Minutes of the 40th meeting of the Expert Appraisal Committee (EAC) held on 26th October, 2018 for appraisal of coal mining projects at Indira Paryavaran Bhawan, Ministry of Environment, Forest and Climate Change, New Delhi-3

The 40th meeting of the Expert Appraisal Committee (EAC) for Coal mining projects was held on 26th October, 2018 in the Ministry of Environment, Forest & Climate Change at Narmada Meeting Hall, Jal Wing, Ground Floor, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi to consider the proposals relating to coal mining sector. The following members were present:

1. Dr. Sharachchandra Lele - (Acting) Chairman

Shri Suramya D. Vora - Member
 Shri G.P. Kundargi - Member
 Shri N. Mohan Karnat - Member
 Dr. Jai Krishna Pandey - Member
 Dr. Manjari Srivastava - Member

7. Shri. N. S. Mondal - Member (Representative of CEA)

8. Shri. S. K. Srivastava - Member Secretary

Dr. Navin Chandra, Dr. N.P. Shukla, Prof. S.K. Gupta (Representative of ISM Dhanbad), Dr. S.K. Paliwal (Representative of CPCB) could not be present. In the absence of the Chair (Dr.Navin Chandra), Dr.Sharachchandra Lele was requested to officiate as Acting Chairman.

Confirmation of minutes

There being no comments from any of the members of the Committee, minutes of the 38th meeting of the EAC held on 27th September, 2018 were confirmed in the presence of the members who had been present in the 38th meeting.

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.40.1

Expansion of Dudhichua Opencast Coal Mining Project from 15.5 to 17.5 MTPA in mine lease area of 1752 ha of M/s Northern Coalfields Limited located at Dudhichua, Post Khadia, District Sonebhadra (UP) - For EC

[IA/MP/CMIN/80585/2018; F No.J-11015/22/1996- IA.II(M)]

- **40.1.1** The proposal is for environment clearance to the expansion of Dudhichua Opencast Coal Mining Project from 15.5 to 17.5 MTPA in an area of 1752 ha of M/s Northern Coalfields Limited located at Dudhichua, Post Khadia, District Sonebhadra (Uttar Pradesh).
- **40.1.2** Facts of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:
- (i) The project was earlier granted environmental clearance vide letter No.J-11015/381/2008-IA.II (M) dated 28th February, 2008 for 12.5 MTPA capacity in project area of 1752 ha. Subsequently, environmental clearance for the expansion of the project from 12.5 MTPA to 15.5 MTPA within the same project area was granted by the Ministry vide letter dated 10th December, 2008.
- (ii) The PP had earlier submitted a proposal for grant of ToR to the project for expansion of

Dudhichua Opencast Coal Mine Project from 15.5 MTPA to 25 MTPA by M/s Northern Coalfields Limited in an area of 2390.722 ha located in Tehsil Waidhan District Singrauli (Madhya Pradesh) and Tehsil Dudhi District Sonebhadra. ToR for the same was granted by the Ministry vide letter No. J-11015/381/2008-IA.II (M) dated 1st February, 2018

- (iii) The latitude and longitude of the project are $24^{0}7'15.54"N$ to $24^{0}10'56"N$ and $82^{0}39'49.18"E$ to $82^{0}43'19.75"E$ respectively.
- (iv) Joint Venture: No
- (v) Coal Linkage: Basket linkage mine for pit head power station of NTPC, UPRVUNL in Singrauli Coalfields and Power station in Western/ Northern India through their own MGR system and other consumers by Public Railway.
- (vi) Employment generated / to be generated: 3350 (Sanctioned manpower as per EPR)
- (vii) Benefits of the project: The project will be able to supply planned quantity of coal to pit head power stations of NTPC, UPRVUNL in Singrauli Coalfields and power stations in western/Northern India through their own MGR system and other consumers by public railway system thus meeting the energy needs of the country
- (viii) The total area of the extant project is 1752 ha. Mining lease area as per approved Mining Plan is 2390.722 ha. The land usage of the project will be as follows:

S. No.	Particulars of land	Area (ha)
1.	Tenancy land	636
2.	Government land	366
3.	Forest land	750
	Total	1752

Pre-Mining

S. No.	Land use	Within ML Area (ha)	Outside ML area (ha)	Total (ha)
1.	Tenancy Land (Agricultural land)	636.00	NIL	636.00
2.	Forest Land	749.78	NIL	749.78
3.	Wasteland	-	NIL	-
4.	Grazing land	-	NIL	-
5.	Surface water bodies	-	NIL	-
6.	Settlements	-	NIL	-
7.	Others (Government land)	366.22	NIL	366.22
	Total	1752.00	NIL	1752.00

Post-Mining

S. No.	Land Use Pattern	Plantation (ha)	Water body (ha)	Public use (ha)	Undisturbed land (ha)	Total land (ha)
1.	External OB dump	152.00	-	-	-	152.00
2.	Top Soil Dump	Top Soil will of OB dump		r biologic	al reclamation	Nil
3.	Excavation Area (backfilled and void)	805.00	63.00		-	868.00
4.	Roads			10.00		10.00
5.	Build-up area (CHP, ETP, Workshop, Railway, colony, mineral storage etc)	155.00		198.00	-	353.00

6.	Green Belt	160.00	-	-	-	160.00
7.	Undisturbed Area	-				
	Total	1272.00	63.00	208.00	209.00	1752.00

- (ix) Total geological reserve is 361.34 MT (Balance as on 31.03.2016). The mineable reserve 320.01 MT (as on 31.03.2017), extractable reserve is 320.01 MT. The per cent of extraction would be 92.49%
- (x) The coal grade is G-8, G-11 & (Avg.-G-10). The stripping ratio is 4.61 M³/t. The average Gradient is 2⁰-3⁰ There will be three seams with thickness ranging upto 25.75 m.
- (xi) The total estimated water requirement is 2.60 MGD. The level of ground water ranges from 0.20 m to 20.85 m below ground level.
- (xii) The Method of mining would be Opencast (Combined system of Mining deploying Dragline and Shovel- Dumper)
- (xiii) There is one external OB dump with Quantity of 134 Mm³ in an area of 152 ha (Old external dump already reclaimed. There is no external dumping in the proposed expansion project) with height of 90 meter above the surface level and two internal dump with Quantity of 1603.78 Mm³ in an area of 1316 ha.
- (xiv) The final mine void would be in 324 ha with depth varying from 30 m to 40 m. and the total quarry area is 1640 ha. Backfilled quarry area of 1316.00 ha shall be reclaimed with plantation. A void of 324 ha with depth varying from 30 to 40m which is proposed to be converted into a water body
- (xv) Ambient Air quality Baseline data monitoring has been carried out during 15th March, 2016 to 15th June, 2016 (Pre-monsoon season) and well documented. The results are found to be within permissible limits.
- (xvi) The life of mine is 18 years (as on 01.04.2017).
- (xvii) Transportation: From mine pit to crusher by rear dumpers, surface to siding by Coal Handling Plant and siding at loading by Automatic loading system through Silo.
- (xviii) There is R & R involved. There are 502 PAFs for this expansion of project.
- (xix) Cost: Total capital cost of the project is Rs. 2718.37 Crores. CSR Cost: As per CIL CSR policy of June 2014, the fund for the CSR should be allocated based on 2% of the average net profit of the company for the three immediate preceding financial year or Rs 2/- per tone of coal production of previous year, whichever is higher. R&R Cost: 17.82 Crore. Environmental Management Cost: 161.5278 Crore
- (xx) Water body: There is no river/Nallha flowing near or adjacent to the proposed mine area.
- (xxi) Approvals: Ground water clearance from CGWA obtained vide letter No. 21-4 (13)/NCR/CGWA/2007-626 dated 20.08.2007 for existing capacity. Board's approval obtained on 25.11.2017. Mining plan has been approved on 25.11.2017. Mine closure plan is an integral part of mining plan.
- (xxii) Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- (xxiii) Forestry issues: Total forest land area involved is 1217.809 ha. FC granted for 750.00 Ha and for balance 467.809 Ha has to be acquired.
- (xxiv) Total afforestation plan shall be implemented covering an area of 1588 ha at the end of mining. Green Belt over an area of 120.722 ha. Density of tree plantation 2500 trees/ ha of plants.
- (xxv) There are no court cases/violation pending with the project proponent.
- (xxvi) Public Hearing was held in two districts. i.e. Sonebhadra (UP) on 10th October, 2006 and Singrauli (MP) on 20th January, 2007.
- (xxvii) The monitoring report on compliance status of existing EC conditions have been forwarded by the Regional Office, MoEFCC at Bhopal vide letter dated 11th August, 2017.
- **40.1.3** During deliberations, the EAC noted the following:-

The proposal is for environment clearance to the expansion of Dudhichua Opencast Coal Mining Project from 15.5 to 17.5 MTPA in mine lease area of 1752 ha of M/s Northern Coalfields Limited located at Dudhichua, Post Khadia, District Sonebhadra (UP) and Tehsil Waidhan, District Singrauli (MP).

The project was earlier granted environmental clearance vide letter dated 28th February, 2008 for 12.5 MTPA capacity in an area of 1752 ha. Further, environmental clearance to the project for expansion from 12.5 MTPA to 15.5 MTPA in the same area was granted by the Ministry on 10th December, 2008 based on the public hearing conducted at Sonebhadra (UP) on 10th October, 2006 and Singrauli (MP) on 20th January, 2007. The project involves 749.78 ha of forest land, for which forest clearance has been obtained to effect its diversion for non-forestry use vide letter dated 30th July, 1990 (555 ha in Uttar Pradesh) and letter dated 17th November, 2005 (194.78 ha in Madhya Pradesh).

Subsequently, in January 2018, the PP had approached the Ministry for further expansion of the project to 25 MTPA in a larger area. Based on the EAC', the Ministry had granted ToR to the project for expansion of Dudhichua Opencast Coal Mine from 15.5 MTPA to 25 MTPA by M/s Northern Coalfields Limited in an area of 2390.722 ha located in Tehsil Waidhan District Singrauli (MP) and Tehsil Dudhi in District Sonebhadra (UP), vide letter dated 1st February, 2018 for preparation of EIA/EMP reports along with public consultation.

However, the PP now states that they are facing difficulties in this expansion, and the scope of the project has been reduced to expansion up to 17.5 MTPA within the existing area of 1752 ha. The new proposal seeks environmental clearance under the provisions contained in para 7(ii) of the EIA Notification, 2006, without any fresh ToR for the project and exemption from public hearing in terms of the Ministry's OM dated 15th September, 2017.

The project report for the earlier proposed expansion of Dudhichua Coal Mining Project was approved by the Board of CIL on 25th November, 2017. Mining Plan for revised scope of the project i.e. expansion from 15.5 to 17.5 MTPA in mine lease area of 1752 was approved by the Board of M/s Northern Coalfields Ltd on 26th September, 2018.

The Regional Office, Bhopal has conducted site inspection of the area on 27th March, 2017 to monitor the status of compliance of conditions stipulated in the environment clearance dated 10th December, 2008 and submitted report vide their letter dated 11th August, 2017. The same is found to be satisfactory.

The EAC however noted that the PP already had an existing TOR (issued in February 2018) for the expansion from 15.5MTPA to 25 MTPA, and that this was clearly the long-term goal of the project. This expansion proposal would then have to stand withdrawn and the TOR cancelled. The PP had not made any motion to withdraw the TOR issued in February 2018. Moreover, proposal submission and TOR issuance are not processes to be taken lightly, to be discarded at will. Moreover, the OM dt. 15th September 2017 only provides the possibility of exemption from public hearing for expansion of upto 40%. It still requires that a TOR be granted and an EIA/EMP be developed and presented to the EAC as per this TOR. Finally, the PP has already received environmental clearance for one expansion in December 2008 without additional public hearing. The exemption from public hearing cannot be taken repeatedly.

40.1.4 The EAC, taking into consideration the above, asked the project proponent to continue with the EIA/EMP and public hearing process as per the TOR granted in February 2018.

Expansion of Umrer OC Coal Mining Project from 3.50 MTPA to 4.90 MTPA in mine lease area of 944.65 ha of M/s Western Coalfields Limited, located in Village Kanwa, Tehsil Umrer, District Nagpur (Maharashtra) - For EC

[IA/MH/CMIN/75881/2018; F.No.J-11015/151/2014-IA.II(M)]

- **40.2.1** The proposal is for grant of environmental clearance to the project for expansion of Umrer OC Coal Mine for 3.50 MTPA to 4.90 MTPA in mine lease area of 944.65 ha of M/s Western Coalfields Ltd located in village Kanhwa, Tehsil Umrer, District Nagpur (Maharashtra).
- **40.2.2** Facts of the proposal, as ascertained from the proposal documents and revealed from the discussions held during the meeting are given as under:
- (i) The proposal is for grant of environment clearance for expansion of Umrer OC Project from 3.50 MTPA to 4.90 MTPA in mine lease area of 944.65 ha of M/s Western Coalfields Limited, located in Village Kanwa, Tehsil Umrer, District Nagpur (Maharashtra).
- (ii) The project area is covered in Survey of India Topo Sheet No.55 P/05 with geographical coordinates ranging from 20°50′56″ 20°52′58″N and 79°15′55″-79°18′9″ E. Mine falls in Umrer block of Umrer Coalfields in Nagpur district. The mine is situated at 45 K.M. South–East of Nagpur and easily approachable by all Maharashtra State Highway No. 9. Mine is connected by a broad gauge railway siding to Butibori Railway Station in Nagpur- Wardha Section of Central Railway.
- (iii) Umrer OC mine was started in the year 1962. Environmental clearance for production capacity of 3.50 MTPA within mine lease area of 944.65 ha was granted by the Ministry vide letter dated 20th May, 2005.
- (iv) Coal linkage of the Umrer OC Project mainly lies with Thermal Power Plants of MAHAGENCO. In addition to this, coal from the mine will be provided to other miscellaneous consumers.
- (v) No joint venture cartel has been formed to operate the mine. Umrer OC Expansion Mine Project has been proposed to be operated solely by the M/s WCL.
- (vi) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13th January, 2010 has imposed moratorium on grant of environment clearance.
- (vii) With regards to employment generation, it is mentioned that existing manpower engaged in the project is reported to be 1,036 persons.
- (viii) The project is reported to be beneficial to bridge the gap between demand and supply of non-coking coal for the power houses and other bulk consumers of western region as well as southern part of the country.
- (ix) Land use detail of the mine is given as under:

During Mining:

S. No	Particulars	Existing land use as on 1 st April,2018 (ha)	Land use during mining (ha)
1	Quarry area	319.60	362.00
2	External OB Dump	139.52*	139.52*
3	Infrastructure including road and colony	227.69	227.69
4	Blasting Zone and Rationalization	257.84	215.44
	Total	944.65	944.65

^{*}The area includes 32.88 ha External Dump of Makardhokra-II OC also as recorded in EC granted to Makardhokra-II OC dated 10th February, 2009.

