapin South Open Cast Coal Mine Project from 0.6 MTPA to 2 MTPA (Normative)/2.50 MTPA (Peak) with increase in mine lease area from 54.10 ha to 178.06 ha of M/s Central Coalfields Limited, located in District Hazaribagh (Jharkhand) - Further consideration of EC

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

32.3.1 The proposal is for grant of environmental clearance for Expansion of Tapin South Open Cast Coal Mine Project from 0.6 MTPA to 2 MTPA (Normative)/2.50 MTPA (Peak) with increase in mine lease area from 54.10 ha to 178.06 ha of M/s Central Coalfields Limited, located in District Hazaribagh (Jharkhand).

32.3.2 The proposal was considered by the EAC in its 26th meeting held on 15-16 February, 2018, wherein the Committee had 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.

32.3.3 In response to the observations of EAC, site visit was conducted on 15th May, 2018, wherein the sub-committee observed the following:-

- (i) There was no catch drain, toe wall or any embankment constructed in between the O/B dump and river Bokaro. Almost no vegetation found on the O/B dump along the slope facing the river. CCL management has not taken any significant step to prevent siltation going into the river. Slope of the dump also found steep without any benching for stabilization especially in the zone facing the river Bokaro. Plantation on O/B dumps was scanty and inadequate. Trees need to be planted on the O/B dump.
- (ii) One internal dump was also visited. Plantation on the internal dump was found rare and unsatisfactory. More plants of native species need to be grown there.
- (iii) An old pit in which internal dumping had been done which has a void was left to store the rainwater.
- (iv) The Open Pit quarry was visited. Currently there was no mining operation going. Mine benches were developed in the open pit. There were many manholes developed inside the open pit. On enquiry it was revealed by project authorities that it was due to theft of coal by local people, apparently a paradise of illegal mining by local people.
- (v) Buildings and villages may have adverse affect due to blasting and operation of HEMM from the project.

(vi) Jharna Nallah was flowing from the North West to South East of the project and finally serves as a tributary to Bokaro river. They have submitted a surface plan showing the diverted route of the Jharna Nallah. It was also informed that villagers from adjoining villages take water from the Bokaro river. Some O/B dumps were also found dumped towards the Jharna Nallah, but there was no catch drain, toe wall to prevent the silt from flowing into nallah. Project authorities also informed that Jharna nallah has to be diverted because it falls midway of the proposed mine project.

(vii) Railway siding at Charhi was also visited. Project authorities told that coal from Tapin South Opencast Coal Project is to be taken to Charhi Railway siding. There was no fixed type water sprinkler at the railway siding. Since the railway siding is far from M/s CCL Coal Mines, mobile water sprinklers may not be a convenient option. Therefore, fixed type water sprinkler has to be installed at suitable interval in the railway sidings using waste/recycled water.

(viii) Some appreciable initiatives of plantations/ greenbelt development were also shown by project authorities near the colony and stadium.

(ix) There still exists ambiguity in consistency of data in the report. Land use pattern provide two values 24.71 ha and 42.40 ha as forest land in the lease hold area of 178.06 ha.

(x) The sub-committee recommended that the project Tapin (South) may be considered for Phase 1 clearance subject to submission of details by project proponent before EAC on the following:-

- a) A model scheme of eco-restoration over back-filled area, external OB dumps and around the mine premises with water conservation measure for adoption
- b) Stabilisation of OB benches facing river Bokaro including catch drain, toe wall and plantation has to be provided
- c) A customised CSR/R&R Scheme in place with compliance to provisions of RFCTLARR 2013, if applicable
- d) Need-based CSR schemes matching with inherent skills of PAPs and there-after scope of its harnessing through intervention of PP in order to strive towards inclusive growth. This should specifically include the requirements of the two affected villages in the close vicinity of the mine
- e) Data presented in the report should be carefully revised to overcome inconsistency or any ambiguity
- f) Impact assessment of Jharana Nallah diversion on the local riverine system considering it as a tributary to River Bokaro.

32.3.4 During deliberations, the Committee noted the following:-

The proposal is for environmental clearance to the project for expansion of Tapin South Opencast Coal Mining project from 0.6 MTPA to 2 MTPA (Normative)/2.50 MTPA (Peak) with increase in mine lease area from 54.10 ha to 178.06 ha of M/s Central Coalfields Limited, located in District Hazaribagh (Jharkhand).

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.

Mining Plan for the phase-I of the proposed expansion was approved by CCL Board on 24th 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 20th May, 2014, which was amended on 29th May, 2015 and then on 1st September, 2015. Public hearing was conducted by the State Pollution Control Board on 27th February, 2016 in District Ramgarh (Jharkhand).

The clarifications given by the project proponent on observations of the sub-committee and the action plan on their recommendations were found to be in order.

32.3.5 *The EAC, after deliberations, recommended the project for grant of environmental clearance to the Expansion of Tapin South Open Cast Coal Mine Project from 0.6 MTPA to 2.50 MTPA (peak) with increase in mine lease area from 54.10 ha to 178.06 ha of M/s Central Coalfields Limited, located in District Hazaribagh (Jharkhand), subject to necessary clarification regarding diversion/regularization of the forest land of 24.71 ha and compliance of terms and conditions as applicable, and the additional conditions as under:-*

- (i) To control the dust production at source, crusher and in-pit belt conveyors shall be provided with mist type sprinklers.*
- (ii) Mitigative measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions as presented before the Committee, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at railway siding, etc.*
- (iii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.*
- (iv) To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.*
- (v) Thick green belt of adequate width in the down wind direction of the project site shall be developed to mitigate/check the dust pollution. Plantation plan shall be prepared in consultation with the State Forest Department.*
- (vi) A model scheme of eco-restoration over back-filled area, external OB dumps and around the mine premises with water conservation measure shall be prepared and implemented.*
- (vii) Stabilization of OB benches facing river Bokaro by constructing catch drain, retaining wall and adequate plantation shall be implemented.*
- (viii) Adequate measures should be taken keeping in view impact of Jharana Nallah diversion on the local riverine system considering it as a tributary to River Bokaro.*

Agenda No.32.4

Kakatiya Khani Opencast III (KTK OC-III) Coal Mining project of 3.75 MTPA by Opencast and 0.48 MTPA by Underground in project area of 1336.64 ha of M/s The Singareni Collieries Company Limited located in District Jayashankar Bhoopalpalli (Telangana) - For ToR

[IA/TG/CMIN/74922/2018, F.No. J-11015/464/2012-IA-II(M)]

32.4.1 The proposal is for grant of ToR for Kakatiya Khani Opencast III (KTK OC-III) Coal Mining project of 3.75 MTPA by Opencast and 0.48 MTPA by Underground in project area of 1336.64 ha of M/s The Singareni Collieries Company Limited located in District Jayashankar Bhoopalpalli (Telangana)

32.4.2 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:-

Background:

Environmental Clearance was accorded for Kakatiya Longwall Project (KLP) for the production capacity of 2.747 MTPA normative and 3.13 MTPA peak in an ML area of 601.20 ha vide Ministry's letter No. J-11015/464/2012-IA-II (M) dated 11th May, 2015.

SCCL proposed for the conversion of KLP underground coal mining project into Kakatiya Khani Opencast-III Project Phase-I proposal (IA/TG/CMIN/67085/2017) dated 3rd August, 2017) in an area of 1555.31 ha with 2.5 MTPA (Peak - 3.00 MTPA) capacity with a life of 38 years. The proposal was considered for grant of ToR and was deliberated in 17th & 26th EAC meetings. Ministry vide letter No. J-11015/65/2017-IA-II(M) dated 1st May, 2018 requested to submit the final mine closure plan duly approved by the Ministry of Coal for the KLP underground project.

Subsequently, SCCL proposed to withdraw the aforesaid proposal and submitted a fresh proposal IA/TG/CMIN/74922/2018 dated 10th May, 2018 for an integrated mine in the name of Kakatiya Khani OC-III project with 3.00 MTPA / 3.75 MTPA (peak) by Opencast and 0.48 MTPA by Underground in the project area of 1336.64 ha of M/s The Singareni Collieries Company Limited- in District Jaya Shankar Bhoopalpalli, Telangana for TOR.