Post mining:

S.N.	Land use during	Land use (ha)				
	mining	Plantation	Water Body	Public use	Undisturbed	Total
1	External OB Dump	139.52	-	-	-	139.52
2	Top soil dump	-	-	-	-	-
3	Excavation	150.0	95.52	-	116.48*	362.00
4	Built up area including Road & Township	20.0	-	-	207.69	227.69
5	Green Belt	-	-	-	-	-
6	Undisturbed Area	88.36	-	-	127.08	215.44
	Total	397.88	95.52	-	451.25	944.65

- 116.48* land will be technically reclaimed and stabilized.
- (x) Total geological reserve reported in the mine lease area is 11.68 MT and entire geological reserve available in the mine lease is extractable. Therefore, extraction percentage is 100%.
- (xi) Mining Plan for a production capacity of 4.90 MTPA within the existing mine lease area of 944.65 ha has been approved by WCL Board in its 300th meeting held on 24th May, 2018.
- (xii) Application for obtaining the approval of the Central Ground Water Authority for dewatering of groundwater has been submitted on 13th June, 2016. Updated status of the same has not been provided by the PP.
- (xiii) Amb river flow through the project area. It has been diverted from southern part of the quarry to northern part of quarry for a length of 2.4 kms. Availability of ground water has been reported to be varying between 2.2 m 10.4 m during pre-monsoon season and between 3.35 m to 10.2 m during post-monsoon season. Total water requirement for the project has been reported to be 1126 m per day.

(xiv) Geo-mining parameters of the mine are given as under:

S. No	Particulars	Total quarry
1	Area of the Quarry	
	a) On floor (ha)	211.83
	b) On surface (ha)	319.6
2	Depth (m)	
	a) Initial	26
	b) Final	145
3	Average gradient of Seam	1 in 2 to 1 in 12
4	Average thickness of seam (m) Seam II & I Seam III Seam IV	17 5.5 7.5
5	Average Strike length (m)	2800
6	Width on surface (m) (Dip Rise)	1600
7	Width on floor (m) (Dip Rise)	600
8	Coal Quality	G-8 / G-9
9	Balance Mineable reserves (Mt) as on 1.4.2018	11.68
10	Balance OB (Cum) as on 1.4.2018	16.97

S. No	Particulars	Total quarry	
11	Average S.R. m ³ /t.	1.453	

- (xv) Method of mining envisages opencast with shovel-dumper combination.
- (xvi) Life of mine is 2 years at normative capacity of 4.9 MTPA.
- (xvii) The project has 5 external OB dumps in an area of 106.64 ha with 60 m height and 42.213 Mm3 of OB. Additional area of 32.88 ha from Makardhokra-II OC also included in the Umrer OC, thereby total no of external OBs increased to 6 with area of 139.52 ha. One internal OB in an area of 266.48 ha with 165.97 Mm3 of OB. The PP has mentioned that out of 266.48 ha, 150 ha will be biologically reclaimed and remaining 116.48 ha will be technically reclaimed.
- (xviii)Total quarry area is 362.0 ha, out of which, 266.48 ha would be backfilled while final mine void will be created in an area of 95.52 ha with 145 m depth which will be converted into a water body.
- (xix) Afforestation plan over a total area of 397.88 ha has been proposed to be implemented by the end of mining operations with density of 2500 plants per ha.
- (xx) Transportation of coal in mine pit head has been proposed by dumpers, surface to sidings by tippers at siding by Pay loader.
- (xxi) The PP has reported No court cases, violation cases are pending against the project of the PP
- (xxii) No forest land has been reported to be involved in the project.
- (xxiii) The project does not involve project affected families.
- (xxiv) Total cost of the project is Rs. 186.65 crores, cost of production is Rs. 1065.48 per tonne, CSR cost is Rs. 2 per tonne, Environment Management Cost is Rs. 2.76 crores.
- (xxv) Public hearing was conducted on 23rd September, 2004 for 944.65 ha land.
- (xxvi) The issues raised during the Public Hearing have been duly addressed. The project proponent has submitted present status of compliance against issues raised during public hearing held on 23.09.2004.
- (xxvii) The Regional Office (WCZ), Nagpur conducted site inspection of the area in February, 2018 to assess the status of compliance of conditions, stipulated in the environment clearance dated 20th May, 2005. The Regional Office, vide letter no. 3-16/2015/3202 dated 7th February, 2018 submitted inspection report along with their observations. The action taken report has been submitted by the PP to RO, MoEF& CC, Nagpur on 2nd July, 2018
- (xxviii) Earlier, Umrer OC expansion project was accorded environment clearance by the Ministry vide letter dated 20th May, 2005 for production capacity of 3.50 MTPA within mine lease area of 944.65 ha. Now, the PP has proposed to increase production by 40 % i.e. 1.4 MTPA applied from 3.5 MTPA to 4.9 MTPA.
- **40.2.3** Earlier, the proposal for re-validation of existing environmental clearance dated 20th May, 2005 in terms of the Ministry's Notification dated 6th April, 2018, was considered by the EAC in its meetings held on 24th July, 2018 & 31st August, 2018. During the meetings, the EAC desired/insisted for the information as under:-
- (i) Public notice to be issued in leading newspapers (one national and two local) for information of the stakeholders about commencement of the project and present coal mining operations of capacity 3.50 MTPA in mine lease area of 944.65 ha, inviting comments and their redressal.
- (ii) Valid Mining Plan and the Mine Closure Plan duly approved by the competent authority,
- (iii) Compliance status of the conditions stipulated in the environmental clearance dated 20th May, 2005 from the Regional Office at Nagpur,
- (iv) Consent to operate from the State Pollution Control Board for the present mining operations,
- (v) Redressal of issues raised during the last public hearing conducted by the SPCB on 23rd September, 2004, along with the R&R details duly certified by the State Government,

(vi) Details of court cases and the compliance status

40.2.4 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of Umrer Opencast Coal Mine from 3.50 MTPA to 4.90 MTPA in mine lease area of 944.65 ha of M/s Western Coalfields Ltd located in village Kanhwa, Tehsil Umrer, District Nagpur (Maharashtra).

The proposal seeks revalidation of the EC dated 20th May, 2005 as mandated under the Ministry's Notification dated 6th April, 2018, and grant of environmental clearance under the provisions contained in para 7(ii) of the EIA Notification, 2006, without any fresh ToR for the project and exemption from public hearing in terms of the Ministry's OM dated 15th September, 2017.

Earlier, the Environmental Clearance to Umrer OC coal mine for its expansion up to 3.5 MTPA in a total area of 944.65 ha, was accorded by the Ministry vide letter dated 20th May, 2005 based on public hearing conducted on 23rd September, 2004. The proposal for re-validation of environmental clearance in accordance with the Ministry's Notification dated 6th April, 2018 was considered by the EAC in its meeting held on 24th July, 2018.

The Regional Office (WCZ) of the Ministry at Nagpur has carried out site inspection in February, 2018 and submitted its report on updated status of compliance of EC conditions vide letter dated 7th February, 2018. The action taken report has been submitted by the PP to the Regional Office, MoEF& CC, Nagpur on 2nd July, 2018.

Renewal of Consent to operate for the existing capacity of 3.50 MTPA has been obtained from the SPCB and is valid up to 31st March, 2021.

The Mining Plan for the increased coal production capacity of 4.90 MTPA within the lease area of 944.65 ha was approved by the Board of M/s Western Coalfields Ltd in its meeting held on 24th May, 2018. Mine Closure Plan is an integral part of the approved Mining Plan.

As per the observations of the EAC in its meeting held on 24th July, 2018, public Notice for information of the stakeholders about present coal mining operations of capacity 3.50 MTPA in mine lease area of 944.65 ha, was issued on 7th August, 2018 inviting comments within one month. The PP informed that no comments/suggestions were received within the prescribed time frame. As such, the PP had complied with the requirements for re-validation of EC.

However, as far as expansion of mining activities from 3.50 MTPA to 4.90 MTPA is concerned, the OM of 15th September 2017 only provides the possibility of exemption from public hearing. Obtaining a TOR for the proposed expansion and conducting of EIA and preparation of EMP are still required.

40.2.5 The EAC recommended the existing project of Umrer Open Cast Coal Mining of Western Coalfields Ltd of capacity 3.50 MTPA for re-validation of EC. Subject to the issuance of the re-validated EC by the Ministry, the PP may approach the EAC to obtain a TOR for the proposed expansion.

Agenda No.40.3

Kakatiya Khani Opencast 2 (KTK OC-2) Coal Mining project of 1.25 MTPA (Normative) and 1.50 MTPA (Peak) in ML area of 668.23 ha of M/s The Singareni Collieries Company Limited in District Warangal (Telangana) - For amendment in EC

[IA/TG/CMIN/27136/2015; F. No. J-11015/162/2015-IA-II(M)]

- **40.3.1** The proposal is for amendment in the environmental clearance granted by the Ministry vide letter dated 26th October, 2016 to Kakatiya Khani Opencast 2 (KTK OC-2) Coal Mining project of 1.25 MTPA (Normative)/1.50 MTPA (Peak) in ML area of 668.23 ha of M/s The Singareni Collieries Company Limited in District Warangal (Telangana).
- **40.3.2** The project proponent vide their letter dated 10th October, 2018 submitted the proposal seeking exemption from Specific Condition No. 4 A (viii) of the environmental clearance 26th October, 2016 regarding acquisition of surface land up to 500 m from the mine boundary. The PP submitted following justification in support of proposed amendment in the environmental clearance:
- (i) DGMS vide letter No. H.1/KTKOC/Reg.196/2018/1915, dated 9th May, 2018 has granted permission to conduct blasting operations within the danger zone of 500 m but not within 150 m of temple, tod, PWD road, hutments of villages Gaddiganipalli, Faqeeragadda, Balajinagar and Akudari.
- (ii) No structure/village exists within 180 m of project boundary.
- (iii) SCCL is conducting blasting operations in KTK OC-2 strictly as per the guidelines issued in DGMS permission by taking adequate precautions like controlled blasting using Non-Electric Delay Detonators (NONELs) so as to ensure that nearby village structures lying within 500 m blasting zone are not damaged.
- (iv) SCCL has also been successful in carrying out blasting operations in some of the opencast mines with similar conditions like JVR OC-I, JVR OC-II, SRP OC-I, SRP OC-2, Medapalli OC and RG OC-II without acquiring land, in spite of villages falling within the danger zone of 500 m.
- (v) A detailed Environment Management Plan incorporating the measures to be taken for control of air pollution, water pollution, noise & blast vibrations has been prepared for the KTK OC-2 which forms the basis for grant of EC. The pollution levels are within the standards specified by CPCB and these reports are being submitted regularly to the Regional Office, MoEF&CC and TSPCB.
- (vi) SCCL has conducted a scientific study through NITK, Surathkal to ascertain the effect of blasting operations being carried out in KTK OC-2 on nearby village structures existing within 500 m of blasting zone. The results of the study revealed that the Peak Particle Velocity (PPV) values which represent blast induced vibrations are found to be within the permissible limits and hence the stability of structures in above villages will not be not affected.
- (vii) The acquisition of the additional 500m of land outside the mine boundary was not a requirement of the original EC, it only happened to be mentioned as a proposed additional measure by the PP and was mentioned in the EC as such. However, acquisition of land up to 500 m from mine boundary will result in more re-location of habitants. Though rehabilitation facilities are provided, there is every possibility of these habitants encroaching the nearby Reserved Forest land.
- **40.3.3** The EAC, after deliberations on the proposal and especially in view of the permission granted by the DGMS vide their letter dated 9th May, 2018 to conduct blasting operations without resettling the population living immediately outside the mine area (while maintaining adequate distance within the mine area) recommended for exemption from the specific condition 4A(viii) of the EC dated 26th October, 2016, subject to strict compliance of the conditions and other precautions as directed by DGMS.

The said EC may be amended accordingly with all other terms and conditions stipulated therein remaining the same.

Rajgamar UG Coal Mining Project of 0.45 MTPA in mine lease area of 3486.577 ha of M/s South Eastern Coalfields Limited located in villages Godma and Rajgamar Gram, Tehsil & District Korba (Chhattisgarh) - For revalidation of EC

[IA/CG/CMIN/7579/2005; F. No. J-11015/165/2005-IA.II(M)]

40.4.1 The proposal is for grant of environment clearance to Rajgamar UG Coal Mining Project of 0.45 MTPA in mine lease area of 3486.577 ha of M/s South Eastern Coalfields Limited located in villages Godma and Rajgamar Gram, Tehsil & District Korba in pursuance of this Ministry's Notification dated 6th April, 2018. The project was earlier granted environmental clearance by the Ministry vide letter dated 16th May, 2006, and now requires fresh appraisal/approval in terms of the said Notification for their present mining operations.

Public Hearing was conducted on 29th November, 2004 by the State Pollution Control Board.

The project area involves 1994.121 ha of forest land. Stage-II approval under the Forest (Conservation) Act, 1980 for diversion of forest land for non-forestry use has been obtained for 243.917 ha of forest land while Stage-I FC is available for another 921.14 ha of forest land. No proposal seeking Stage-I forest clearance for the diversion of balance forest land of 916.993 ha has been submitted by the PP.