- (i) The proposal is for TOR.
- (ii) SCCL is operating 5 underground mines namely KTK-1&1A Incline, KTK-2&2A Incline, KTK-5 Incline, KTK-6 Incline, KTK Longwall Project and two opencast projects KTK OC Sector - I and KTK OC - II in Bhoopalpalli Area in Jaya Shankar Bhoopalpalli District of Telangana State.
- (iii) KTK OC Sector-I is a dedicated project to Kakatiya Thermal Power Plant (KTPP) of Telangana State Generation Corporation (TSGENCO) located near Chelpur Village which is about 10 Km from the project).
- (iv) In order to sustain the coal production from the area and fulfil the committed supply to 500 MW KTPP of TSGENCO beyond 2019-20, it is proposed for conversion of the existing Kakatiya Longwall Project into opencast up to 300m depth of floor of 5 seam.
- (v) The Kakatiya Khani OC III Project is covered in 3 Mining leases namely,
 - a. Peddapur Block-I Extn. (North) ML, granted vide G.O.Ms. No.455 I&C Dept, dated 26.12.1998, for period of 30 years. This ML area covers 330 ha of non-forest land and valid up to 25.05.2029.
 - b. Peddapur ML, granted vide G.O.Ms. No.114 I&C Dept, dated 19.04.1999, for period of 30 years. This ML area covers 955 ha of non-forest land and valid up to 21.09.2029.
 - c. Dip side of Peddapur Block-I Extn. (North) ML, granted vide GO.Ms. No.146 I&C Dept. dated 19.06.2009, for period of 30 years. This ML area covers 376.10 ha of non-forest land and valid up to 16.09.2039.
- (vi) The proposed project is located in the north central part of Mulug Coal Belt of Godavari Valley Coal Field (GVCF).
- (vii) The latitude and longitude of the project are 18° 19' 40" to 18°22' 56" and 79° 52' 42" to 79° 55' 30" respectively.
- (viii) There is no joint venture
- (ix) Coal Linkage : TSGENCO

- (x) Employment generated: Permanent: 252 (Opencast), 1113 (Underground), Contractual: 960
 (xi) Benefits of the project: Generation of direct and indirect employment; meeting the demand of coal in the region; Improvement in social infrastructure: conservation of remnant coal locked in underground mine(s)
 (xii) The land usage of the project will be as follows:

i. Pre-mining

Land owner ship	Land use	Extent (ha)
Forest	Forest	Nil
Private land	Agriculture	718.95
	Grazing	-
	Barren	-
	Built up area	13.63
	Water Bodies	3.73
	Road	0.97
Sub Total		737.28
Government Land	Agriculture	282.96
	Built up area	3.68
	Grazing	280.38
	Barren	--
	Water bodies	28.30
	Roads	4.04
Sub Total		599.36
Total		1336.64

ii. Post- Mining area in ha

Sl.No	Description	Land Use Details (ha)					Total
		Plantation	Water Body	Public/Compa ny Use	Agriculture	Undist urbed	
1.(a)	Excavation (Backfill)	281.13	2.75	-	182.71	-	466.59
(b)	Excavation (Voids)	-	211.62	-	-	-	211.62
	Sub-total excavation:	281.13	214.37	-	182.71	-	678.21
2.	External Dump Yard	382.04	-	-	-	-	382.04
3.	Safe barrier, Roads, Drainage around quarry & Dump yard.	129.15	21.99	39.56	-	-	190.70
4.	Built up area / Infrastructure	38.71	0.32	11.09	-	-	50.12
5.	Nallah Diversion	19.31	6.58	-	-	-	25.89
6.	Undisturbed/NFL (Exclusive UG Area)	-	-	-	-	9.68	9.68
	Grand Total :	850.34	243.26	50.65	182.71	9.68	1336.64

iii. Core Area

Sl. No.	Type	Land Use (During Mining)
1	Excavation/Quarry Area:	
	(a) Backfilled Area	466.59
	(b) Excavated Void	211.62
	Sub-Total	678.21
2	External Dump	382.04
3	Safety Zone /Rationalisation area:	
	(a) Safe barrier & Drain along the Quarry	92.21
	(b) Safe barrier & drain along the external dump	98.49
	Sub-Total	190.70
4	Road & Infrastructure area (Service Buildings and CHP)	50.12
5	Nallah Diversion	25.89
6	Undisturbed/NFL (Exclusive UG Area)	9.68
Grand Total		1336.64

(xiii) The total geological reserve is 120.37 MT. The mineable reserve is 89.16 MT (OC 80.96 MT + UG 8.20 MT); extractable reserve is 77.45 MT (OC 72.88 MT + UG 4.57 MT). The percent of extraction would be 63.30% (OC 59.95, UG 12.54).

(xiv) The coal grade is G8. The stripping ratio is 13.48 Cum/tonne. The average Gradient is 1.0 in 3.0. There are 13 workable seams with the thickness ranging upto 4.0 m.

(xv) The total estimated water requirement is 2801 m³/day. The level of ground water ranges from 0.30 m to 14 m.

(xvi) Method of mining: Opencast with shovel dumper and underground by Bord & Pillar Semi-mechanization.

(xvii) Solid Waste from OC Operations: The solid waste excavated from the proposed project in the form of overburden (OB) will be 972.54 M.Cum which includes top soil of 6.78 M.Cum and hard OB of 965.76 M.Cum. Further 3.82 M.Cum of Top Soil will be removed from the external dump yard before dumping overburden material.

(xviii) Out of 965.76 M.Cum of hard OB, 248.70 M.Cum of hard OB will be dumped in the external dump yard. Remaining 717.06 M.Cum of hard OB will be accommodated in the internal dump yard. Percentages of external and internal dumping will be 25.75 and 74.25 respectively. The heights of external dump yard and internal dump will be 120m and 60m respectively above ground level.

(xix) Solid waste from UG mining operations: In underground mine, wastes generated during the mining is very less compared to that of opencast mining. The solid waste generated will be generally the stone bands / dirt bands / shale produced during mining activity. The debris so produced will be used for underground track ballasting, leveling of the uneven floors and strengthening of surface bank head.

(xx) The final mine void: Total void is 263.79 M.Cum at the end of mining operations. The area of the final void is 211.62 ha and maximum depth of final void is 300m. The final void shall be left as watery reservoir after closure of the mining operations.

(xxi) The life of mine is 32 years (OC 29 years, UG 10 years)

(xxii) Transportation: Opencast: coal transport in pit by dumpers; surface to sliding by truck; sliding to loading by truck. Underground: Coal transport to surface through rope haulage system in tubs.

(xxiii) R&R is involved and there are 67 PAFs and 444 PDFs.

(xxiv) Cost: Total capital cost of the project is 413.84 Crores, 2% of average net profits of the company made during last three years allocated for CSR. R & R cost is 3.47 Crore, Environmental Management Cost is Rs 10.54 Crores.

(xxv) Water body: One seasonal nallah viz. Gundla Vagu passes over the proposed quarry area. Diversion length of Gundla Vagu is 7.50 Km.

(xxvi) Approvals: Ground water clearance to be applied. Mine plan is under preparation Mine closure plan is an integral part of Mining plan.

(xxvii) Wildlife issues: there is no national park, wildlife sanctuary, biosphere reserves found in the 10km buffer zone.

(xxviii) Forestry issues: There is no forest area involved for mining.

(xxix) Total afforestation plan: 850.34 ha, Density of tree plantation is 2500 plants/ha

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

(xxxi) Public hearing: Public hearing will be held after preparation of Draft EIA/EMP report.

(xxxii) Project specific Impact: One road connecting Parasurampalli and Peddapur villages passes across the project site. The diversion length of this road is 4.43 km. The proposed project involves Rehabilitation and Resettlement of 3 no. of villages fully and 2 no. of villages partly. Three villages falling completely within the project site are Kondarajireddipalli, Madhavaopalli & Ravinagar. Two villages falling partly within the project site are Venkateshwarlapalli & Jangupalli. A total of 511 families are affected by the project of which 444 Nos. of families are Project Displaced Families (PDFs) and 67 families are Project Affected Families (PAFs).

(xxxiii) Base Line Data was collected during winter season (March, 2016 to May, 2016) for early preparation of EIA/EMP preparation of EIA/EMP.

32.4.3 During deliberations, the Committee noted the following:-

The proposal is for ToR to Kakatiya Khani Opencast III (KTK OC-III) Coal Mining project of 3.75 MTPA by Opencast and 0.48 MTPA by Underground of M/s The Singareni Collieries Company Limited in an area of 1336.64 ha located in District Jayashankar Bhoopalpalli (Telangana). There is no forest area involved.

Earlier, the proposal of ToR for KTK OC-III of capacity 2.50 MTPA (Normative)/3 MTPA (Peak) in an area of 1555.31 ha was submitted by the project proponent. The same was considered by the EAC in its meeting held on 16th February, 2018 and recommended. However, on further examination of the proposal vis-à-vis the conditions stipulated in the EC dated 11th May, 2015 for the adjoining KTK Longwall project of capacity 3.13 MTPA in an area of 601.20 ha, the project proponent was asked for submitting the status of final Mine Closure Plan duly approved by the Ministry of Coal for the said project. That proposal has since been withdrawn.

The present proposal is for the mixed/integrated project, carved out of the existing KTK Longwall project up to 300 m depth of 5 seam floor, and involves working the KTK Longwall project for 10 years and simultaneous working KTK OC-III opencast operations for 30 years. The remaining part of the KTK Longwall project is still covered under the existing EC dated 11th May, 2015. Such a scenario would warrant revision of the said EC in parallel,

Further, the project would still involve conversion of UG Mine to OCP in a part of KTK Longwall project and thus bound to comply with the conditions relating to Mine Closure Plan. The Committee observed no perceptible changes in the present scenario compared to the earlier one which forced the project proponent to withdraw the proposal.

32.4.4 The EAC, after deliberations, asked the project proponent to explore for inclusion of the leftover of the KTK Longwall project into the present proposal. The Committee also suggested the project proponent to approach the Ministry of Coal for clarification/comments on the observations of the Ministry to expedite further consideration of the proposal.

The proposal was, therefore, not taken forward.

Agenda No.32.5

Expansion of Manuguru Opencast-II Coal Mining Project from 5 MTPA to 6.25 MTPA in an ML area of 1526.20 ha of M/s The Singareni Collieries Company Limited located in District Khammam (Telangana) - For amendment in EC

[IA/TG/CMIN/18274/2013, F.No.J-11015/78/2013-IA.II(M)]

32.5.1 The proposal is for amendment in environmental clearance for Expansion of Manuguru Opencast-II Coal Mining Project from 5 MTPA to 6.25 MTPA in an ML area of 1526.20 ha of M/s The Singareni Collieries Company Limited located in District Khammam (Telangana)

32.5.2 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:-

(i) Ministry granted Environmental clearance for Manuguru Opencast-II Expansion Coal Mining Project 6.25 MTPA in an ML area of 1526.20 ha vide letter No. J-11015/78/2013-IA-II(M), dated 21st February, 2014, wherein the applied area was reduced from 3205.76 ha to 1526.20 ha by excluding 1679.56 ha for which forest land was under process of diversion and it was stipulated that the project proponent need to obtain approval under the FC Act for diversion of the entire forest land located within the mining lease within a period of two years.

(ii) Out of balance 1679.56 ha of forest land to be diverted, Stage-I clearance for diversion of 368.92 ha has been granted vide letter F.No.8-70/2014-FC, dated 17th April, 2018 and so far total forest land diverted is 1363.06 ha (994.14 ha and 368.92 ha) and diversion of the remaining land is still under process and may take some more time.

(iii) Mining has been completed in the already diverted forest land and recently diverted 368.92 ha of forest land is now required for further continuation of mining operations in the mine. The newly diverted forest land of 368.92 ha is a part of land which is already having EC. Hence, SCCL requested for grant of amendment to EC for a land extent of 1895.12 ha by annexing 368.92 ha to the existing 1526.20 ha.

(iv) With this amendment, there will be no change in other conditions in EC except the land acquisition status, as shown hereunder:

Particulars	Total Land requirement			PRESENT STATUS					
				Land under Possession of SCCL (ha)			Land to be Acquired(ha)		
	Non-Forest	Forest	Total	Non Forest	Forest	Total	Non Forest	Forest	Total
Quarry area	121.54	1305.20	1426.74	16.30	937.50	953.80	105.24	367.70	472.94
OB dumps	262.23	807.83	1070.06	56.06	219.74	275.80	206.17	588.09	794.26

Safe barrier, drainage, protection bund etc	59.01	174.75	233.76	3.07	48.70	51.77	55.94	126.05	181.99
Service buildings, rail way sidings, CHP, etc	2.17	103.86	106.03	2.17	78.88	81.05	0.00	24.98	24.98
Vagu Diversion	85.32	281.81	367.13		78.24	78.24	85.32	203.57	288.89
Diversion of Road	1.79	0.25	2.04		0.00	0.00	1.79	0.25	2.04
Total	532.06	2673.70	3205.76	77.60	1363.06	1440.66	454.46	1310.64	1765.10

(v) The Manuguru OC-II Expansion project is a part of Manuguru coal fields of Kothagudem region, the project is located near Manuguru Village, Manuguru Tehsil, Bhadrachalam District of Telangana State and is about 70 Km from Kothagudem town by road and 55 Km by rail.

(vi) The total land required for the project including MNG OC-II Expansion project is 3205.76 ha. Out of which 2673.70 ha is Forest land and the remaining 532.06 ha is non forest land. The block is located between North latitude 17°55'34" and 17°59'11" and East Longitude 80°43'57" and 80°47'27" in the Survey of India Topo sheets 65C/9 and 65C/13. Kinnerasani WL Sanctuary is at a distance of 7.5 Km from the project site. River Godavari is flowing 3.3 Km away from the mine boundary.

(vii) Gorrepeta Vagu lies in the middle of the property and is proposed to be diverted in consultation with Irrigation Department. The total land required for diversion is estimated as 367.13 ha (Non-Forest land - 85.32 ha; Forest land-281.81 ha) and the length of diversion is about 16.69 Km. Diversion will be taken up in a phased manner as the mining advances.

(viii) A total quantity of 1929.75 M.Cum of OB (including top soil 18.62 M.Cum) will be generated during the life of mine from MNG OC II Expansion Property, out of which, 1228.50 M.Cum of OB will be dumped internally and balance quantity of 682.63 M.Cum of OB will be dumped externally up to a maximum height of 120 m in decks with a maximum deck height of 30 m.

(ix) Out of 3205.76 ha of total land acquired area for the proposed project, 1961.78 ha of land will be biologically reclaimed after back filling the void. The 1040.57 ha of land will be left as void for water body after filling the void to 45m depth. This will help in augmenting ground water recharge. The balance 203.41 ha of land will be used for miscellaneous purposes like safe barrier, drainage, service building, road diversion etc.

(x) The changed land use at the end project operations is as follows:

i. Quarry area	:	1426.70
ii. External dump yards	:	1070.10
iii. Safe barrier, drainage, Protection bund etc.	:	233.76
iv. Service building, railway siding, CHP etc.	:	106.03
v. Vagu diversion	:	367.13
vi. Road diversion	:	2.04

(xi) Existing township is sufficient for this project requirement for housing needs of the employees. Existing road and rail network cater the needs of the project.

32.5.3 During deliberations on the proposal, the Committee noted the following:-

Ministry granted Environmental clearance for Manuguru Opencast-II Expansion Coal Mining Project 6.25 MTPA in mine lease area of 1526.20 ha vide letter dated 21st February, 2014, wherein the area was reduced from 3205.76 ha to 1526.20 ha by excluding 1679.56 ha of forest land for which stage-I forest clearance was not available. It was stipulated in the EC that the project proponent shall obtain approval under the FC Act for diversion of the entire forest land located within the mining lease within a period of two years.

Out of balance 1679.56 ha of forest land to be diverted, Stage-I clearance for diversion of 368.92 ha has been granted vide letter F.No.8-70/2014-FC, dated 17th April, 2018 and so far total forest land diverted is 1363.06 ha (994.14 ha and 368.92 ha). Diversion of the remaining forest land is still under process and may take some more time.

32.5.4 *The EAC, after detailed deliberations, insisted for the revised Mining Plan against the project area of 1895.12 ha, which would include 532.06 ha of non-forest land and 1363.06 ha of forest land for which stage-I forest clearance is available.*

The proposal was deferred for the needful.

Agenda No.32.6

Expansion of Samaleswari Opencast coal mine project of 15 MTPA with increase in ML area from 928.264 ha to 1334.912 ha of M/s Mahanadi Coalfields Limited located in Ib Valley Area, Tehsil & District Jharsuguda (Odisha) - Further consideration for ToR

[IA/OR/CMIN/73143/2018, F.No.J-11015/183/2008-IA.II(M)]

32.6.1 The proposal is for grant of TOR for Expansion of Samaleswari Opencast coal mine project of 15 MTPA in respect of increase in ML area from 928.264 ha to 1334.912 ha of M/s Mahanadi Coalfields Limited located in Ib Valley Area, Tehsil & District Jharsuguda (Odisha)

32.6.2 The proposal was earlier considered by the EAC in its 28th meeting held on 17-18 April, 2018. During the last meeting, the Committee made the following observations:

(i) In view of the extent of forest land involved, diversion of Nala and almost five-fold (400%) increase in production in a span of past mere two decades, it would not be improper to suggest for a probing study to be made by any reputed institution to know the effect on ecosystem-services available in the said mining area and assessment of carrying capacity of the extant ecology there-in before granting ToR to Samleswari project of MCL desirous of producing 15 MTPA of coal.

Reply by the project proponent

- The Mining Plan of Samaleswari OC Expn. Ph-IV (15.0 MTPA) has been approved by MoC vide letter dated 20-11-2017.

- The additional forest land involved for the project is 230.20 ha, and the Stage-1 Forest Clearance is in process vide proposal no. FP/OR/MIN/26817/2017 dated 07-10-2017.
- The present proposal is for expansion in area with the production capacity remaining same at 15.0 MTPA.
- The study by reputed Institution to know the effect on ecosystem- services available in the said mining area and assessment of carrying capacity of the extant ecology there-in will be carried out. Since the said study will take time it is requested to include this study as a ToR item to be submitted along with the EIA-EMP.

(ii) The EAC expressed its deep concern over the excess coal production during the periods from 1996-97 to 2011-12 and then in 2014-15, and thus repeated violation of the EIA Notification, 2006. The Committee desired that the Ministry should take a serious note of the same to consider the present proposal, even if the complaint case was already filed in the Court of Law for the said default.