Detailed Project Report has been approved by the Board of M/s SECL Board in its meeting held on 28th March, 2005. Progressive Mine Closure Plans for Ragamar 4 &5 incline and Rajgamar 6&7 incline have been approved by the Board of Directors of the SECL on 18th May, 2013

Consent to operate has been obtained by the PP from the Chhattisgarh Environment Conservation Board and the same is valid upto 30th April, 2020.

40.4.2 The Committee, after deliberations, desired for preparation of the EIA/EMP report based on one season baseline data along with the details in respect of the following:-

- Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal.
- Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority,
- Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.
- Consent to operate from the State Pollution Control Board for the present mining operations.
- Redressal of issues raised during the last public hearing conducted by the SPCB.
- Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.
- Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.
- Stage-I/Renewal of forest clearance under the Forest (Conservation) Act, 1980, as the case may be, of the forest land involved in the project.
- Details of court cases and the compliance status.

Rehar Underground Coal Mining Project of 0.31 MTPA in mine lease area of 424.70 ha of M/s South Eastern Coalfields Limited located in village Getra, Tehsil Lakhanpur, District Surajpur (Chhattisgarh) - For revalidation of EC

[IA/CG/CMIN/26364/2002; F. No. J-11015/25/2000-IA.II(M)]

40.5.1 The proposal is for grant of environment clearance to Rehar Underground Coal Mining Project of 0.31 MTPA in mine lease area of 424.70 ha of M/s South Eastern Coalfields Limited located in village Getra, Tehsil Lakhanpur, District Surajpur (Chhattisgarh) in pursuance of this Ministry's Notification dated 6th April, 2018. The project was earlier granted environmental clearance by the Ministry vide letter dated 27th November, 2002, and now requires fresh appraisal/approval in terms of the said Notification for their present mining operations.

Public Hearing was conducted on 27th November, 2002 by the State Pollution Control Board for 0.31 MTPA for the project area of 424.70 ha.

Forest land involved in the project is 70.39 ha. Stage-II approval under the Forest (Conservation) Act, 1980 for diversion of forest land for non-forestry use has been obtained by the PP vide letter No. 8-90/1999 dated 27th September, 2000. Detail of renewal of diversion of forest land, if any, required to be obtained by the PP, has not been provided by the PP.

Coal mining operations in Rehar UG Coal Mining Project were started in Annual coal production is reported to have been realized within the approved capacity *vis-a-vis* the environmental clearances issued for the project.

Detailed Project Report has been approved by the Board of M/s SECL Board in its meeting held on 8th April 1999. Progressive Mine Closure Plan has been approved by the Board of Directors of the SECL on 27th January, 2014.

Consent to operate has been obtained by the PP from the Chhattisgarh Environment Conservation Board and the same is valid upto 28th November, 2019.

40.5.2 The Committee, after deliberations, desired for the preparation of EIA/EMP report based on one season baseline data along with the details in respect of the following:-

- Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal,
- Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority,
- Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.
- Consent to operate from the State Pollution Control Board for the present mining operations.
- Redressal of issues raised during the last public hearing conducted by the SPCB.
- Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.
- Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project

- proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.
- Stage-I/Renewal of forest clearance under the Forest (Conservation) Act, 1980, as the case may be, of the forest land involved in the project.
- Details of court cases and the compliance status.

Kurasia Underground Coal Mining Project of 0.50 MTPA in mine lease area of 523.30 ha of M/s South Eastern Coalfields Limited located in Chirimiri area, PO West Chirimiri Colliery, District Korba (Chhattisgarh) - For revalidation of EC

[IA/CG/CMIN/7727/2005; F. No. J-11015/190/2005-IA.II(M)]

40.6.1 The proposal is for grant of environment clearance to Kurasia Underground Coal Mining Project of 0.50 MTPA in mine lease area of 523.30 ha of M/s South Eastern Coalfields Limited located in Chirimiri area, PO West Chirimiri Colliery, District Korba (Chhattisgarh) in pursuance of this Ministry's Notification dated 6th April, 2018. The project was earlier granted environmental clearance by the Ministry vide letter dated 9th May, 2006, and now requires fresh appraisal/approval in terms of the said Notification for their present mining operations.

Public Hearing was conducted on 14th June, 2004 by the State Pollution Control Board for 0.50 MTPA in mine lease area of 523.30.

No forest land is involved in the project.

Detailed Project Report has been approved by the Board of M/s SECL Board in its meeting held on 28th March, 2005. Progressive Mine Closure Plan has been approved by the Board of Directors of the SECL on 27th January, 2019.

Consent to operate has been obtained by the PP from the Chhattisgarh Environment Conservation Board and the same is valid upto 30th January, 2019.

40.6.2 The Committee, after deliberations, desired for the preparation of EIA/EMP report based on one season baseline data along with the details in respect of the following:-

- Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal,
- Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority,
- Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.
- Consent to operate from the State Pollution Control Board for the present mining operations.
- Redressal of issues raised during the last public hearing conducted by the SPCB.
- Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.
- Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.

- Stage-I/Renewal of forest clearance under the Forest (Conservation) Act, 1980, as the case may be, of the forest land involved in the project.
- Details of court cases and the compliance status.

Damini Underground Coal Mining Project of 0.48 MTPA in mine lease area of 335 ha of M/s South Eastern Coalfields Limited located in village Kandoha, Tehsil Burhar, District Shahdol (Madhya Pradesh) - For revalidation of EC

[IA/MP/CMIN/9077/2002; F. NO. J-11015/47/2002-IA.II(M)]

40.7.1 The proposal is for grant of environment clearance to Damini Underground Coal Mining Project of 0.48 MTPA in mine lease area of 335 ha of M/s South Eastern Coalfields Limited located in village Kandoha, Tehsil Burhar, District Shahdol (Madhya Pradesh) in pursuance of this Ministry's Notification dated 6th April, 2018. The project was earlier granted environmental clearance by the Ministry vide letter dated 5th October, 2004 and now requires fresh appraisal/approval in terms of the said Notification for their present mining operations.

Public Hearing for the project of 0.48 MTPA for an area of 335 ha was conducted on 12th October, 2001 by the State Pollution Control Board.

The project area involves 9.621 ha ha of forest land. Proposal seeking approval under the Forest (Conservation) Act, 1980 for diversion of forest land for non-forestry use has been submitted by the PP and Stage-I approval is yet to be received for the same.

Detailed Project Report has been approved by the Board of M/s SECL Board in its meeting held on 5th April 2000. Progressive Mine Closure Plan has been approved by the Board of Directors of the SECL on 18th May, 2013.

Consent to operate has been obtained by the PP from the Chhattisgarh Environment Conservation Board and the same is valid upto 31st December, 2018.

40.7.2 The Committee, after deliberations, desired for the preparation of EIA/EMP report based on one season baseline data along with the details in respect of the following:-

- Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal,
- Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority,
- Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.
- Consent to operate from the State Pollution Control Board for the present mining operations.
- Redressal of issues raised during the last public hearing conducted by the SPCB.
- Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.
- Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.

- Stage-I/Renewal of forest clearance under the Forest (Conservation) Act, 1980, as the case may be, of the forest land involved in the project.
- Details of court cases and the compliance status.

Chirimiri Underground Coal Mining Project of 1.40 MTPA in mine lease area of 686.29 ha of M/s South Eastern Coalfields Limited located in village Chirimiri, Tehsil Khadgaon, District Korea (Chhattisgarh) - For revalidation of EC

[IA/CG/CMIN/7714/2005; F. No. J-11015/189/2005-IA.II(M)]

40.8.1 The proposal is for grant of environmental clearance to Chirimiri Underground Coal Mining Project of 1.40 MTPA in mine lease area of 686.29 ha of M/s South Eastern Coalfields Limited located in village Chirimiri, Tehsil Khadgaon, District Korea (Chhattisgarh) in pursuance of this Ministry's Notification dated 6th April, 2018. The project was earlier granted environmental clearance by the Ministry vide letter dated 9th May, 2006, and now requires fresh appraisal/approval in terms of the said Notification for their present mining operations.

Public Hearing was conducted on 14th June, 2004 by the State Pollution Control Board for 1.40 MTPA in mine lease area of 686.29 ha.

The project area involves 680.84 ha of forest land. Stage-II approval under the Forest (Conservation) Act, 1980 for diversion of forest land of 989.40 ha (247.290 ha for open cast and 742.110 ha for underground mining) for non-forestry use has been obtained vide letter No. 8-121/2005-FC dated 15th July, 2011.

Detailed Project Report has been approved by the Board of M/s SECL Board in its meeting held on 28th March, 2005. Progressive Mine Closure Plan has been approved by the Board of Directors of the SECL on 5th November, 2013.

Consent to operate has been obtained by the PP from the Chhattisgarh Environment Conservation Board and the same is valid upto 31st January, 2019.

40.8.2 The Committee, after deliberations, desired for the preparation of EIA/EMP report based on one season baseline data along with the details in respect of the following:-

- Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal,
- Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority,
- Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.
- Consent to operate from the State Pollution Control Board for the present mining operations.
- Redressal of issues raised during the last public hearing conducted by the SPCB.
- Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.
- Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.

- Stage-I/Renewal of forest clearance under the Forest (Conservation) Act, 1980, as the case may be, of the forest land involved in the project.
- Details of court cases and the compliance status.

North Chirimiri Underground Coal Mining Project of 0.50 MTPA in mine lease area of 510.667 ha of M/s South Eastern Coalfields Limited located in village Chirimiri, Tehsil Khadgaon, District Korea (Chhattisgarh) - For revalidation of EC

[IA/CG/CMIN/7710/2005; F. No. J-11015/188/2005-IA.II(M)]

40.9.1 The proposal is for grant of environment clearance to North Chirimiri Underground Coal Mining Project of 0.50 MTPA in mine lease area of 510.667 ha of M/s South Eastern Coalfields Limited located in village Chirimiri, Tehsil Khadgaon, District Korea (Chhattisgarh) in pursuance of this Ministry's Notification dated 6th April, 2018. The project was earlier granted environmental clearance by the Ministry vide letter dated 9th May, 2006 and now requires fresh appraisal/approval in terms of the said Notification for their present mining operations. Public Hearing was conducted on 14th June, 2004 by the State Pollution Control Board.

Entire project area is forest land. Stage-II approval under the Forest (Conservation) Act, 1980 for diversion of forest land for non-forestry use has been obtained vide letters No. 8-118/2005-FC dated 24th April, 2006 for 550 ha.

Detailed Project Report has been approved by the Board of M/s SECL Board in its meeting held on 28th March, 2005. Mine Closure Plan has been approved by the Board of Directors of the SECL on 18th May, 2013.

Consent to operate has been obtained by the PP from the Chhattisgarh Environment Conservation Board and the same is valid upto 31st January, 2019.

40.9.2 The Committee, after deliberations, desired for the preparation of EIA/EMP report based on one season baseline data along with the details in respect of the following:-

- Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal.
- Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority,
- Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.
- Consent to operate from the State Pollution Control Board for the present mining operations.
- Redressal of issues raised during the last public hearing conducted by the SPCB.
- Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.
- Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.
- Stage-I/Renewal of forest clearance under the Forest (Conservation) Act, 1980, as the case may be, of the forest land involved in the project.

• Details of court cases and the compliance status.

Agenda No.40.10

Proposal for environmental clearance to Katkona Underground Coal Mining Project of 0.36 MTPA in mine lease area of 1130.929 ha of M/s South Eastern Coalfields Limited located in village Katkona via Patna, Tehsil Baikunthpur, District Korea (Chhattisgarh) - For revalidation of EC

[IA/CG/CMIN/7909/2005; F. No. J-11015/219/2005-IA.II(M)]

40.10.1 The proposal is for grant of environment clearance to Katkona Underground Coal Mining Project of 0.36 MTPA in mine lease area of 1130.929 ha of M/s South Eastern Coalfields Limited located in village Katkona via Patna, Tehsil Baikunthpur, District Korea (Chhattisgarh) in pursuance of this Ministry's Notification dated 6th April, 2018. The project was earlier granted environmental clearance by the Ministry vide letter dated 20th June, 2006, and now requires fresh appraisal/approval in terms of the said Notification for their present mining operations. Public Hearing was conducted on 11th April, 2005 by the State Pollution Control Board for 0.36 MTPA in mine lease area of 1130.929 ha.

The project area involves 1126.599 ha of forest land. Stage-II approval under the Forest (Conservation) Act, 1980 for diversion of 298.0 ha of forest land for non-forestry use has been obtained vide letters No. 8-87/1993-FC dated 31st July, 1995 while Stage-I approval for diversion of another 549.94 ha of forest land has been obtained vide letter No. 8-1/2006-FC dated 14th June, 2006. Proposal seeking diversion of another 200.209 ha of forest land has been submitted by the PP while no proposal for diversion of balance forest land of 78.45 ha has been submitted by the PP.

Detailed Project Report has been approved by the Board of M/s SECL Board in its meeting held on 28th March, 2005. Mine Closure Plan has been approved by the Board of Directors of the SECL on 18th May, 2013.

Consent to operate has been obtained by the PP from the Chhattisgarh Environment Conservation Board and the same is valid up to 30th November, 2019.

40.10.2 The Committee, after deliberations, desired for the preparation of EIA/EMP report based on one season baseline data along with the details in respect of the following:-

- Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal,
- Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority,
- Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.
- Consent to operate from the State Pollution Control Board for the present mining operations.
- Redressal of issues raised during the last public hearing conducted by the SPCB.
- Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.
- Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project

- proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.
- Stage-I/Renewal of forest clearance under the Forest (Conservation) Act, 1980, as the case may be, of the forest land involved in the project.
- Details of court cases and the compliance status.