Reply by the project proponent

- The excess production made during the period 1996-97 to 2011-12 was apprised to the EAC, and deliberated during its earlier meetings. Further, the EC for expansion for 5 MTPA to 11 MTPA was granted vide letter dated 25th February, 2013.
- This EC was granted after credible legal action was initiated against the project authorities. Case under Section 15 & 16 of the EP Act, 1986 vide case no. No. 2(c) cc No. 172/2013 dated 11th February, 2013 is pending in SDJM, Jharsuguda court.
- There was no excess production during the year 2014-15. As per the discussion during the EAC meeting on 17th April, 2018, it was advised to submit the consent to operate for the period 2014-15. The same along with revised basic information was submitted and also sent by email on 19th April, 2018.

(iii) The Committee also preferred for compliance status of the conditions stipulated in the existing EC dated 6th February, 2015, through the Regional Office of the Ministry at Nagpur, to take the proposal forward.

Reply by the project proponent

- Eastern Regional Office, MoEF&CC, Bhubaneswar has been requested vide letter dated 2nd May, 2018 to inspect the mine & issue certified compliance status of EC dated 16th February, 2015.
- It is requested not to insist on the submission of the above report before issue of ToR. The same shall be submitted along the EIA-EMP as per MoEF&CC OM dated 30th May, 2012.

Since the present working of Samaleswari OCP (15 MTPA) has almost reached to its boundary limit and extension to new lease hold area will be required very shortly to maintain the coal production and supply to power houses, it is our submission before the EAC to kindly issue ToR at the earliest. It is assured that thorough study on all condition of ToR will be made and submitted along with EIA/EMP report.

32.6.3 During deliberations, the Committee noted the following:-

The proposal is for grant of ToR to the expansion project of Samaleswari Opencast Coal Mine (Phase IV) of capacity 15 MTPA of M/s Mahanadi Coalfields Limited, involving increase in project area from 978.119 ha to 1384.767 ha (mine lease area from 928.264 ha to 1334.912 ha), located in Tehsil Brajrajnagar, District Jharsuguda (Odisha).

The Ministry had earlier granted EC to the expansion project of Samaleswari Coal Mine from 11 MTPA to 15 MTPA in mine lease area of 928.264 ha vide letter dated 6th February, 2015.

With the proposed increase in mine lease area, total forest land would be increased from 334.918 ha to 580.292 ha. Out of it, forest land of 350.092 ha has already been diverted for non-forestry purposes. Stage-1 Forest Clearance for the remaining forest land of 230.20 ha, applied vide proposal No. FP/OR/MIN/26817/2017 dated 7th October, 2017, is presently under process.

Mining plan was approved in 194th MCL Board meeting held on 8th September, 2017 and by MoC vide letter dated 20th November, 2017. Mine closure plan is an integral part of Mining Plan.

There has been no coal production in excess of the sanctioned capacity from 2012-13 onwards i.e. after the environmental clearance granted by the Ministry on 25th February, 2013 to the project for expansion from 5 to 11 MTPA.

32.6.4 *The EAC, after detailed deliberations, recommended the proposal for grant of ToR to the project for expansion of Samaleswari Opencast coal mine project of 15 MTPA with increase in ML area from 928.264 ha to 1334.912 ha of M/s Mahanadi Coalfields Limited located in Ib Valley Area, Tehsil & District Jharsuguda (Odisha), 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: -*

- *Stage-I forest clearance for diversion of 230.20 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 shall be set up and included in the air quality modeling.*
- *Ecological restoration and mine reclamation plan to be prepared with afforestation of local/native species found in the area.*
- *To know the effect on ecosystem services available in the said mining area and assessment of carrying capacity of the extant ecology therein, study shall be carried out by any reputed institution.*

The Committee further suggested that in view of the excess coal production as mentioned above and thus violation of the EIA Notification, 2006, all the conditions stipulated in the Ministry's OM dated 30th May, 2018 shall be applicable in the instant case also, and the project proponent to be informed accordingly at this stage only.

Agenda No.32.7

Coal Washery of 2.5 MTPA in an area of 8 ha of M/s Paras Power & Coal Beneficiation Ltd at Ghutku Village, Tehsil Takhatpur, District Bilaspur District (Chhattisgarh) - For EC

[IA/CG/CMIN/74978/2016, F.No.J-11015/70/2016-IA.II(M)]

32.7.1 The proposal is for grant of environmental clearance for Coal Washery of 2.5 MTPA in an area of 8 ha of M/s Paras Power & Coal Beneficiation Ltd at Ghutku Village, Tehsil Takhatpur, District Bilaspur District (Chhattisgarh)

32.7.2 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 Terms of Reference (TOR) was issued vide MoEF&CC letter no. J-11015/70/2004-IA.II (M) dated 6th June, 2016. Subsequently, M/s PPCBL sought change in the area from 24.26 acres to 19.77 acres which was approved by EAC vide MoEF&CC letter no. J-11015/70/20016-IA.II (M) dated 30th November 2017.

(ii) The latitude and longitude of the project are:
➤ Latitude 22°08'9.17" N to 22°09'2.84" N
➤ Longitude 82°05'21.74" E to 82°05'31.95" E

(iii) Joint Venture: There is no joint venture.

(iv) Coal Linkage: MOU signed with M/s Ultratech Cement Limited and M/s Jaiprakash Power Ventures Ltd., M/s JK Lakshmi Cement Ltd., and M/s Lanco Anpara Power Ltd.

(v) Employment generation/to be generated: About 200 persons for construction and 65 persons during operation & maintenance

(vi) Benefits of the Project: Beneficiation of low grade coal is an important area both from the economic and the environment point of view. The project will encourage ancillary industries in the region, which will increase the employment potential. The economic base of the region will be further strengthened.

(vii) The total land required for the proposed coal washery plant is 19.77 acres (8 ha). 95% of the project land is under possession of PPCBL

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

Sr. No.	Particulars	Area (in acres)
1	Washery Plant	7.00
2	Raw Coal Stockyard	1.42
3	Clean coal, middling & Rejects	3.75
4	Other facilities – Office building, Internal roads, Weigh bridge, Water reservoir, Canteen, Labourer room, Maintenance shed, Stores etc.	1.67
5	<i>Plantation</i>	<i>5.93</i>
	<i>Total</i>	<i>19.77</i>

(ix) Water requirement of 61 m³/hr, which includes 4m³/hr of domestic demand, will be met from the ground water source. RCC water reservoir of around 5000 m³ storage capacity will be constructed. NOC from the Central Ground Water Authority has been obtained vide letter no. 21-4/336/CT/IND/2016 -2576 dated 18th November, 2016.

(x) Washing Technology – Heavy Media Cyclone

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

(xii) The ambient air quality monitoring was carried out from 1st March, 2016 to 31st May, 2016 representing pre-monsoon season. All PM₁₀, PM_{2.5}, SO₂ and NO_x values are found to be well within prescribed limits of CPCB.

- (xiii) Transportation: ROM coal from SECL mines will be transported by road. Efforts will be made to bring some coal by rail. Maximum coal evacuation from the washery will be from own railway siding at Ghutku which will be made operational before the establishment of 2.5 MTPA project.
- (xiv) Cost: The estimated cost of the proposed project is about Rs. 24 crores excluding cost of EMP, land and railway siding at Ghutku.
- (xv) CSRcost: It is proposed to invest a sum equivalent to 2% of the net profit or an amount of Rs. 10 lakhs, whichever is higher annually for various social welfare and community development activities in the region
- (xvi) EMP Cost: Rs. 1.50 crores is earmarked towards environmental protection measures.
- (xvii) Nearest Water bodies: 2.5 km from Arpa River and 7.2 km from GhonghaNadi
- (xviii) Ground Water Clearance: NOC from the Central Ground Water Authority has been obtained vide letter no. 21-4/336/CT/IND/2016 -2576 Dated 18th Nov 2016.
- (xix) Wild Life issues: There are no national parks, wildlife sanctuaries, biospheres reserves found in 10 km buffer zone.
- (xx) Forestry issues: No forest issues involved
- (xxi) Greenbelt: 30% of the project area will be developed on greenbelt using nature plant species at the rate of 2500 trees per ha
- (xxii) There are no court cases/violation pending with project proponent
- (xxiii) Public Hearing was held on 9th March, 2018 at Ghanapara Basti near Ghutku village, Takhatpur Tehsil, Bilaspur district (CG). The issues raised during PH includes employment, infrastructure development, drinking water facilities, education and health.
- (xxiv) Main issues raised and comments of the applicant during the public hearing:

S. No.	Main Issues raised in Public Hearing	Project Proponent Response
1.	Provide employment to youths / unemployed persons.	During construction period of approx. 24 months about 200 people will be required. Unskilled and semi-skilled labour will be drawn locally or from nearby places. The employment of local persons in skilled and executive staff category (65 no.) will depend on individuals' education and experience suitable for the job as per company policy.
2.	Pollution from proposed operations will affect agricultural productivity. Washery effluent, storm water discharge including sewage will damage agricultural fields.	<p>The proposed 2.5 MTPA plant will adopt measures like bag filter, covered belt conveyors, regular water sprinkling through nozzles during loading and unloading of coal on conveyors, dry fog dust suppression system in coal handling area, plantation, regular water sprinkling on roads, pucca internal roads to keep pollution levels well within the prescribed standards.</p> <p>The washery is envisaged on zero effluent discharge concept. Domestic wastewater will be treated in septic tanks followed by soak pits. Surface run-off will be channelized to micro-percolation tanks within the plant for ground water recharge. No adverse effect on agriculture land and crop yield is anticipated.</p> <p>The company is committed to comply with the environmental standards and any other safeguards & conditions as may be</p>

S. No.	Main Issues raised in Public Hearing	Project Proponent Response
		stipulated by the Regulatory Authorities.
3.	If 40 HP capacity motor pump is put, the water levels will go down in surrounding villages and the people of this region will face acute water crisis for drinking water.	<p>CGWA has granted permission to abstract ground water for the project. 26 Rain water harvesting structures will be constructed to augment groundwater resources of the region as recommended by CGWA. This will ensure more recharge of ground water than required.</p> <p>Piezometers will be installed to monitor ground water levels. Periodic reports will be submitted to regulatory authorities.</p>
4.	Information on pollution control measures.	<p><u>Air Pollution Control Measures</u> The emissions of particulate matter from the coal washery will be controlled by effective dust extraction / dust suppression system such as -</p> <ul style="list-style-type: none"> • Bag Filter with coal crusher. • Dry fog dust suppression system in coal handling areas. • Covered belt conveyors • Pucca internal roads • Regular water sprinkling on roads within & outside the plant to minimize fugitive dust emissions. • 30% of the project area will be developed as green belt [5.93 acres] using native plant species with a density of 2500 trees / ha. • Road side plantation to avoid dispersion of dust particles. <p><u>Water Pollution Control Measures</u> Beneficiation is envisaged on wet process.</p> <ul style="list-style-type: none"> • Plant design on zero effluent discharge concept. • Rainwater Harvesting structures to artificially recharge ground water resources in the region. • Surface run-off through drainage network to micro-percolation tanks within the plant for ground water recharge. • Piezometers to monitor water level. • Septic tanks followed by Soak pits for sewage treatment. <p><u>Noise Attenuation Measures</u></p> <ul style="list-style-type: none"> • Proper rubber lining, housing of vibrating screens in covered building, lubrication of pumps. • Regulation of vehicles movement within the plant. • Plantation • PPE for workers.

S. No.	Main Issues raised in Public Hearing	Project Proponent Response
		<p><u>Monitoring & Reporting Environmental compliance</u> Environmental performance will be monitored as per approved monitoring schedule. Monthly, quarterly and half yearly compliance reports including annual environmental statement will be regularly submitted to the regulatory authorities.</p>
5.	<p>There is no provision of separate road for the proposed Coal Washery. Villagers, surrounding villages, schools are there. Dust emissions from vehicles movement affects public, cultivation, and trees.</p>	<p>For strengthening the capacity & maintenance of the existing road, PPCBL has deposited a sum of Rs. 118.0 lakhs with the State Govt.</p> <p>Own railway siding under construction at Ghutku, 300m from the project site, will be operational well before the project commences commercial production. Maximum coal evacuation will be by rail from the own siding. Movement of coal by road will be kept minimum and through covered trucks. The following effective measures will be taken to reduce dust emissions -</p> <ul style="list-style-type: none"> • Pucca internal roads within the plant, • Regular water sprinkling on roads to minimize fugitive dust emissions, • 30% of the project area will be developed as green belt, and • Road side avenue plantation outside the plant premises also to avoid dispersion of dust particles. <p>Any additional safeguards and conditions as may be recommended by the regulatory authorities will be adopted to ensure compliance with the regulations and standards.</p>
6.	<p>Create facilities for health care, drinking water; construct buildings & roads for schools, secluded bathing spaces for women near ponds etc.</p>	<p>Under proposed ESC activities - 2% of the net profit will be spent annually on:</p> <ul style="list-style-type: none"> • Health Care • Sanitation • Education & Sports • Community Infrastructure Development • Plantation • Drinking water supply through tanks to acute shortage area in nearby villages. • Cultural activities <p>Drinking water to the school will be supplied. In the actual water storage, drinking water tank will also be sent.</p> <p>Local issues will be prioritized in consultation with the</p>

S. No.	Main Issues raised in Public Hearing	Project Proponent Response
		<p>Panchayats for better development and implementation of social welfare activities.</p> <p>Proper allocation of funds will be made within the available resources for community infrastructure development in consultation with the Ghutku Panchayat and the Local Administration.</p>
7.	Impact of noise on public health	<p>EIA Study indicates that incremental noise levels will remain confined to the project site and does not contribute to violation of notified standards. Pollution control measures will prevent adverse impact on the population. Information on pollution control measures was presented during public hearing.</p> <p>30% of the project area will be developed as green belt. Saplings will be planted with a density of 2500 trees/ha.</p> <p>Regularly, health camps will be organized.</p>
8.	Plantation	<p>Plantation will cover about 30% of the total project area using native plant species, which will positively impact the ecosystem. Trees have potential to reduce CO₂ level from the air. Avenue plantation will also be carried out along the roads outside the project area.</p>
9.	Land acquisition	<p>Land was purchased from land owners with mutual consent by giving them adequate compensation.</p>
10.	Wages to the employees	<p>Wages will be paid as per the National Minimum Wages Act 1948 and amendments thereto.</p>

32.7.3 During deliberations, the Committee noted the following:-

The proposal is for environmental clearance to Coal Washery of 2.5 MTPA of M/s Paras Power & Coal Beneficiation Ltd in an area of 19.77 acre at Ghutku Village, Tehsil Takhatpur, District Bilaspur (Chhattisgarh). There is no forest area involved.

The ToR for the project was granted by the Ministry on 6th June, 2016 which was amended on 30th November 2017 for reduction in project area from 24.26 acre to 19.77 acre. Public hearing was conducted by the State Pollution Control Board on 9th March, 2018. Main issues raised during public hearing include employment, infrastructure development, drinking water facilities, education and health etc.

Total fresh water requirement is estimated to be 1464 cum/day, which includes 96 cum/day for domestic demand, will be met from the ground water source. NOC from the Central Ground Water

Authority has been obtained vide letter No.21-4/336/CT/IND/2016-2576 dated 18th November, 2016.

Raw coal from the linked coal mines of M/s SECL is proposed to be taken to coal washery by road covering the distance ranging 51-61 km. Traffic density on the said road reported to be already on the higher side, the Committee insisted for other means of coal transportation also needs to be explored. In addition, the Committee desired that carrying capacity assessment of the said road vis-à-vis the environmental concerns shall be carried out from some reputed government agency to deliberate on the matter.

Detailed schematic diagram of washing process including performance parameters i.e. mass-energy balance for each stage of coal washing, starting from crushing/screening passing through washing process, would be required to firm up the yield, actual quantum of washed coal and disposal of rejects.

32.7.4 *The EAC, after deliberations and especially in view of concerns explained in the preceding para, was not inclined to take the proposal forward for the present.*

Agenda No.32.8

Pakri Barwadih Coal Mine Project of 15 MTPA in an area of 3319.42 ha of M/s National Thermal Power Corporation Ltd located in Tehsil Barkagaon District Hazaribagh (Jharkhand) - For amendment in EC

[IA/JH/CMIN/8804/2007, F.No.J-11015/38/2007-IA.II(M)]

32.8.1 The proposal is for amendment in environmental clearance for Pakri Barwadih Coal Mine Project of 15 MTPA in an area of 3319.42 ha of M/s National Thermal Power Corporation Ltd located in Tehsil Barkagaon District Hazaribagh (Jharkhand)

32.8.2 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) EC was granted to the project vide letter No.J-11015/692/2007-IA.II (M) Dated 19th May 2009, and subsequently amendment in EC was accorded regarding permission for transportation of coal by road from crusher point to the Banadag railway siding for Pakri Barwadih Coal Mine Block vide letter dated 29th June, 2016 which is valid up to 28th June 2018.

(ii) As per the EC amendment letter the specific condition no. 2A (ix) may reads as;

“The coal shall be transported through closed belt conveyor system of a length of 13 km to Banadag railway station. The project proponent is permitted for (2) two year to use State Highways/Public Roads for transportation of coal (approx. 35 km) to Banadag railway siding by adopting all mitigative measure to control dust pollution. The project proponent shall put all efforts to expedite completion of service road for belt conveyer so that the same can be utilized for coal transportation by road.”

(iii) Mining operation has started from October 2016 and the road transportation of coal to Banadag Railway siding by trucks via Tandawa-Hazaribag State Highway was started from

January 2017. Presently, the coal transportation from mine to Banadag railway siding is being done through State Highways/Public roads passing through Chamgarha, Barkagaon, Pakri Barwadhi, Oderna, Sirka village covering a distance of approx. 35 km in line with the above cited amendment dated 29.06.2016.

(iv) It is now proposed to transport the coal through newly constructed mine peripheral road passing through Upardari & Jugra village and further service road along the belt conveyor with minimal use of public road (about 4 km only) for movement of loaded trucks. Hence, the distance for transportation of coal by road has been reduced from 35 km to 23.72 km. It is also proposed that the empty trucks after unloading will follow the stretch of service road along the Belt and public road passing through Sirka & Oderna village. Earlier the length of public road used is about 20.96 Km. Now, the utilization of public road has been reduced to about 4 Km for loaded trucks and about 13.82 Km for the movement of empty trucks, including old abandoned road.