Rajrappa Opencast Coal Mining Project and Coal Washery of 3 MTPA each in mine lease area of 2263.83 ha of M/s Central Coalfields Limited located in Ramgarh, District Bokaro (Jharkhand) - For ToR

[IA/JH/CMIN/80881/2018; F. No. J-11015/108/2018-IA.II (M)]

- **40.11.1** The proposal is for ToR for Rajrappa OC Coal Mining & Washery Project of 3.0 MTPA in mine lease area of 2263.83 ha of M/s Central Coalfields Limited located in Ramgarh, District Bokaro (Jharkhand). The project was earlier granted environmental clearance by the Ministry vide letters dated 23rd November, 1992 and 30th January, 1987, and now the PP desires to obtain consolidated ToR for the mine and washery under the EIA Notification, 2006 and hence requires fresh appraisal/approval in terms of the said Notification for present mining operations.
- **40.11.2** Facts of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:-
- (i) Rajrappa OCP and washery are located in the Ramgarh Block-I, Block II & Block-IV of south-eastern part of Ramgarh Coalfield, Districts Ramgarh & Bokaro (Jharkhand).
- (ii) The block is bounded by latitudes 23°34′40′′N to 23°38′33′′N and longitudes 85°39′44′′E to 85°42′45′′E. The block is covered in Survey of India toposheet no. 73E/10 (RF: 25000).
- (iii) Rajrappa OCP & Washery are operating units under Rajrappa Area of Central Coalfields Limited, Jharkhand. The DPR for Rajrappa OCP for a rated capacity of 3.0 MTPA of ROM coal capacity was sanctioned by the Govt. on 17.6.1983, at an estimated capital investment of Rs. 91.46 crores. A revised Cost estimate was prepared at a capital outlay of Rs. 510.85 Cr and was approved by CIL board in its 364th meeting dated 23/12/2009.
- (iv) Rajrappa washery, a pit-head washery was designed for a rated capacity of 03 MTY raw coal capacity (ROM) in 1975 with a capital outlay of Rs. 2576.89 Lakhs.
- (v) Earlier, environmental clearance for Rajrappa OCP was granted by the Ministry vide letter dated 23rd November, 1992 for 3 MTPA capacity while environmental clearance for coal washery was granted vide letter No. J11015/4/85-IA dated 30th January, 1987.
- (vi) Joint Venture: No Joint Venture.
- (vii) Coal Linkage: Coal from Rajrappa OCP is transported by road to Rajrappa Washery. Coal from Rajrappa Washery is dispatched by rail to steel plants and other miscellaneous consumers.
- (viii) Employment generated/to be generated: 850 already generated. Additional employment will be provided for land falling under Block II.
- (ix) Benefits of the project: Improvements in physical infrastructure, improvements in social infrastructure, increase in employment potential, contribution to the exchequer, meet energy and steel sector requirement, productive utilization of existing manpower of project.
- (x) Land use details of the project are as under:

S. No.	Particulars	Block II	Block I,IV	Total Area (ha)
1	Quarry	389.07	437.65	826.72
2	External Dump	0	247.16	247.16

3	Washery	0	27.22	27.22
4	Industrial Infrastructure	114.25	18.68	132.93
5	Residential Area	0	134.34	134.34
6	Rehabilitation Site	0	14.07	14.07
7	Railway Line	0	88.23	88.23
8	Safety Zone, Haul Road, Embankment, Vacant land etc	82.32	710.83	793.15
	Total	585.65	1678.18	2263.83

- (xi) The mineable reserve is 78.46 MT, extractable reserve is 78.46 MT. The per cent of extraction would be 100 %.
- (xii) The coal grade is W-III. Stripping ratio is 3.08 cum/tonne. The average Gradient is 7 to 13 degree. There are 6 workable seams as per detail given below:

S. No.	Particulars	Unit	East Quarry
Α	Seam Thickness		
1	Seam-VIIIA	M	1.86 - 4.70
2	Seam-VII Top	M	4.49-15.75
3	Seam-VII Bottom	M	3.40
4	Seam-VIIA	M	3.50
5	Seam-VI	M	2.80
6	Seam-V	M	2.80

- (xiii) Rajrappa washery is a three product washery. Clean coal production is about 40 percent, middling is about 42 percent and balance is rejects.
- (xiv) Total estimated water requirement is 5800 m³ /day comprising of 1600 m³/day potable and 4200 m³/day industrial water.
- (xv) The Method of mining is opencast method with shovel-dumper combination.
- (xvi) Life of the mine is 29 years as on April 2018.
- (xvii) Transportation: Coal transportation in pit by Rear dumpers; mine to washery by Trucks; loading at washery by CHP and transportation by rail.
- (xviii)R & R details: Total 192 PAFS. 172 PAFS has been shifted. 20 more PAPs to be shifted from existing block I & IV. Additional families to be shifted in Block II.
- (xix) Cost: Total capital cost is Rs. 51085 Lakhs for Rajrappa OCP and Rs. 2576.89 Lakhs for Rajrappa Washery. Environmental Management Cost is Rs. 6479 Lakhs for Rajrappa OCP & 165 Lakhs for washery.
- (xx) Water body: Damodar is the main drainage of the area and Bhera river is its main tributary in the block.
- (xxi) Detail of forest land involved in the project and status of forest clearance obtained for diversion of forest land for non-forestry use is as under:

S. No.	Forest land	Status of forest clearance	
1.	Block I & IV	Stage II clearance for diversion of 510.82 ha of forest land was	
	510.82 ha	obtained vide letter No. 8-105/2003-FC dated 15 th March, 2007.	
2.		Proposal seeking Stage-I approval under the Forest	
	(notified forest)	(Conservation) Act, 1980 is in advance stage and it will be	
3.	Block II: 178.46 ha	considered by the FAC in its meeting scheduled for 26 th	
	(GMK JJ)	October, 2018.	

(xxii) Public hearing for the project was not held by the PP.

(xxiii)Certified compliance report from the Regional Office of the Ministry has not been obtained by the PP.

(xxiv) Details pertaining to v

(xxv) Consent to Operate obtained from the State Pollution Control Board has not been made available by the PP.

40.11.3 During deliberations, the EAC noted the following:

The proposal is for ToR for Rajrappa Opencast Coal Mining project and coal washery of 3 MTPA capacity each, by M/s Central Coalfields Limited in mine lease area of 2263.83 ha, located in Districts Ramgarh and Bokaro (Jharkhand).

Earlier, the coal mining project and washery were granted environmental clearances by the Ministry vide letters dated 23rd November, 1992 and 30th January, 1987 respectively. In pursuance of this Ministry's Notification dated 6th April, 2018, it is now proposed to obtain combined environmental clearance, both for the mine and washery, under the provisions of the EIA Notification, 2006.

Total forest land involved in the project is 1081.58 ha. For diversion of 510.82 ha of forest land for non-forestry purposes, approval under the Forest (Conservation) Act, 1980 has been obtained vide letter dated 15th March, 2007. Stage-I approval for the balance forest land of 570.76 ha is yet to be obtained, and the same is reported to be under consideration.

Revised Cost Estimates for the proposed scope of the project was approved for the capital cost of Rs.510.85 crores by the CIL Board on 23rd December, 2009. Mine Closure Plan for Rajrappa OCP was approved by the Board of Directors of M/s CCL on 1st October, 2012.

Production details from the year 1991-92 onwards revealed no excess coal production against the sanctioned capacity prescribed in the environmental clearance dated 23rd November, 1992.

40.11.4 The Committee, after deliberations and especially taking note of the fact that the said ECs were issued prior to the EIA Notification, 1994, found the proposal not admissible in terms of the provisions of the Ministry's Notification dated 6th April, 2018. The Committee further desired to seek more details and the rationale for the combined environmental clearance (for the coal mining project and the washery), when there is no change in scope of the individual projects.

The proposal was deferred for the needful on the above lines.

Agenda No.40.12

Basanpur Tapin Coking Coal Washery of 4 MTPA in an area of 32.47 ha of M/s Central Coalfields Limited, located in Kedla, District Ramgarh (Jharkhand) - For ToR

[IA/JH/CMIN/77450/2018; F. No. IA-J-11015/97/2018-IA-II(M)]

- **40.12.1** The proposal is for grant of ToR for Basanpur Tapin Coking Coal Washery of 4 MTPA in the project area of 32.47 ha of M/s Central Coalfields Limited, located in Kedla, District Ramgarh (Jharkhand).
- **40.12.2** Facts of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The project area is covered under Survey of India Topo Sheet No: 73 E/2 and is bounded by the geographical coordinates ranging from $23^{\circ}49'22.6"$ to $23^{\circ}49'48.7"$ N and longitudes $85^{\circ}33'44.7"$ to $85^{\circ}34'1.8"$ E.
- (ii) Coal linkage for the project is proposed with Tapin North OCP, Tapin South OCP, Parej East OCP and Jharkhand OCP through tipping trucks
- (iii) No Joint venture cartel has been formed for Basantpur Tapin Coking Coal Washery Project.
- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13th January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation: Employment to approximately 200 persons will be provided from the project.
- (vi) People will be benefitted due to direct and indirect employment opportunities. This will continue throughout the life of the project. Activities will lead to overall socio economic growth of the area. Socio- economic benefits of the projects will accrue to local population also.
- (vii) For construction of the washery and temporary storage of rejects, 32.47 ha of land is required. No forest land is involved in the project.
- (viii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (ix) Ash content in raw coal proposed to be washed is 33.4 %.
- (x) Railway siding is proposed at Kedla washery located adjacent to proposed washery site. In case of delay in construction of the said railway siding, whased coal from Tapin washery will be transported by road to Chainpur siding.
- (xi) Water for the proposed washery will be sourced from the mine water of Kedla Underground Project located at a distance of 3.75 km from proposed washery site.
- (xii) Ground water level details will be dealt in EIA EMP study.
- (xiii) Application for obtaining the approval of the Central Ground Water Authority is under preparation.
- (xiv) Chutuanalla is flowing at a safe distance of 100 m from boundary of lease.
- (xv) It is proposed to develop green belt all along the project boundary, infrastructure sites and service building area besides avenue plantation on both sides of the roads.
- (xvi) Ambient air quality is being generated twice every fortnight and all results are within limits.
- (xvii) No court cases, violation cases are pending against the project of the PP.
- (xviii)The project does not involve violation of the EIA Notification, 2006 and amendment issued thereunder.
- (xix) Total cost of the project is Rs. 36000 lakhs. Environment Management Cost is Rs. 170 crores.
- (xx) Public hearing will be done after the grant of ToR

40.12.3 During deliberations, the EAC noted the following:

The proposal is for grant of ToR for Basanpur Tapin Coking Coal Washery of 4 MTPA by M/s Central Coalfields Limited in an area of 32.47 ha located in Kedla, District Ramgarh (Jharkhand). No forest land is involved in the project.

Transportation of washed coal has been proposed through upcoming railway siding at Kedla washery located adjacent to proposed washery site. In case, after construction of washery project, construction of said railway siding remains incomplete, the PP has proposed alternate mode of transport by road upto Chainpur railway siding.

Water for the proposed washery will be sourced from the mine water of Kedla Underground Project located at a distance of 3.75 km from proposed washery site. Annual fresh water

requirement for coal washery operations is 2.40 lakh cum. Fresh water requirement per tonne of raw coal is 0.060 cum.

Chutuanalla is flowing at a distance of 100 m from the lease boundary. No study on hydrological regimes in the area was, however, made available by the PP.

40.12.4 The Committee, after deliberations, recommended for grant of terms of references for Basanpur Tapin Coking Coal Washery Project of 4 MTPA of M/s Central Coalfields Limited in an area of 32.47 ha, located in Tehsil Kedla, District Ramgarh (Jharkhand), for preparation of EIA/EMP reports along with public consultation, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable, along with the additional conditions as under:-

- Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA).
- Total fresh water requirement shall be 0.060 cum/tonne of raw coal.
- Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- Transportation of washed coal shall be undertaken through upcoming railway siding at Kedla washery located adjacent to proposed washery site.
- Ash content below 34% should be maintained in washed coal to be transported beyond 500 km distance.
- 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.
- Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ will be planned by the collection of air quality data
- Impact of proposed project activity on the hydrological regime of the area shall be assessed and report be submitted.
- Disposal of washery rejects shall be in accordance with the extant policy and guidelines, and environment friendly.
- Thick green belt of adequate width to be provided around the washery to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.

Agenda No.40.13

Tara (East) and Tara (West) Coal Mine Project of 4.0 MTPA peak rated capacity in mine lease area of 937.44 ha of M/s West Bengal Power Development Corporation Limited located in Block Jamuria, Tehsil Jamuria, District Barddhaman (West Bengal) - For ToR

[IA/WB/CMIN/76052/2018, F No.J-11016/22/96-IA-II(M)]

40.13.1 The proposal is for ToR to expansion of Tara (East) and Tara (West) Coal Mine Project from 2 MTPA to 4 MTPA peak rated capacity in mine lease area of 937.44 ha of M/s West Bengal Power Development Corporation Limited located in Block Jamuria, Tehsil Jamuria, District Barddhaman (West Bengal).

40.13.2 Earlier, the proposal was considered by the EAC in its 36th meeting held on 31st August, 2018. The EAC, after deliberations, took serious note of the gross violation of the Mining Plan, and also non-compliance of the EC conditions by the earlier allottee. The Committee also noted that the Mining Plan has been revised again by the Ministry of Coal on 30th August, 2018 with the mine lease area now increased from 800 ha to 937.44 ha, without taking any cognizance of the earlier violation. The Committee desired to know whether the

given status warrants any action by either of the regulatory authority.

40.13.3 The Ministry of Coal vide letter No. 103/10/2015/NA dated 26th October, 2018 submitted reply to the observations as made by the EAC in its meeting dated 31st August, 2018. The O/o Nominated Authority in the Ministry of Coal vide letter dated 31st August, 2018 informed that said coal mine has been allocated afresh to M/s West Bengal Power Development Corporation (WBPDCL) and Allottee has entered into an Allottement Agreement with the Ministry of Coal as per which the coal mines are to be developed as per the timeline prescribed in it. Any deviation from the scheduled timeline is to attract penal action against the allottee company. So far as earlier violation of Mining Plan and non-compliance of the conditions stipulated in the EC is concerned, the same has been done by the prior allottee of the said coal mines and is being referred herewith to the Ministry of Coal for examination and action as per Section 14(1) and 14 (3) of the Coal Mines (Special Provisions) Act, 2015. The MoC further emphasized that since the said coal mines have been allotted afresh and revised Mining Plan has been approved by the Ministry of Coal, the MoEF&CC may consider the proposal of EC for the said coal mines as per the law applicable.