(v) In view of foregoing, it is requested to accord the permission to transport coal from Pakri Barwadhi CMB to Banadag Railway siding for further two years (i.e. up to 28.06.2020) by road as an interim arrangement by way of suitable amendment in PBCMB EC specific Condition No. 2A (ix) as the erection of conveyor corridor system will take some more time to complete.

32.8.3 During deliberations on the proposal, the Committee noted the following:-

The proposal is for amendment in environmental clearance dated 19th May, 2009 to Pakri Barwadhi Coal Mining Project of 15 MTPA of M/s National Thermal Power Corporation Ltd in an area of 3319.42 ha located in Tehsil Barkagaon District Hazaribagh (Jharkhand)

EC was granted to the project on 19th May 2009, and amended on 29th June, 2016 permitting transportation of coal for a period of two years, by road from crusher point to the Banadag railway siding (approx 35 km) by adopting all mitigative measure to control dust pollution. The project proponent was also required to put all efforts to expedite completion of service road for belt conveyor so that the same can be utilized for coal transportation by road.

It is now proposed to transport coal through newly constructed mine peripheral road passing through Upardari & Jugra villages and further service road along the belt conveyor with minimal use of public road (about 4 km only) for movement of loaded trucks. Hence, the distance for transportation of coal by road has been reduced from 35 km to 23.72 km. It is also proposed that the empty trucks after unloading will follow the stretch of service road along the Belt and public road passing through Sirka & Oderna village.

Further amendment has been sought to extend permission for coal transportation from Pakri Barwadhi CMB to Banadag Railway siding for another period of two years (i.e. up to 28th June, 2020) by road as an interim arrangement due to delay in commissioning of conveyor corridor system.

32.8.4 *The EAC, after deliberations, recommended for amendment in environmental clearance dated 19th May, 2009, permitting coal transportation from Pakri Barwadhi CMB to Banadag Railway siding for further two years (i.e. up to 28th June, 2020) by road as an interim arrangement by adopting all mitigation measures to control dust pollution, which would include regular maintenance of roads, water sprinkling, covering trucks with tarpaulin sheet etc.*

The committee further insisted that the public roads used for transportation of coal, should be widened and shouldered at populated areas.

Agenda No.32.9

Coal Beneficiation Plant of 1 MTPA in an area of 3.5 ha of M/s Shree Nakoda Ispat Limited, located in Plot No.109 and 75 in Siltara Industrial Growth Centre, District Raipur (Chhattisgarh) - For Amendment in EC

[IA/CG/CMIN/9088/2008, F.No.J-11015/473/2008-IA.II(M)]

32.9.1 The proposal is for amendment in environmental clearance for Coal Beneficiation Plant of 1 MTPA capacity in an area of 3.5 ha of M/s Shree Nakoda Ispat Limited, located in Plot No.109 and 75 in Siltara Industrial Growth Centre, District Raipur (Chhattisgarh)

32.9.2 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) Environmental Clearance was granted to the project vide letter No. J-11011/473/2008-IA-II (M) dated 10th February, 2010. Subsequently, amendment to the EC was granted on 29th December, 2015.

(ii) The Chhattisgarh Environment Conservation Board, Raipur vide their letter no 500/HO/Tech/CPCB/2016 dated 28th April 2016 advised our company to obtain permission from Coal Controller, for disposal of coal reject, as stipulated in clause no 4 of the EC Amendment order dated 29th December, 2015.

(iii) The Coal Controller, Kolkatta vide their letter No CC/MCBA/105/18/2015-2016/Madanpur North (Disposal) dated 22nd November, 2016 has categorically informed that “the policy of disposal of washery reject is not finalized at Government Level. Therefore, application may be processed only after the circulation of the finalized policy for disposal of washery rejects”.

(iv) Request to make the amendment/modification/correction in Clause No 4 in EC amendment letter dated 29th December, 2015.

32.9.3 *The EAC, after deliberations recommended for deletion of the condition stipulated at para 4 of this Ministry’s letter dated 29th December, 2015, and at the same time, revising the conditions 2A (ii)&(x) of the earlier EC dated 10th February, 2010 as under:-*

‘The project proponent shall abide by all the policies, guidelines issued by Ministry of Coal and/or MoEF&CC from time to time regarding utilization/disposal of washery rejects in eco-friendly manner.’

Agenda No.32.10

Jayant Opencast Coal mine Expansion project from 15.5 MTPA to 25 MTPA in an area of 3177 ha of M/s Northern Coalfields Limited located in District Singrauli (Madhya Pradesh) - Further Consideration of EC

32.10.1 The proposal is for grant of environmental clearance for Jayant Opencast Coal mining

Expansion project from 15.5 MTPA to 25 MTPA in an area of 3177 ha of M/s Northern Coalfields Limited located in District Singrauli (Madhya Pradesh).

32.10.2 The proposal was considered by the EAC in its 30th meeting of the EAC held on 17-18 May, 2018, wherein the Committee insisted for clarifications and inputs in respect of the following:

(i) Discrepancy in respect of total forest area involved under the project, whether 1180 ha or 1180.17 ha. The same needs to be firmed up and the land use pattern/details to be revised accordingly.

(ii) More area to be acquired under the project involves additional forest land of 18 ha, carved out of Nigahi Opencast Coal Mining project. As such, the parallel proposal for amendment in the EC for Nigahi OCP also needs to be submitted.

(iii) Coal production during previous years, especially from the year 2000-01 up to 2007-08, has been consistently more than the reported sanctioned capacity of 9 MTPA, which clearly signifies violation of the EIA Notification, 2006 and needs to be addressed at this stage vis-à-vis the orders of Hon'ble Supreme Court and/or extant statutory provisions.

32.10.3 In response to the observations of EAC, the details submitted by the project proponent and/or as informed during the meeting, are as under:-

Sl. No.	Observations of the EAC meeting	ATR by Project Proponent
1.	Discrepancy in respect of total forest area involved under the project, whether 1180 ha or 1180.17 ha. The same needs to be firmed up and the land use pattern/details to be revised accordingly.	<p>Total forest area involved for the Jayant expansion OCP (25 MTPA) is 1180.171 ha, which was rounded off to 1180 Ha in the EMP submitted earlier (at page no-32 of chapter-II).</p> <p>(i) The details of forest land is deliberated as below:</p> <p>(a) Forest land area diverted before enactment of FC act 1980 is 943 Ha : The 927 Ha of forest land area was notified under CBA 1957 and another 16 ha was acquired through transfer in 1975 for Magazine.</p> <p>(b) Forest land area diverted after enactment of FC act 1980 is 219.171 Ha : Permission for acquisition of 219.171 Ha of land has been obtained in three phases as per following details:</p> <ul style="list-style-type: none"> • <u>100 Ha</u>: Initially acquired in the year 1992 for lease period of 10 yrs and subsequently renewed. • <u>68.290 Ha</u>: Initially acquired in the year 1997 for lease period of 30 yrs. • <u>50.881 Ha</u>: Initially acquired in the year 2000 for lease period of 30 yrs. <p>(c) Diversion of forest land area as per FC act 1980 is 18 Ha : Acquired by Nigahi Project and has been</p>

		<p>carved out for Jayant Project. The stage –II clearance of the referred 18 Ha of forest land has been obtained.</p> <p>(ii) The non-forest land required for the Jayant Expansion OCP 1997 Ha. As such the total land required for Jayant Expansion OCP is 3177.171 Ha (1180.171 Ha of forest land + 1997 Ha of non-forest land) which is firmed up in the revised MCP and EMP.</p> <p>(iii) The revised MCP has been approved by NCL Board in its 229th meeting held on 21.06.2018 and the necessary correction is being done in the Project Report and it will be communicated to NCL Board and CIL Board in its next meeting.</p> <p>(iv) Calendar Plan or any other details of Production for 20.0 MTPA (normative) and 25.0 MTPA (peak) based on updated figures has been incorporated in the revised EMP.</p>
2	<p>More area to be acquired under the project involves additional forest land of 18 ha, carved out of Nigahi Opencast Coal mining project. As such parallel proposal for amendment in EC for Nigahi OCP also needs to be submitted.</p>	<p>There is provision of 3036.40 ha of land in Nigahi Project with capacity of 18.75 MTPA. However, at present Nigahi Project is having EC for 18.75 MTPA involving 2650.40 ha land i.e. except the 386 ha of forest land for which Stage-II clearance has been obtained in April' 2018.</p> <p>Since stage-2 clearance of forest land has been issued and 18 Ha of forest land has been carved out of Nigahi Project for Jayant Project. So, revised mine plan for Nigahi Project, involving 3018.40 Ha of land has been approved by NCL Board in its 229th meeting held on 21.06.2018.</p> <p>Out of these 386 Ha for which FC stage 2 clearance has been obtained by Nigahi Project, 18 Ha shall be used by Jayant project and as such parallel proposal for amendments in the EC for Nigahi OCP is under preparation based on total land requirement of 3018.40 ha (2650.40 + 368 {i.e. 386-18} ha).</p> <p>So, based on 3018.40 Ha of land, Nigahi Project shall process for amendment in EC very shortly.</p>
3	<p>Coal productions during previous years, especially from the year 2000-01 up to 2007-08 has been consistently more than the reported sanctioned capacity of 9 MTPA , which clearly signifies the violations of the EIA Notification, 2006 and</p>	<p>EC capacity was not mentioned in the EC letter while the project sanctioned capacity was 10.0 MTPA against which EC was obtained. As such, there was no violation of EIA notification'2006 except the year 2006-07 and 2007-08.</p> <p>The consent to operate (CTO) was granted by MPPCB for 9.0 MTPA based on earlier years production achieved, however sanctioned PR capacity was 10.0</p>