- **40.13.4** The PP vide their communication dated 4th October, 2018 has made following submissions:
- (i) Subsequent to allotment of Tara (East) and Tara (West) Coal Mine in favour of M/s WBPDCL on 31st March 2015 by the Ministry of Coal, Govt of India, the matter of excess coal extraction by the prior allottee M/s Bengal EMTA Coal Mines Limited (BECML), was informed by WBPDCL to the Nominated Authority, Ministry of Coal, Govt of India vide Letter No WBPDCL/GM (MMC)/170 dated 30.03.2016.
- (ii) Revised mining Plan for 4 MTPA was approved by Ministry of Coal, Government of India on 30th August, 2018 and on the basis of revised and approved Mining Plan, the proposal for grant of TOR was submitted.
- (iii) Subsequent to allocation of coal mine in favour of M/s WBPDCL, no mining operations have been carried out by M/s WBPDCL for want of statutory clearances. Hence, any action which is purportedly regarded as 'violation' is attributable to the prior allottee M/s Bengal EMTA Coal Mines Limited (BECML) during the course of mining operations continued by them from 1997-98 to 2014-15
- (iv) Already, considerable delay has been elapsed in commencement of mining operations for want of various statutory clearances and delay is causing a huge loss. Further, delay in obtaining EC will result in concomitant loss and therefore, it is requested to grant ToR at an early date.

40.13.5 During deliberations, the EAC noted the following:

The proposal is for ToR for Tara (East) & Tara (West) Coal Mine Project of 4 MTPA (peak) capacity in mine lease area of 937.44 ha of M/s West Bengal Power Development Corporation Limited located in Block Jamuria, District Paschim Bardhaman (West Bengal).

Earlier, the Ministry had granted environment clearance vide letter dated 30th January, 1997, to Tara (East & West) Blocks Coal Mine project of capacity 2 MTPA in an area of 361 ha located at village Churulia, District Burdwan (West Bengal) in favour of M/s Bengal EMTA Coal Mines Ltd.

No forest land is involved in the project.

Subsequent to cancellation of coal blocks in the year 2014 as per the orders of Hon'ble Supreme Court, the said coal block was allotted to M/s West Bengal Power Development Corporation Limited by the Nominated Authority in the Ministry of Coal. Accordingly, the said EC

was transferred in their name on 6th July, 2015 subject to compliance of all the conditions stipulated in the earlier EC. There has been, however, no mining operations carried out by the present allottee and the mine is closed since 1st April, 2015.

Actual coal production during the period 1999-00 to 2013-14 in mine lease of 800 ha is more than the approved EC capacity of 2 MTPA in mine lease area of 361 ha. Also, the actual coal production during the said period is much more than that Mining Plan originally approved in 1996 and/or revised Mining Plan approved in the year 2005. That, in fact, amounts to violation of the Mining Plan and non-compliance of the conditions stipulated in the EC.

The Nominated Member from the Ministry of Coal informed the EAC that earlier violation of Mining Plan and non-compliance of the conditions stipulated in the EC is concerned, have been done by the prior allottee of the said coal mines and is being referred herewith to Ministry of Coal for examination and action as per Section 14(1) and 14 (3) of the Coal Mines (Special Provisions) Act, 2015.

40.13.6 The Committee, after deliberation, recommended for grant of terms of references to Tara (East) and Tara (West) Coal Mine Project of 4.0 MTPA peak rated capacity in mine lease area of 937.44 ha. of M/s West Bengal Power Development Corporation Limited located in Block Jamuria, Tehsil Jamuria, District Barddhaman (West Bengal) and for preparation of EIA/EMP reports with public consultation, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-

- The ground water permission from Central Ground Water Authority (CGWA) shall be obtained, if applicable.
- An integrated hydrological study would be carried out of the impact of coal mining on the baseflows in the downstream of the mine area.
- For proper baseline air quality assessment, adequate monitoring stations (4-5 nos.) in the downwind areas need to be set up and included in the air quality modeling.
- Ecological restoration and mine reclamation plan to be prepared with afforestation of local/native species found in the area.

Agenda No.40.14

Expansion of Kondapuram Underground Coal Mining Project from 0.51 MTPA to 0.92 MTPA in mine lease area of 477.03 ha of M/s the SCCL located in village Kondapuram, Tehsil Manuguru, District Bhadradri Kothagudem (Telangana) - For ToR

[IA/TG/CMIN/80182/2018; F. No. J-11015/328/2008-IA.II(M)]

- **40.14.1** The proposal is for ToR for expansion of Kondapuram Underground Coal Mining Project from 0.51 MTPA to 0.92 MTPA in mine lease area of 477.03 ha of M/s the SCCL located in village Kondapuram, Tehsil Manuguru, District Bhadradri Kothagudem (Telangana).
- **40.14.2** Facts of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:
- (i) Earlier, environmental clearance to Kondapuram Underground Coal Mining Project of 0.51 MTPA in mine lease area of 477.03 ha was granted by the MoEF&CC vide letter No. J-11015/328/2008-IA.II (M), dated 5th March, 2010 based on public hearing conducted on 18th May, 2009.

- (ii) ToR for the earlier project was granted by the Ministry vide letter dated 19th September, 2008.
- (iii) Kondapuram UG Mine is located in the south-western part of Manuguru sector at an aerial distance of around 50 km from Kothagudem township and is connected to Kothagudem (Head-quarters of SCCL) by an asphalt road of 70 km distance. The nearest railhead is Manuguru railway station which is at a distance of 7 km. This railway station is connected to Bhadrachalam Road railway station by 55 km which is also used for coal transport to various customers.
- (iv) Kondapuram UG mine is bound by latitudes N17°55'55" to 17°57'30" and Longitudes E 80°42'50" to 80°44'45" and covered under Survey of India Toposheet No. 65 65 B/12, B/16, C/9 and C/13.
- (v) Mining lease of Kondapuram UG Mine was granted by the State Government in an area of 477.03 ha vide G.O. Ms. No. 107, I & C (M.III) Department, dated 12th October, 2010 for a period of 21 years and is valid up to 13.12.2031.
- (vi) This mining operations will be carried out using mechanized Continuous Miner and LHD Technologies.
- (vii) The life of the project is 17 years.
- (viii) There is no R&R involved in the Project.
- (ix) The capital requirement of the Project is Rs.298.71 Crores. Environmental Capital Cost is Rs.15.2583 Crores.
- (x) Land use detail of the project is as under:

S.No.	Description	Area (ha)
Α	Roads and infrastructure including UG Entry	
1	Surface structures at pit head	3.00
2	Air shaft & fan house	0.36
3	Magazine	0.03
4	Stowing arrangements	1.00
5	Roads	1.85
	Sub-Total	6.24
В	Other Uses	
1	Diversion of nallah	0.35
	Total FL (Surface Rights including UG Rights)	6.59
С	Undisturbed land/UG rights for mining	470.44
	Grand Total - UG Rights(A+B+C)	477.03

Mine Closure/Post Closure /Reclamation Plan:

S. No.	Description	Area(ha)	Reclaimed area (ha)	Public use/company use/ Undisturbed area (ha)
Α	Roads and infrastructure including UG Entry			
1	Surface structures at pit head	3.00	3.00	-
2	Air shaft & fan house	0.36	0.36	-
3	Magazine	0.03	0.03	-
4	Stowing arrangements	1.00	1.00	-
5	Roads	1.85	1.85	-
	Sub-Total	6.24	6.24	-
В	Other Uses	-	-	
1	Diversion of nallah	0.35	-	0.35
	Total FL(Surface Rights including UG	6.59	6.24	0.35

	Rights)			
С	Undisturbed land/UG rights for mining	470.44	-	470.44
	Grand Total (A+B+C)	477.03	6.24	470.79

(xxvi) Total geological reserve is 49.303 MT with the mineable reserve of 78.46 MT. Out of the total mineable reserve, extractable reserve is 9.933 MT. The per cent of extraction would be 38.54%.

(xxvii) Single workable seam of 1.8 m - 2.5 m thickness is available. Grade of coal is G-5 and G-76. The average Gradient is 1in 6 - 1 in 8.

(xxviii) Method of mining will be underground using Bord and Pillar methods with continuous miner Technology & LHDS

- (xi) Entire mine lease area is forest land within Kondapuram Reserved Forest of Paloncha Forest Division. Final approval for diversion of the said forest land with underground rights has been granted vide letter dated 18th May, 2015, which is valid up to 13th December, 2031 viz. coterminus with mining lease. In addition, diversion of 10.50 ha of forest land for development of surface infrastructure, has also been accorded approval on 6th January, 2016.
- (xii) Transportation of coal from underground mine to surface bunker has been proposed through a series of five belt conveyors and the same will be transported into Pre weight bin to be constructed near Kondapuram CHP for loading into the trucks for direct transportation to the linked consumers.
- (xiii) The Project is located at distance of 1.0 Km from boundary of Notified Eco-sensitive Zone of Kinnerasani Wildlife Sanctuary.
- (xiv) Godavari river flows at a distance of 7.5 Km from the mine lease boundary. Another river/naalla named Gorrepeta Vagu flows in the project area and the same is proposed to be diverted along the rise side boundary of the mine lease

40.14.3 During deliberations, the EAC noted the following:-

The proposal is for terms of reference to the project for expansion of Kondapuram Underground Coal Mine from 0.51 MTPA to 0.92 MTPA of M/s the Singareni Collieries Company Ltd in mine lease area of 477.03 ha located in village Kondapuram, Tehsil Manuguru, District Bhadradri Kothagudem (Telangana). The project is proposed with Mechanized Bord and pillar method to be operated with Continuous Miner and Load Haul Dumpers partly with caving and partly with hydraulic sand stowing.

The project was earlier granted environmental clearance vide letter dated 5th March, 2010 for its capacity of 0.51 MTPA (peak capacity 0.54 MTPA) in mine lease area of 477.03 ha, based on public hearing conducted on 18th May, 2009.

Entire mine lease area is forest land within Kondapuram Reserved Forest of Paloncha Forest Division. Final approval for diversion of the said forest land with underground rights has been granted vide letter dated 18th May, 2015, which is valid up to 13th December, 2031 viz. coterminus with mining lease. In addition, diversion of 10.50 ha of forest land for development of surface infrastructure, has also been accorded approval on 6th January, 2016.

Revised Mining Plan and the Mine Closure Plan for the proposed expansion project has been submitted to Ministry of Coal for approval on 15th March, 2018.

40.14.4 The EAC after detailed deliberations recommended the proposal for grant of terms of references for expansion of Kondapuram Underground Coal Mine from 0.51 MTPA to 0.92 MTPA of M/s the Singareni Collieries Company Ltd in mine lease area of 477.03 ha located in village Kondapuram, Tehsil Manuguru, District Bhadradri Kothagudem (Telangana) and for preparation of EIA/EMP reports with public consultation, subject to compliance of all terms and

conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-

- The ground water permission from Central Ground Water Authority (CGWA) shall be obtained, if applicable.
- For proper baseline air quality assessment, adequate monitoring stations (4-5 nos.) in the downwind areas need to be set up and included in the air quality modeling.
- Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ will be planned by the collection of air quality data
- Ecological restoration and mine reclamation plan to be prepared with afforestation of local/native species found in the area.
- Utilization of fly ash in external overburden dumps and backfilling shall be ensured as per the provisions contained in the Fly Ash Notification, 2009, read with subsequent amendments.
- Impact of mining activity on the hydrological regime of the area shall be assessed and report be submitted.
- A certified report on the updated status of compliance of conditions stipulated in the environmental clearance dated 5th March, 2010 from the concerned Regional Office of the MoEF&CC.

Agenda No.40.15

Proposal for Kasnau Matasukh Lignite Mining project Project of 1 MTPA in mine lease area 1063.35 ha of M/s Rajasthan State Mines and Minerals Limited located in villages Kasnau, Igiar, Matasukh, Arwar, Tehsil Jayal, District Nagaur (Rajasthan) - For ToR

[IA/RJ/CMIN/79923/2018; F. No. J-11015/21/99-IA.II(M)]

Proposal was deferred by the EAC due to paucity of time.

At the special request of the Member-Secretary, the following two proposals were considered, although they were not included in the originally notified agenda of this meeting.

Agenda No.40.16

Expansion of Kusmunda Opencast Coal Mine Project from 36 MTPA to 50 MTPA in an area of 1655.825 ha of M/s South Eastern Coalfields Ltd, located in District Korba (Chhattisgarh) - Environmental Clearance

[IA/CG/CMIN/23512/2014, F. No. J-11015/176/2014-IA-II(M))]

- **40.16.1** The proposal is for expansion of EC for expansion of the project, Kusmunda Opencast Coal Mine from 36 MTPA to 50 MTPA Normative & 62.50 MTPA Peak in ML area of 3510.348 ha of M/s South Eastern Coalfields Limited in District Korba (Chhattisgarh).
- **40.16.2** The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported as under:-
- (i) Originally, the project proponent had submitted the proposal was for grant of environmental clearance to the expansion of Kusmunda Opencast Coal mining Project from 15 MTPA (Normative)/18.75 MTPA (Peak) to 50 MTPA(Normative)/62.50 MTPA (Peak) in mine lease area of 3510.348 ha of M/s South Eastern Coalfields Limited located at Tahsil Katghora, District Korba (Chhattisgarh). The public hearing was held on 11th February, 2015. The coal mining project is proposed to be implemented in two phases:

- Phase I: Without fresh forest land in a total area of 1655.825 ha.
- Phase II: With fresh forest land in a total area of 3510.348 ha (including Phase-I).
- (ii) The proposal was considered by the sectoral Expert Appraisal Committee (EAC) in the Ministry for Thermal and Coal Mining projects in its meetings held on 11-12 June 2015, 16-17July 2015, 31st August 1st September 2015, 8 -9 October 2015, 30th November 1st December 2015 and 7-8 January, 2016. The EAC in its meeting held on 7- 8 January, 2016 recommended the project for grant of environmental clearance for a production level of 26 MTPA (peak).
- (iii) Based on the recommendation of the EAC, environmental clearance for the expansion of Kusmunda Opencast Coal Mining Project from 18.75 MTPA to 26 MTPA in leasehold area of 1449.864 ha was granted by the Ministry vide letter dated 3rd February, 2016.
- (iv) Subsequently, to meet the country's demand for coal, the project proponent on 21st December 2017 submitted proposal for expansion from 26 MTPA to 50 MTPA (Normative) and 62.50 MTPA (Peak) after taking various control measures as per EC conditions.
- (v) A report on the compliance status of the conditions stipulated in the environment clearance 3rd February, 2016 was forwarded by the Regional Office of the MoEF&CC at Nagpur vide letter dated 13th June, 2017.
- (vi) Total forest land involved under the project is 205.961 ha. Stage-I approval for diversion of 402.966 ha of forest land (including 205.961 ha of Kusmunda OCP and 197.005 ha of Laxman OCP) for non-forestry use has been obtained vide letter dated 26th April, 2018.
- (vii) The Terms of Reference to the project was granted by the Ministry vide letter dated 1st December, 2014. The sub-committeevisited three mines of SECL viz. Kusmunda, Gevra and Dipka OC and the surrounding areas on 9-10 October, 2014 before according ToR.
- (viii) Mining plan for 50 MTPA was approved by CIL Board in its 300th meeting held on 28.10.2013. Mine closure plan is an integral part of the approved mining plan.
- (ix) Coal Linkage: Various Thermal Power Plants including Chhattisgarh State Electricity Board (CSEB).
- (x) Employment to 2017 persons has been provided and additional employment to 4130 persons will be provided from the expansion project.
- (xi) Benefits of the project: Project will considerably improve the socio-economic status of the adjoining areas. This will result in benefits such as improvements in physical infrastructure; improvements in social infrastructure, increase in employment potential, contribution to the exchequer, meet energy requirement and post-mining enhancement of green cover.