needs to be addressed at this stage vis-à-vis the orders of Hon'ble Supreme Court and / or extant statutory provisions.	<p>MTPA against which EC was obtained.</p> <p>At present Jayant is having Environmental Clearance of 15.50 MTPA which was granted in the year Dec'2008.</p> <p>However, as per the directives of MOEF&CC OM no F.No 3-50/2017-IA.III(pt.) dated 30.05.2018 the undertaking and commitment of the project proponent not to repeat any such violation in future, by way of affidavit for compliance of all the statutory requirement & orders of Hon'ble Supreme Court dated 2nd Aug 2017, shall be submitted accordingly.</p>
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32.10.4 During deliberations, the Committee noted the following:-

The proposal is for grant of EC to the expansion of Jayant Opencast Coal mining project from 15.5 MTPA to 25 MTPA of M/s Northern Coalfields Limited in a total area of 3177 ha located in District Singrauli (Madhya Pradesh).

Out of the total lease hold of 3177 ha, 1180.17 ha is the forest land (including safety zone and all types of forest land). Forest Clearance for 1162.17 ha has been obtained in stages. The remaining 18 ha of forest land has been acquired from Nigahi project under the CBA Notification No.1430 dated 19th June, 2000, and stage-II forest clearance has been obtained for the same.

Earlier, the project for expansion of Jayant OCP from 12.5 to 15.5 MTPA in mine lease area of 2704 ha was granted EC by the Ministry vide letter dated 10th December, 2008.

The ToR for the project was granted on 15th June, 2017 and the public hearing was conducted by the State Pollution Control Board on 13th December, 2017. Main issues raised therein included rehabilitation & employment of oustees, social & economical problem of oustees and affected population like availability of drinking water, electricity and employment.

The project report for expansion of Jayant OCP was approved in 202nd M/s NCL Board meeting held on 1st March, 2016 and by Coal India Board vide letter dated 16th May, 2017.

There has been no coal production in excess of the sanctioned capacity from 2008-09 onwards i.e. after the environmental clearance granted by the Ministry on 10th December, 2008 to the project for expansion from 12.5 to 15.5 MTPA.

The project proponent has requested for correction/updation of the figures/details in the May, 2018 EAC minutes of the projects.

32.10.5 *The EAC, after deliberations, recommended the project for grant of environmental clearance to expansion of Jayant Opencast Coal mining project from 15.5 MTPA to 25 MTPA of M/s Northern Coalfields Limited in a total area of 3177 ha located in District Singrauli (Madhya Pradesh), and subject to the compliance of terms and conditions as applicable, and the additional conditions as under:-*

- (i) *To control the dust production at source, crusher and in-pit belt conveyors shall be*

provided with mist type sprinklers.

(ii) Mitigative measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions as presented before the Committee, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at railway siding, etc.

(iii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.

(iv) To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.

(v) Thick green belt of adequate width in the down wind direction of the project site shall be developed to mitigate/check the dust pollution. Plantation plan shall be prepared in consultation with the State Forest Department.

The Committee further suggested that in view of the excess coal production before the last environmental clearance issued on 10th December, 2008 and thus violation of the EIA Notification, 2006, all the conditions stipulated in the Ministry's OM dated 30th May, 2018 shall be applicable in the instant case also.

PARTICIPANTS IN 32nd EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 28th June, 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. Jai Krishna Pandey	Member
4.	Dr. G P Kundargi	Member
5.	Dr. S K Paliwal	Member
6.	Shri S.D.Vora	Member
7.	Shri N.S. Mondal	Member
8.	Shri S. K. Srivastava	Member Secretary

PARTICIPANTS IN 33rd EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 28th June, 2018 ON COAL SECTOR PROJECTS.

32.1 Cluster XVII Kalyaneshwari OCP of M/s Bharat Coking Coal Ltd.,

32.2 Cluster XI group of mines of M/s Bharat Coking Coal Limited,

1. Shri R K Garg
2. Shri D.Gangopadhyay
3. Shri Anandji Prasad
4. Shri Partha Das
5. Shri Hemant Chouhan
6. Shri Amarjeet Singh
7. Debashish Bandhopadhyay
8. Kumar Vaibhav
9. Vaishali Singh
10. Abhist Raj
11. Ms Lekha Khare
12. Ms Vinita Arora

32.3 Expansion of Tapin South OCP of M/s Central Coalfields Limited,

1. Shri R K Garg
2. Shri V K Shrivastav
3. Shri Ravi Ranjan
4. Shri Laxmideep G.
5. Shri Debasi Bandyopadhyay
6. Ms Lekha Khare
7. Ms Vinita Arora

32.4 Kakatiya Khani Opencast III (KTK OC-III) of M/s The Singareni Collieries Company Limited

32.5 Expansion of Manuguru Opencast-II of M/s The Singareni Collieries Company Limited.

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

32.6 Expansion of Samaleswari OCP of M/s Mahanadi Coalfields Limited

1. Shri R K Garg
2. Shri O.P.Singh
3. Shri A.K.Samantaray

4. Shri C.Jayadev
5. Shri R.C.Sahoo
6. Shri N.K.Singh
7. Ms Lekha Khare
8. Ms Vinita Arora

32.7 Coal Washery of 2.5 MTPA of M/s Paras Power & Coal Beneficiation Ltd

1. Shri Prashant Jain
2. Shri K K Jain
3. Shri M Janardhan
4. Shri Prasad M K
5. Ms Durga Bhavana

32.8 Pakri Barwadih of M/s NTPC Limited

1. Shri Reju Danial
2. Shri R.K.Badera
3. Shri Pratha Majumdar
4. Shri K.S.Sundaram
5. Shri P.R Rao
6. Moh. Abdul Hasib Ansari
7. Smt. Marisha Sharma
8. Shri U Sadananda Chary
9. Shri S C Singh

32.9 Coal Beneficiation Plant of M/s Shree Nakoda Ispat Limited

1. Shri Arvind Kumar Sharma
2. Shri Shrikant Vyauhare

32.10 Jayant Expansion OCP of M/s Northern Coalfields Limited

- 1 Shri R K Garg
- 2 Shri P M Prasad
- 3 Shri P Chansoriya
- 4 Shri V K Pandey
- 5 Shri Prem Prakash Kumar
- 6 Shri V N Dupattawala
- 7 Ms Lekha Khare
- 8 Ms Vinita Arora

32.11 Discussion on any other item.

ANNEXURE-3

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 (PM10, PM2.5, SOx and NOx, noise, water (surface and groundwater), soil be submitted.
- (ix) The wet washery should generally utilize mine water only. In case mine water is not available, the option of storage of rain water and its use should be examined. Use of surface water and ground water should be avoided.
- (x) Detailed water balance should be provided. The break-up of water requirement as per different activities in the mining operations vis-a-vis washery should be given. If the source of water is from surface water and/or ground water, the same may be justified besides obtaining approval of the Competent Authority for its drawl.
- (xi) The entire sequence of mineral production, transportation, handling, transfer and storage of mineral and waste, if any, and their impacts on air quality should be shown in a flow chart with specific points where fugitive emissions can arise and specific pollution control/mitigative measures proposed to be put in place. The washed coal and rejects should be transport by train as far as possible. Road transport of washed coal and rejects should generally be avoided. In case, the TPP is within 10km radius, it should be through conveyer belt. If transport by rail is not feasible because of the topography of the area, the option for transport by road be examined in detail and its impacts along with the mitigation measures should be clearly brought out in EIA/EMP report.
- (xii) Details of various facilities proposed to be provided in terms of parking, rest areas, canteen etc. to the personnel involved in mineral transportation, workshop and effluents/pollution load from these activities should be provided.
- (xiii) Impacts of CHP, if any, on air and water quality should also be spelt out alongwith Action Plan.