(xii) The land use pattern of the project will be as follows:

Pre-Mining:

(Area in ha)

Phase - I	·
Agricultural/ Tenancy Land	1045.597 ha
Revenue Forest Land	205.961 ha
Govt/ Other Land	
A) Water Body	31.042 ha
B) Grazing Land	373.225 ha
C) Waste Land/ Others	00.00 ha
Sub Total of Govt. Land	404.267 ha
Total Land	1655.825 ha
Phase - II	
Agricultural/ Tenancy Land	2532.365 ha
Revenue Forest Land	376.922 ha
Govt/ Other Land	
D) Water Body	87.035 ha
E) Grazing Land	488.643 ha
F) Waste Land/ Others	25.383 ha
Sub Total of Govt. Land	601.061 ha

Total Land	3510.348 ha
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Post Mining land use:

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

Core area:

Phase – I: Project land use details during mining (without Fresh Forest Land):

S. No.	Purpose	Total (ha)
1.	Area to be excavated	788.874
2.	Storage for top Soil	03.000
3.	Over Burden / Dumps	325.000
4.	Mineral Storage	0.000
5.	Infrastructure (Workshop, Administrative Building)	284.634
6.	Roads	07.517
7.	Green Belt	10.000
8.	Effluent Treatment Plant	01.000
9.	Rehabilitation site (Outside mine)	69.000
10.	Colony (Outside Mine)	39.000
11.	Safety Zone	82.800
		45.000
	TOTAL	1655.825

Phase II: Proposed land use during mining (with Fresh Forest Land)

S. No.	Purpose	Area (ha)
1.	Area to be excavated	1600.000
2.	Storage for Top soil	3.000
3.	Overburden/Dumps	325.000
4.	Mineral storage	0.000
5.	Infrastructure (W/Shop, Admin. Building)	300.000
6.	Roads	10.000
7.	Green Belt	10.000
8.	Rehabilitation Site(outside mine)	130.000
9.	Colony(outside mine)	40.250
10.	Safety Zone	153.000
11.	Other specific (future mining)	939.098
	TOTAL	3510.348

(xiii) Total geological reserve is 1105 MT. The mineable reserve is 887.726 MT (as on 01.04.2017) and extractable reserve is 887.726 MT (as on 01.04.2017). The percent of extraction would be 80.33 %.

- (xiv) The life of mine is 20 years (as on 01.04.2017).
- (xv) The grade of the coal is G-11and the stripping ratio is 1.34 Cum/tonne. The average gradient varies from 40 to 100 in 3seams with thickness ranging from 2.86 m to 60.83 m.
- (xvi) Total estimated water requirement of the project is 16,447 cum/day. The level of ground water ranges from 1.59 m to 11.98 m in post-monsoon and 2.88 m to 14.60 m in pre-monsoon season.
- (xvii) The method of mining would be opencast.
- (xviii)There are 13 external OB dumps in an area of 325 ha with quantity of 20.80 Mcum and height of 60 m above the ground level, and one internal dump with quantity of 1321.70 Mcum in an area of 1245 ha.
- (xix) The final mine void would be created in 355 ha with depth of 300 m, which is proposed to be converted into water body.
- (xx) External OB dump area and backfilled quarry area shall be reclaimed with plantation.
- (xxi) The transportation of coal from face to in-pit crusher is by trucks, from surface to siding by tippers and from siding to consumer by belt conveyor & rail.
- (xxii) Rehabilitation and resettlement is involved in the project. There are 8200 PAFs.
- (xxiii) Total capital cost of the project is Rs. 7612.33 Crores.
- (xxiv) The CSR cost: According to new CSR policy the fund for the CSR should be allocated, based on 2% of the average net profit of the Company for the three immediate preceding financial years or Rs. 2 per tonne of coal production of previous year, whichever is higher.
- (xxv) R&R Cost is Rs. 508.28 crores and Environmental Management Cost is Rs. 575.33 Crores.
- (xxvi) Hasdeo river bank is situated along the eastern boundary of lease. The Ahiran River and its tributary, Laxman nallah are bounded to the lease area on the north and north-west respectively and finally drained into Hasdeo River.
- (xxvii) The ground water clearance has been obtained for the project on 16.02.2017.
- (xxviii) There are no National Parks, Wildlife Sanctuary, Biosphere Reserves in the 10 km buffer zone of the study area.
- (xxix) Afforestation plan shall be implemented covering an area of 1570.00 ha at the end of the mining. Density of tree plantation shall be 2500 trees/ ha of plants.
- (xxx) There are court cases / violation pending with the project proponent as per the following details:-

S.	Case No	Parties	Brief	Present status
No.				
1	128/2012 in the court of Judicial Magistrate, Class – 1, Katghora	CECB, Korba. Vs. SECL Kusmunda Project	A case was filed u/s 44/47 of Water Act; u/s 21/22,37,39 of Air Act; u/s 15,16 of EP Act,1986 against over production of coal in 2008 -09	Order passed on 09.06.2017 and none was found guilty.
2	Appeal No. 7/2016 in Central Zonal Bench, NGT, Bhopal	Laxmi Chauhan Vs Union of India & 02 others	An appeal has been made by Shri Laxmi Chauhan against EC granted to Kusmunda OCP (26.000 MTY) vide no. J-11015/176/2014-IA-II (M) dated 03/02/2016.	Date of Final Hearing has been fixed on 23/02/2018. Due to No Hon'ble Members is posted in this bench. The Cases listed on 23-02-2018 has been adjourned.

(xxxi) In order to meet country's demand for coal, SECL has been assigned a target for producing coal to the tune of 167 MT for the current financial year. To commensurate with the targeted coal production, SECL has proposed opening of 5 new projects of approximately 5 MTPA during the current financial year. However, due to various administrative and technical

constraints, commissioning of said new projects was delayed and given the situation of non-production from proposed new projects, the shortfall in the total target of production (167 MTPA) is proposed to be met from Kusmunda OC during current financial year. Kusmunda OC project has already achieved production of 20 MTPA till October, 2018 and production capacity of 36 MTPA would be achieved by February, 2019. To ensure uninterrupted supply of coal to Power Plants, continuity of coal production is essential and for which EC for enhanced capacity beyond 36 MTPA is required.

(xxxii) Following Works for additional control measures are in process :

- Proposal for dust breaking arrangement (Wind Barrier) at railway siding is under process and the work will be completed by September, 2018.
- Mechanical sweeping machine has been introduced in SECL and will be deployed in Kusmunda OC by March, 2018
- Procurement of long range fogging machine is under process and will be deployed in Kusmunda by September, 2018.
- CHP Phase 2: Construction of 04 nos. of SILO's with Rapid Loading System along with New Railway Siding to completely eliminate loading by pay loaders at siding resulting control of air pollution is in process. The work will be completed by December, 2021
- **CHP Phase 3**: Installation of In Pit Belt Conveyor for transportation of coal from Pit Bottom to Surface/Siding by belt conveyor to eliminate transportation by tipperis under process. The work will be completed by December, 2023.
- Rail corridor: The work of East West Rail corridor is in process and it is expected to be completed by March 2020.
- **Trial Blast Study**: A proposal was initiated for conducting trial blast as a part of R&D study for control and mitigation of dust & fumes generation during drilling and blasting operations at Kusmunda OCP. Gas bags have been procured for conducting trial blast study. This work will be completed till 31st March 2018.

40.16.3 (a) The PP has submitted an updated progress report to strengthen the environmental safeguards vis-à-vis observations made by the Regional Office in its inspection report dated 13th June, 2017 as per detail given below:

S.	EC Conditions	Observations of the	Action plan for compliance of EC		
No.		Regional Office of	condition submitted by the PP		
		the MoEF&CC	-		
1	Condition no: IV	Partially complied with	Being Complied.		
	Adoption of	Substantial fugitive	In addition to control measures already		
	additional control	emission was	committed for production of 26.00 MTPA,		
	measures beyond	observed during the	various additional measures have been		
	those already	inspection especially	adopted.		
	committed by the	in the area of active	(a) Mist spray arrangement commissioned		
	project proponent	mining pit, coal stock	at 3 crushers – Westphalia, AC 2 & AC		
	for production	yard and CHP area.	5.		
	level of 26 MTPA	Measures to check	(b) Work has been completed on		
	so as to reduce	fugitive emission in the	extension of fixed spray sprinklers for		
	the existing high	lease area of the	additional length of 750 meters.		
	levels of pollution	Project Proponent	(c) Trial blast as a part of R&D study for		
	load as shown in	needs to be further	control and mitigation of dust & fumes		
	their study.	strengthened as the	generation during drilling and blasting		
		existing measures	operations at Kusmunda OCP was		
		appeared to be	conducted on 3/4 th April 2018.		
		insufficient to check	(d) Construction of a 20,000 Te Bunker &		
		emissions especially	Truck Receiving Station (CHP Phase –		
		from spillage,	I) is completed. This will effectively		
		transportation and in	reduce the fugitive dust emission from		

CHP area. coal transportation trucks and the coal transported will be from a closed conveyor belt thereby reducing the emission from source itself. (e) Work has been awarded and work started from 15.10.2018 for construction of dust breaking arrangement (Wind Barrier) at railway siding. Work will be completed by February, 2019. (f) Mechanical Sweeping Machine has been deployed and working satisfactorily. (g) Supply order has been placed for Procurement of Long Range Fogging Machine on 26/10/2018. Machine to be supplied by March, 2019. (h) For setting up of 10.00 **MTPA** Kusmunda Washery under BOO Concept, Tender has been opened & TCR is under process. (i) New Railway is Siding under Construction, Likely to be Completed by 30/09/2019. (j) Construction of 04 nos. of SILO's with Rapid Loading System along with New Railway Siding to completely eliminate loading by pay loaders at siding resulting control of air pollution. Construction has been started. To be completed by 30/06/2020. (k) Installation of In Pit Belt Conveyor so that transportation of coal from Pit Bottom to Surface/Siding is completely eliminated resulting control of air pollution. In order to reduce the pollution load, high capacity equipment have been planned in phased manner. 20 nos. of 240 T highest size dumpers have been deployed for OB transport with matching 2 nos. 42 cum shovel. In future 1no of 42 cum. Shovel, matching 12 nos. of 240 T dumpers and 4 nos. of 10-12 cu. m. capacity electric - hydraulic shovels will be deployed additionally for OBR production. 65 nos. of 60 T truck and 10 nos. of 10 cu. m. Front End Loaders will be deployed for coal transportation substitution of presently deployed 18T /30T coal tippers and

3 cu. m. Front End Loaders. 7 Nos. 70 KL capacity Water tankers & 3 Nos. 28 KL capacity Water tankers fitted with Mist spray arrangement are being used for dust suppression. In future 2 nos. of Water tankers with 28 KL capacity & 3 Nos. of Water tankers with 70 KL capacity with mist arrangements will be deployed additionally. (m) For Soil Dump Stabilization (1.00 Ha) at overburden dump of Kusmunda OCP using vetiver system technology with plantation of 1,00,000 vetiver saplings was carried out by IIT, Kharagpur in 2017-18, costing Rs 33.35 lakhs. (n) Construction of RCC Settling Tank with Sludge Drying Bed for treatment of mine discharge water for industrial use at an estimated cost of Rs 36 Lakhs has been completed & will be commissioned soon along with newly constructed 20,000 Te Overhead Bunker. 2 Condition no: IV Partially complied with Being Complied. The programme of the For providing an adequate and effective Immediate steps green belt around the villages affected by shall be provided PP to develop green the higher values of PM₁₀, 6855 Nos. of belt is still in its for an adequate saplings have been planted at Bata village and effective nascent stage. The PP green belt around has informed that a at an area of 2.75 Ha. budget of Rs. 2 crores Land acquisition the villages process of the surrounding villages is under progress to affected by the has been earmarked higher values of build a thick Green belt of 75 m width at for the development of green belt. No details the final boundary in the down wind PM_{10} pertaining to the direction of the project site. For acquisition of 1050 ha additional land for Kusmunda plantation undertaken OCP, notification under Section 9 (i) of for the green belt development CBA (A&D) Act, 1957 has been issued on detail last financial year was 18/07/2018. made available by the Apart from this, Action Plan for the PP. Given the pollution development of Green Belt around Mine loads in the mining lease area and the details of the species lease area of the PP, proposed to be planted are as follows:speedy measures Green Belt Barrier for a width of (75should 100 m) will be provided all around the have been implemented. periphery of the mine in Safety zone area. Three Tier Plantations will be done with native species (Neem, Semal, Palash, Amaltas, Gulmohar, etc.) Provision of Rs. 2 Crores has been made in the PR

		<u> </u>	T == 1		1 1/ 1		
						evelopment	
			along the core zone/ safety zone of the				
				mine will be done in phased manner as pe			
	A II.I Y Y		land acquisition programmes.				
3	Condition no: XV	Partially complied with	Being com				
	Garland drains be	Management of the	Kuchha/ga		Irain of	average	
	provided.	garland drains and	dimension		4.5mx2.5m	0	
		catch drains was	Rs.5.83 La	akhs has	been cons	structed all	
		observed to be poor.	along the	peripher	y of the	quarry for	
		No monsoon	channeling	of run-	off water d	luring rainy	
		preparatory works	season. T	he drains	are perio	dically de-	
		were observed to be	silted before	e Monsoc	n every ye	ar. Regular	
		undertaken by the PP.	cleaning a	and mana	agement c	of Kaccha/	
		No efforts of the PP	garland dra	ains is beir	ng done pro	perly.	
		were observed					
		towards the de-silting					
		of the drains. Further,					
		drains on the sides of					
		the roads were also					
		observed in poor state.					
4	Condition no:	Partially complied with	Being Com	plied			
	XIX	The PP has informed			expenditure	on CSR:	
	The CSR cost	that fund for the CSR	Year	Product	CSR	Expenditur	
	should be Rs 5	are being allocated		ion	Expendit	e (Rs)	
	per tonne of coal			(in Mt)	ure (in	tonne	
	produced which	average net profit of		,	lakh Rs)		
	should be	the Company for the	2015-16	24.501	138.38	0.56	
	adjusted as per	three immediate	2016-17	26.000	1257.36	4.836	
	the annual	preceding financial	2017-18	26.000	161.35	0.620	
	inflation.	years or Rs. 2.00 per	Average	20.000	101.00	0.020	
		tonne of coal	(3	25.500	519.03	2.035	
		Production of previous	years)	20.000	013.00	2.000	
		year whichever is	yoursy				
		higher. During the					
		inspection interactions					
		with the PP revealed					
		that cost of CSR					
		activities comes to					
		approximately Rs. 2					
		per tonne.					
5	Condition no:	Partially complied with	Being com	plied.			
	XXIII	No details pertaining			Act, 1957	Periodical	
	People working in	to the people engaged				or one-third	
	the core area	in the core area and			•		
	should be	other dusty area,	' '				
	periodically tested	,					
	for the lung	diseases, has been					
	diseases and the	•	occupational disease and audiometry test				
	cost to be met by	,	for hearing impairment, and a composite				
	PP.	-		•		examination	
						al Services,	
			•			is sent to	
			DGMS.		opo.c	.5 .50 10	
		<u> </u>					

			The target and achievement of Periodical Medical Examination (PME) for last 5 years are as follows-					
			year	Total manp ower	Total pme targe	Total pme achiev ed	acl	nievemer
			2014	2410	744	746		100%
			2015	2305	775	783		101%
			2016	2246	766	769		100%
			2017	2191	730	805		110%
			2018 (Up to July)	2357	393	361		91.86%
6	Condition no:	Partially complied with	_	Compli				
	XXIV	It was observed during	,	•			•	lantation
	The mining area should be surrounded by green belt having tree cover with thick closed canopy.	the inspection that major plantation has been undertaken by the PP over OB dumps and in the	dump planta Vikas organ Planta	and Ition b Nigam Ization)	plain y Chh n (CGR n one at l	areas attisgarh RVVN, A Kusmund vs:	and Raj stat da Are	on both avenue ya Van e Govt.
		infrastructure such CHP, crushers, coal stock yards, ETP,	S. No.	Det	ails	No. saplii (in Lal	ngs	Area (ha)
		workshops and road	1	Dump	Zone	17.5		461.942
		sides were observed to have greater scope	2	Non-	Dump one	7.5		296.20
		of plantation than what has been planted so far by the PP.	year : will be	er the p 2019-20 plante	olantatic), 1,34, d on OE		s. of	for the saplings
7	Condition no:	Partially complied with		compli				
	Catch drains and siltation ponds of appropriate size shall be constructed to arrest Sill and sediment flows from Soil, OB and mineral dumps The water so collected shall be utilized for watering the mine area roads green belt development etc. The drains	observed to be poor. No monsoon preparatory works were observed to be undertaken by the PP. No efforts of the PP were observed	Monso and i	oon ev manage	ery yea	ar. Regi	ular (ha /	d before Cleaning garland orth.

shall be regularly desilted and maintained properly Garland drams (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge In the area adjoining the mine site. Sump capacity shall also provide adequate retention period to proper allow settling of silt material.

no: Pai

Crushers at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads transfer points, etc.

Condition

XXX

8

Partially complied with Considerable fugitive emissions were

emissions were observed at crushers and CHP sites. Though the PP has installed the mitigative measures. however, the same needs to be further strengthened. The PP has been advised to undertake appropriate and effective measures to reduce the fugitive emissions.

Being Complied.

In addition to control measures already committed for production of 26.00 MTPA, various additional measures have been adopted.

- (a) Mist spray arrangement commissioned at 3 crushers Westphalia, AC 2 & AC 5
- (b) Work has been completed on extension of Fixed spray sprinklers for additional length of 750 meters.
- (c) Trial blast as a part of R&D study for control and mitigation of dust & fumes generation during drilling and blasting operations at Kusmunda OCP was conducted on 3/4th April 2018.
- (d) Construction of a 20,000 Te Bunker & Truck Receiving Station (CHP Phase I) is completed. This will effectively reduce the fugitive dust emission from coal transportation trucks and the coal transported will be from a closed conveyor belt thereby reducing the emission from source itself.
- (e) Work has been awarded and construction started from 15.10.2018 for construction of dust breaking arrangement (Wind Barrier) at railway siding. Work will be completed by February, 2019. Copy of work order

- enclosed as Annexure-I.
- (f) Mechanical Sweeping Machine has been deployed and working satisfactorily.
- (g) Supply order has been placed for Procurement of Long Range Fogging Machine on 26/10/2018. Machine to be supplied by March, 2019.
- (h) For setting up of 10.00 MTPA Kusmunda Washery under BOO Concept, Tender has been opened & TCR is under process.
- (i) New Railway Siding is under Construction, Likely to be Completed by 30/09/2019.
- (j) Construction of 04 nos. of SILO's with Rapid Loading System along with New Railway Siding to completely eliminate loading by pay loaders at siding resulting control of air pollution.
- (k) Installation of In Pit Belt Conveyor so that transportation of coal from Pit Bottom to Surface/Siding is completely eliminated resulting control of air pollution.
- (I) In order to reduce the pollution load, high capacity equipment have been planned in phased manner.
 - 20 nos. of 240 T highest size dumpers have been deployed for OB transport with matching 2 nos. 42 cum shovel. In future 1no of 42 cum. Shovel, matching 12 nos. of 240 T dumpers and 4 nos. of 10-12 cu. m. capacity electric - hydraulic shovels will be deployed additionally for OBR production.
 - 65 nos. of 60 T truck and 10 nos. of 10 cu. m. Front End Loaders will be deployed for coal transportation in substitution of presently deployed18T /30T coal tippers and 3 cu. m. Front End Loaders.
 - 7 Nos. 70 KL capacity Water tankers & 3 Nos. 28 KL capacity Water tankers fitted with Mist spray arrangement are being used for dust suppression. In future 2 nos. of Water tankers with 28 KL capacity & 3 Nos. of Water tankers with 70 KL capacity with mist arrangements will be deployed additionally.

9 Condition no:

The PP shall undertake regular repairing and tarring of roads used for mineral transportation. A 3 green belt comprising of a mix of native species shall be developed all along the major approach roads.

Partially complied with Major approach roads and internal roads have been observed to be in good condition with black topping. However, road inside the lease area were observed to heavily laden with coal dust poor drainage system resulting into fugitive emissions.

Being Complied with.

Roads inside the lease area Offices, Schools, colonies are being swept on daily basis. Drains are also being cleaned periodically on a regular basis.

In addition to this, following measures are also being taken up at Area and HQ level to reduce fugitive emissions:

- (a) Mechanical Sweeping Machine has been deployed and working satisfactorily.
- (b) Order has been placed for procurement of new Mechanical Sweeping machine for Kusmunda Area and is likely to be supplied soon. These machines will help control dust along colony roads as well as Approach roads at Kusmunda
- (c) Work has been completed on extension of fixed spray sprinklers for additional length of 750 metersnow making the total length of haul roads covered by fixed sprinkling arrangement to 5.39 kms.

Variety of Native species such as Aam, Bel, Babool, Neem etc. have been planted along the major as well as internal approach roads of Kusmunda OCP. 62,000 nos. saplings of different species were planted along the road side of KOCP during 2008-09 plantation Programme. Further plantation will be carried out in the upcoming years to further enhance the green cover in and around mine area.

10 Condition no: XXXVII

Compensatory
Ecological
Restoration of
waste land other
degraded land and
OB dumps in lieu
of breaking open
the land be carried
out.

Not-Complied

With regards to compliance to this condition the PP has adverted to the restoration measures undertaken for the stabilization of OB. No action has been taken by the PP towards the restoration of waste lands and degraded land in lieu of breaking the land.

Being Complied.

Apart from reclamation of OB dumps, restoration of waste land and other degraded land is being carried out through systematic plantation of native species in and around mine lease area. At Kusmunda OCP an area of 193.53 ha of waste land/degraded has been ecologically restored. Most of the species being planted by CGRVVN via long term MoU with SECL are mostly native species including fruit bearing & medicinal species.

_		a 11.1		
'	11	Condition no:		Being Complied.
		XIIII	No ETP has been	An integrated ETP will be constructed for
		Sewage treatment	·	treatment of CHP waste water.
		plant shall be	CHP wastewater. The	Construction of RCC Settling Tank with
		installed in the	PP has provided a	Sludge Drying Bed for treatment of mine
		existing colony.	siltation pond for	discharge water for industrial use at an
		ETP shall also	settling and recycling	estimated cost of Rs 36 Lakhs has been
		be provided	of CHP effluent has	completed & will be commissioned soon
		for workshop and	also been constructed	along with newly constructed 20,000 Te
		CHP wastewater.	by the PP near CHP.	Overhead Bunker.
Γ	12	Condition no:	No Final Mine Closure	Being Complied.
		XIvii	Plan has been	Kusmunda OCP is an on-going Project.
		A detailed Final	prepared by the PP.	Activities regarding Progressive Mine
		Mine Closure Plan	The PP has informed	Closure Plan is being followed and
		along with details	that Final Mine	implemented on yearly basis.
		of Corpus Fund	Closure Plan shall be	Mine Closure Plan is a part of approved
		shall be submitted	prepared five year	Project Report for Kusmunda Expansion
		to the Ministry of	prior to the closing of	OCP (15-50MTPA).
		Environment,	the mine and the same	Details on Corpus funds are as follows:
		Forests & Climate	shall be submitted to	Annual closure cost deposit for the year
		Change within 6	the MoEF&CC.	(2017-18) 682.67 Lakhs and the
		months of grant of	and MoEr add.	Progressive balance including interest in
		Environmental		the Escrow account is Rs. 33.59 Crores as
		Clearance.		on 31.03.2018.
		Cicarance.		011 31.03.2010.
Γ.	13	Condition no:	Details regarding	Being complied.
•	13	Condition no:		Being complied. System to report non- compliance/violations of
•	13	Xlix (d)	system to report non-	System to report non- compliance/violations of
•	13	Xlix (d) Condition-	system to report non- compliance/violations	System to report non- compliance/violations of the EC to the Board of Directors is in practice
•	13	Xlix (d) Condition- Corporate	system to report non- compliance/violations of the EC to the Board	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in
	13	Xlix (d) Condition- Corporate Environment	system to report non- compliance/violations of the EC to the Board of Directors has not	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the
	13	Xlix (d) Condition- Corporate Environment Responsibility:	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non-	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of environmental	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of environmental norms to the	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of environmental norms to the Board of Directors	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of environmental norms to the Board of Directors of the company	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of environmental norms to the Board of Directors of the company and/or	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of environmental norms to the Board of Directors of the company and/or shareholders or	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of environmental norms to the Board of Directors of the company and/or	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of environmental norms to the Board of Directors of the company and/or shareholders or	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-
	13	Xlix (d) Condition- Corporate Environment Responsibility: d.To have proper checks and balances, the company shall have a well laid down system of reporting of non- compliances/violat ions of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at	system to report non- compliance/violations of the EC to the Board of Directors has not been made available	System to report non- compliance/violations of the EC to the Board of Directors is in practice and a quarterly report is sent to the Board in accordance with the instructions issued by the Ministry of Coal vide letter no. 23/3/2015-

40.16.3(b) Status of the compliance of EC dated 3rd July, 2018 granted for 36 MTPA is as under:

S.	under: Conditions	Status of Compliance			
No.					
1.	The project proponent shall collect and analyze one season base line data for environmental parameters, preferably during April-June, 2018, and submit for consideration of the EAC before 31st December, 2018.	EC granted and received on 3 rd July, 2018. As directed, action has been taken to submit baseline data for April-June.			
2.	The project proponent shall also submit the details regarding action taken on different observations of the Regional Office before 31st December, 2018, for the Committee to examine adequacy and efficacy of the pollution control measures and its impact on ambient air quality and to make recommendations for continuance of the project thereafter.	The detail regarding action taken on different observations of the Regional Office has been submitted.			
3.	To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.	Mist Spray system has been provided and is in operation at all crushers. Newly constructed 20,000 Te Bunker & TRS (CHP Phase – 1) is also equipped with mist spray.			
4.	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.	Various Mitigative measures undertaken at Kusmunda OCP are:- a) Mist Spray arrangement is already functional in all crushers, Perforated Pipe spraying arrangement at Transfer points and 16 nos. of Spray Guns at Coal Stock Yard. b) Fixed sprinklers for a length of 5.39 km has been installed on coal transportation roads. c) Construction of a 20,000 Te Bunker & Truck Receiving Station (CHP Phase – I) is completed. This will effectively reduce the fugitive dust emission from coal transportation trucks and the coal transported will be from a closed conveyor belt thereby reducing the emission from source itself. e) Work has been started for construction of dust breaking arrangement (Wind Barrier) at railway siding. Work will be completed by February, 2019. f) Mechanical Sweeping Machine has been deployed and working satisfactorily. g) Procurement of Long Range Fogging Machine – Tender for machine procurement has been opened and bid evaluation is under final stage. h) New Railway Siding is under			

- Construction, Likely to be Completed by 30/09/2019. J) Construction of 04 nos. of SILO's with Rapid Loading System along with New Railway Siding has been started. K) Installation of In Pit Belt Conveyor so that transportation of coal from Pit Bottom to Surface/Siding is completely eliminated resulting control of air pollution. L) In order to reduce the pollution load, high capacity equipment have been planned in phased manner. 20 nos. of 240 T highest size dumpers have been deployed for OB transport with matching 2 nos. 42 cum shovel. In future 1no of 42 cum. Shovel, matching 12 nos. of 240 T dumpers and 4 nos. of 10-12 cu. m. capacity electric hvdraulic be shovels will deployed additionally for OBR production. 65 nos. of 60 T truck and 10 nos. of 10 cu. m. Front End Loaders will be deployed for coal transportation substitution of presently deployed 18T /30T coal tippers and 3 cu. m. Front End Loaders. 7 Nos. 70 KL capacity Water tankers & 3 Nos. 28 KL capacity Water tankers fitted with Mist spray arrangement are being used for dust suppression. In future 2 nos. of Water tankers with 28 KL capacity & 3 Nos. of Water tankers with 70 KL capacity with mist arrangements will be deployed additionally. M) For Soil Dump Stabilization (1.00 Ha) at overburden Kusmunda OCP using vetiver
 - additionally.