- (xiv) O.M.no.J-II013/25/2014-IA.I dated 11th August, 2014 to be followed with regard to CSR activities.
- (xv) Details of Public Hearing, Notice(s) issued in newspapers, proceedings/minutes of Public Hearing, points raised by the general public and response/commitments made by the proponent along with the Action Plan and budgetary provisions be submitted in tabular form. If the Public Hearing is in the regional language, an authenticated English translation of the same should be provided. Status of any litigations/ court cases filed/pending, if any, against the project should be mentioned in EIA.
- (xvi) Analysis of samples indicating the following be submitted:
Characteristics of coal prior to washing (this includes grade of coal, other characteristics of ash, S and heavy levels of metals such as Hg, As, Pb, Cr etc).
Characteristics and quantum of coal after washing.
Characteristics and quantum of coal rejects.
- (xvii) Details of management/disposal/use of coal rejects should be provided. The rejects should be used in TPP located close to the washery as far as possible. If TPP is within a reasonable distance (10 km), transportation should be by conveyor belt. If it is far away, the transportation should be by rail as far as possible.
- (xviii) Copies of MOU/Agreement with linkages (for stand-alone washery) for the capacity for which EC is being sought should be submitted.
- (xix) Corporate Environment Responsibility:
a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
- (xx) A detailed action Plan for Corporate Social Responsibility for the project affected people and people living in and around the project area should be provided.
- (xxi) Permission of drawl of water shall be pre-requisite for consideration of EC.
- (xxii) Wastewater /effluent should confirm to the effluent standards as prescribed under Environment (Protection) Act, 1986
- (xxiii) Details of washed coal, middling and rejects along with the MoU with the end-users should be submitted.

GENERIC TOR FOR AN OPENCAST COALMINE PROJECT for EC

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

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

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.
- (xiv) One-season (other than monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx 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.
- (xv) 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.
- (xvi) 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.
- (xvii) 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.
- (xviii) 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.

- (xix) 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.
- (xx) Detailed water balance should be provided. The break-up of water requirement for the various mine operations should be given separately.
- (xxi) 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.
- (xxii) 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.
- (xxiii) Impact of blasting, noise and vibrations should be given.
- (xxiv) Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
- (xxv) 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.
- (xxvi) 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.
- (xxvii) 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 28o 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.
- (xxviii) 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.
- (xxix) 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.
- (xxx) Progressive Green belt and ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEFCC given below) and selection of species (native) based on original survey/land-use should be given.

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

S.N.	Land use Category	Present (1 st Year)	5 th Year	10 th Year	20 th Year	24 th 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 st year					
2.	3 rd year					
3.	5 th year					
4.	10 th year					
5.	15 th year					
6.	20 th year					
7.	25 th year					
8.	30 th year					
9.	34 th year(end of mine life)					
10.	34- 37 th Year (Post- mining)					

* As a representative example

(xxxii) 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)				TOTAL
		Plantation	Water Body	Public Use	Undisturbed	
1.	External OB Dump					
2.	Top soil Dump					
3.	Excavation					

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

(xxxii) 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.

(xxxiii) 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.

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

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

(xxxvi) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.

(xxxvii) 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.

(xxxviii) 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.

(xxxix) 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.

(xl) 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.

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

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

(xliii) 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.

(xliv) 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 Forest land (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			

GENERIC TORs FOR AN UNDERGROUND COALMINE PROJECT

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

S.N	ML/Project Land use	Area under Surface Rights(ha)	Area Under Mining Rights (ha)	Area under Both (ha)
1.	Agricultural land			
2.	Forest Land			
3.	Grazing Land			
4.	Settlements			
5.	Others (specify)			

Area under Surface Rights

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

(viii) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.

(ix) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.

(x) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.

(xi) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.

(xii) One-season (other than monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.

(xiii) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.

(xiv) Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring

measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.

(xv) Study on subsidence including modeling for prediction, mitigation/prevention of subsidence, continuous monitoring measures, and safety issues should be carried out.

(xvi) Detailed water balance should be provided. The break up of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users should be provided.

(xvii) Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.

(xviii) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.

(xix) Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.

(xx) Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.

(xxi) The number and efficiency of mobile/static water sprinkling system along the main mineral transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.

(xxii) Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.

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

(xxiv) Greenbelt development should be undertaken particularly around the transport route and CHP. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.

(xxv) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.

(xxvi) Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.

(xxvii) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.

(xxviii) Corporate Environment Responsibility:

- a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
- b) The Environment Policy must prescribe for standard operating process/procedures

to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.

- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
- d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

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

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

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

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

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

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

Total ML /Project Area (ha)	Total Forest Land (ha)	Date of FC	Extent of Forest Land	Balance area for which FC is yet to be obtained	Status of appl. For diversion of forest land
		If more than one provide details of each FC			

GENERIC TORs FOR AN OPENCAST-CUM-UNDERGROUND COALMINE PROJECT

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

05/07/2018

https://mail.gov.in/iwc_static/layout/shell.html?lang=en&3.0.1.2.0_15121607

Subject: **Re: Draft Minutes of the 32nd meeting of the EAC held on 28th June, 2018 for appraisal of Coal mining projects- reg.** Date: 07/04/18 05:40 PM
To: "Dr. P R Sakhare" <sakhare.pr@nic.in> From: navin chandra <navinchandrarrl@yahoo.com>

04/07/2018

Dear Dr. Shrivastava Ji/Sakhare Ji,

I have gone through the draft minutes sent by you. The Minutes are in order and you may upload the same on the web-site of the MoEF&CCD as per your norms.

With regards,
yours sincerely,

(NAVIN CHANDRA)

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

**32nd EAC (THERMAL & COAL MINING PROJECTS) MEETING
SCHEDULED FOR 28th June, 2018.**

AGENDA

Venue: Narmada Conference Hall, Ground Floor, Jal Wing,
Indira Paryavaran Bhawan, Jorbagh, New Delhi-110003.

[Pl. check the MoEF website: http://environmentclearance.nic.in/Report/Default3.aspx](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

COAL MINING PROJECTS

Time: 10.00 AM: Thursday: 28th June, 2018

32.1 Cluster XVII Kalyaneshwari OCP Project 5.20 MTPA Peak and Kalyaneshwari Washery 3.65 MTPA capacity in an ML area 1459.10 ha to 1844.09 ha of M/s Bharat Coking Coal Ltd., Asansol located at District Burdwan, (West Bengal) - For EC

[IA/WB/CMIN/20226/2013, F.No.J-11015/373/2013-IA.II(M)]

32.2 Cluster XI group of mines (5.08 MTPA with a peak capacity of 6.604 MTPA) in a

combined ML area of 3447.14 ha (3527.58 ha - 80.44 ha of forest land = 3447.14 ha) and Moonidih Washery (1.6 MTPA peak capacity) of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand)-Further consideration for amendment in EC

[IA/JH/CMIN/9513/2011, F.No.J-11015/77/2011-IA.II(M)]

32.3 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)- Further consideration of EC

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

32.4 Kakatiya Khani Opencast III (KTK OC-III) Coal Mining project of 3.75 MTPA by Opencast and 0.48 MTPA by Underground in project area of 1336.64 ha of M/s The Singareni Collieries Company Limited located in District Jayashankar Bhoopalpalli (Telangana) - For ToR

[IA/TG/CMIN/74922/2018, F.No. J-11015/464/2012-IA-II(M)]

32.5 Expansion of Manuguru Opencast-II Coal Mining Project from 5 MTPA to 6.25 MTPA in an ML area of 1526.20 ha of M/s The Singareni Collieries Company Limited located in District Khammam (Telangana)- For EC Amendment

[IA/TG/CMIN/18274/2013, F.No.J-11015/78/2013-IA.II(M)]

32.6 Expansion of Samaleswari Opencast coal mine project of 15 MTPA in respect of increase in ML area from 928.264 ha to 1334.912 ha of M/s Mahanadi Coalfields Limited located in Ib Valley Area, Tehsil & District Jharsuguda (Odisha) – Further consideration of ToR

[IA/OR/CMIN/73143/2018, F.No.J-11015/183/2008-IA.II(M)]

32.7 Coal Washery of 2.5 MTPA in an area of 8 ha of M/s Paras Power & Coal Beneficiation Ltd at Ghutku Village, Tehsil Takhatpur, District Bilaspur District (Chhattisgarh) - For EC

[IA/CG/CMIN/74978/2016, F.No.J-11015/70/2016-IA.II(M)]

32.8 Pakri Barwadih Coal Mine Project of 15 MTPA in an area of 3319.42 ha of M/s National Thermal Power Corporation Ltd located in Tehsil Barkagaon District Hazaribagh (Jharkhand) – For Amendment in EC

[IA/JH/CMIN/8804/2007, F.No.J-11015/38/2007-IA.II(M)]

32.9 Coal Beneficiation Plant of 1 MTPA capacity in an area of 3.5 ha of M/s Shree Nakoda Ispat Limited, located in Plot No.109 and 75 in Siltara Industrial Growth Centre, District Raipur (Chhattisgarh) – For Amendment in EC

[IA/CG/CMIN/9088/2008, F.No.J-11015/473/2008-IA.II(M)]

32.10 Jayant Opencast Coal mine Expansion project from 15.5 MTPA to 25 MTPA in an area of 3177 ha of M/s Northern Coalfields Limited located in District Singrauli (Madhya Pradesh) - Further Consideration of EC

[IA/MP/CMIN/62083/2017, F.No.J-11015/12/2017-IA.II(M)]

32.11 Discussion on any other item.