 M) For Soil Dump Stabilization (1.00 Ha) at overburden Kusmunda OCP using vetiver system technology with plantation of 1,00,000 vetiver saplings was carried out by IIT, Kharagpur in 2017-18, costing Rs 33.35 lakhs.
 - N) Construction of RCC Settling Tank with Sludge Drying Bed for treatment of mine discharge water for industrial use at an estimated cost of Rs 36 Lakhs has been completed & will be commissioned soon along with newly constructed CHP.
 - O) For developing vertical greenery, Chhattisgarh Rajya Van Vikas Nigam (A Govt. of Chhattisgarh U/T) has been entrusted to carry out this work.

We have already taken up the issue with Chhattisgarh Center for entrepreneurship Development, Bilaspur (CGCED) for training on Livelihood and Skill development for

- Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- 5

		nearby villages.
6.	To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.	Regular Medical camps are being organized and will be continued on a regular basis. (From 2013-14:No. of camps held -212 and no. of beneficiaries -9109).
7.	Thick green belt of 75 m width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.	For providing an adequate and effective green belt around the villages, 6855 Nos. of saplings have been planted at Bata village at an area of 2.75 Ha. As directed, we have already acquired 1050 ha land in the final boundary and after section 11(i) of CBA (A&D) Act, 1957 & immediately after possession, 75 m width green belt condition will complied.
8.	A third party assessment of EC compliance shall be undertaken once in 03 year through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.	As directed, we have already engaged ICFRE for third party audit.

40.16.3 (c) Different works taken up under the CSR during last four years are as under:-:

Year	Amount spent in Rs.	Major works
	lakhs	
2013-14	189.53	Construction of 3 Nos room at Community Place Laxman Nagar. Construction of C. C. Road at Yamuna Nagar Rehab Village of Kusmunda Area. Construction of Community shed and cement concrete road at Salora village near Kusmunda area. Second Installment for Construction of Double Lane bridge at Left Bank Canal of Hasdeo Barrage.
2014-15	316.22	Construction of Nirmal Ghat at Bade Talab and Paithu Talab at Rangbel Village. Construction of Samudayik Bhawan at Amgaon Village. Construction of CC Road from House of Chandan Ram Yadav to house of Hulasram at Sonpuri Village. Construction of Samudayik Bhawan and stage at Sonpuri Village of Kusmunda Area
2015-16	138.38	Construction of new building of PRIMARY SCHOOL Badgaon instead of ruined old building; Repair/minor construction at Post Matric SC Girls Hostel ITI, Korba. Installation of solar power plant of capacity of 5 KW (along with C.O.M.C. and distribution network) in village Banjaridand-1, Block- Pondi Updora.
2016-17	1257.36	Construction of toilets and arrangement of drinking water in Govt. High School in Balgikhar. Repair/ minor construction work of Govt. Primary School, Kosmanda (Vijaynagar). Construction of boundary wall around PHC in Birda Village. Construction of 250 m boundary wall and support to the Minimata Girls College, Korba.

2017-18	161.35	Drinking water supply and community developments works
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40.16.3 (d) Detail of additional infrastructure Development works is as under:

S. No.		Activity	Status		
1.	CHP PHASE-I	Construction of 20,000Te Bunker	Construction completed. To be commissioned by 31/03/2019.		
2.	CHP PHASE-II	Construction of New Railway Siding Construction of 04 nos. of SILO's with Rapid Loading System (4000 Te capacity each) along with New Railway Siding.	Work in progress (54% completed). To be completed by 30/09/2019. Work in progress (6.5% completed). To be completed by 30/06/2020.		
	Kusmunda Washery (10 MTY)	Construction of Kusmunda Washery (10.00 MTY)	Tender under evaluation. Construction work likely to be completed by 30/03/2021.		
3.	CHP PHASE-III	Installation of In Pit Belt Conveyor	NIT is being framed by CMPDIL. Construction likely to be completed by 31/12/2023.		
4.	WORKSHOP	Construction of Integrated Workshop	Tender to be floated shortly. Construction likely to be completed after 1 year after the work being awarded.		

- **40.16.3 (e)** Kusmunda OC is catering to most of the critical and super critical thermal power plants including State Power Generation Corporation Ltd., CSPGCL (West), NTPC Korba, NTPC Seepat, Adani Power, Balco, Lanco, Bhilai TPS etc,. In view of the shortage of coal in the country and the resulting power crisis, there is a pressing demand for grant of Environmental Clearance to the expansion project in National interest.
- 40.16.4 During discussions, the EAC first took note of the chronology of events as under:-
- (a) The proposal was originally submitted for grant of environmental clearance to the expansion of Kusmunda Opencast Coal Mining project from 15 MTPA (normative)/18.75 MTPA (peak) to 50 MTPA (normative)/62.50 MTPA (peak) by M/s South Eastern Coalfields Ltd in mine lease area of 3510.348 ha in District Korba (Chhattisgarh). Public hearing for the project was conducted by the SPCB on 11th February, 2015.
- (b) Mining Plan for the proposed expansion was earlier approved by the Board of M/s Coal India Ltd in its 300th meeting held on 28th October, 2013. Mine Closure Plan is an integral part of the Mining Plan.
- (c) The EAC in its meeting held on 7-8 January, 2016 recommended the project for grant of environmental clearance for a production level of 26 MTPA (peak), subject to compliance of certain specific conditions and adopting mitigating measures. As per the recommendations, the project for expansion from 18.75 to 26 MTPA (peak) in mine lease area of 1449.864 ha, was granted EC by the Ministry on 3rd February, 2016. The rationale behind granting expansion only till 26 MTPA as against the proposal for 50 MTPA was that the tripling of mine capacity (from 15 MTPA (normative) to 50 MTPA (normative) could have adverse environmental consequences.
- (d) The proposal for further expansion of the project from 26 to 50 MTPA (normative)/62.50 MTPA (peak) was considered by the EAC in its meeting held on 27th February, 2018. During the meeting, the Committee took note of the observations of Ministry's Regional Office, contained in

their monitoring report dated 13th June, 2017 (site visit on 22nd April, 2017), which mainly included the following:-

- Existing measures to check fugitive emissions while spilling, transportation, CHP area, appeared to be insufficient.
- Development of green belt is in nascent stage. The green belt of adequate width needs to be developed around the mine lease area, CHP, overburden dump sites, etc.
- Management of garland and catch drains was observed to be in poor state.
- No action undertaken for restoration and stabilization of overburden.
- Roads within the mine lease area observed to be laden with coal dust having poor drainage system.
- No ETP for treatment of CHP waste water. Only siltation pond provided for settling and recycling of effluent from the CHP.
- (e) Taking cognizance of compliance status of the conditions stipulated in the EC dated 3rd February, 2016 and the additional control measures adopted by the project proponent, the sectoral EAC in its meeting held on 27th February, 2018, recommended the project for grant of EC to its expansion from 26 to 36 MTPA in an area of 1655.825 ha for a period of one year i.e. up to 31st March, 2019, subject to compliance of additional terms and conditions as under:-
- (i) The project proponent shall obtain prior clearances for regularization and/or diversion of the forest land of 205.961 ha from the concerned regulatory authority to enable its use for nonforestry purpose.
- (ii) The project proponent shall collect and analyze one season baseline data for environmental parameters, preferably during April-June, 2018, and submit for consideration of the EAC before 31st December, 2018.
- (iii) The project proponent shall also submit the details regarding action taken on different observations of the Regional Office before 31st December, 2018, for the Committee to examine adequacy and efficacy of pollution control measures and its impact on ambient air quality and to make recommendations for continuance of the project thereafter.
- **40.16.5** During deliberations on the present proposal, the EAC noted the following:-

The present proposal is for environmental clearance to further expansion of Kusmunda Opencast Coal Mining project from 36 MTPA to 50 MTPA (normative)/62.5 MTPA (peak)by M/s South Eastern Coalfields Ltd in mine lease area of 1655.825 ha in District Korba (Chhattisgarh).

Total project area of 1655.825 ha includes forest land of 205.961 ha. The same has since been regularized under the Forest (Conservation) Act, 1980 by the Ministry vide letter dated 26th April, 2018, for diversion to non-forestry purposes.

As one year clearance to expand capacity from 26 to 36 MTPA has already been given in February 2018 (only 8 months ago) without conducting public hearing, as per OM of September 15th 2017. The reason why a permanent EC for 36 MTPA was not granted was that the EAC was concerned with the possible adverse environmental impacts of the repeated and rapid expansions taking place. Hence the EAC imposed several conditions to be complied with during this 1-year period, including collection of baseline data (see 40.16.4(e) above).

However, consent to Operate against the last EC dated 3rd July, 2018 has not been issued by the State Pollution Control Board even after a period of 5 months, and the project for its expansion up to 36 MTPA was yet to be made operational.

Moreover, as per one of the said EC conditions, one season baseline data for environmental parameters, for consideration of the EAC before 31st December, 2018, was yet to be collected/analyzed. Further, no compliance status for the EC dated 3rd July, 2018 through the Ministry's Regional Office has been submitted, which is necessarily required for considering the proposal for continuation of EC for production at 36 MTPA capacity.

40.16.6 The EAC expressed its serious concerns over the prevailing environmental conditions, projected scenario even at the present production capacity of 36 MTPA and compliance status of its earlier recommendations as explained in the preceding paras.

The Committee, in the first instance and in view of suggestions of majority of its members, was not inclined to recommend the proposal, mainly due to non-submission of compliance status for the conditions stipulated in the said environmental clearance dated 3rd July, 2018 through the Regional Office of the Ministry.

The compliance status of the conditions stipulated in the EC dated 3rd July, 2018, as reflected in para 40.16.3(b) above, was presented during the meeting. Also, public hearing for the project for its expansion from 15 MTPA (normative)/18.75 MTPA (peak) to 50 MTPA (normative)/62.50 MTPA (peak) was already conducted by the SPCB on 11th February, 2015.

Member Secretary informed the Committee that in view of shortage of coal in the country to meet the requirements of linked critical and super-critical thermal power plants, there is a pressing demand for environmental clearance to the proposed expansion of the project beyond 36 MTPA. He requested the Committee for consideration of the proposal for further expansion to a smaller extent for the present, and that too for a limited period, subject to submission of Consent to Operate, coal production plan for the year 2018-19 and compliance status of the conditions stipulated in the EC dated 3rd July, 2018 to the satisfaction of the Ministry/Regional Office.

In view of the differing opinion, the proposal could not be concluded and deferred for further deliberations during the next meeting.

Agenda No.40.17

Manikpur Opencast expansion project from 3.50 MTPA to 4.90 MTPA of M/s South Eastern Coalfields Limited in an area of 1018.925 ha located at Tehsil & District Korba (Chhattisgarh) - For EC

[IA/CG/CMIN/11065/2007; F. No. No.J-11015/1129/2007-IA.II(M)]

- **40.17.1** The proposal is for environmental clearance to the expansion Manikpur Opencast expansion project from 3.50 MTPA to 4.90 MTPA of M/s South Eastern Coalfields Limited in an area of 1018.925 ha located at Tehsil & District Korba (Chhattisgarh)
- **40.17.2** Facts of the proposal, as ascertained from the proposal documents and revealed from the discussions held during the meeting are given as under:-
- (i) The project was earlier granted environmental clearance vide letter dated 22nd August, 2014 for production capacity of 3.50 MTPA in the same mine lease area 1018.925 ha.
- (ii) The project area is located in Korba Area of SECL in Koba district of Chhattisgarh. Project area covered under Survey of India Topo Sheet No. 64-J/11 with geographical coordinates ranging from latitudes 22⁰ 19" 00" N to 22⁰ 19' 30"N and longitudes 82⁰ 42 30"E to 82⁰ 44 30"E.

- (iii) Coal linkage of Manikpur Open Cast Project mainly lies with Thermal Power Stations. The mine is catering to CSPGCL through own wagon system (rail mode). Some coal is auctioned to BALCO, DB POWER, LANCO and dispatched through road/rail. Some coal is also supplied to MPPGCL through rail mode.
- (iv) No joint venture cartel has been formed to operate the mine. Manikpur Open Cast Project has been proposed to be operated solely by the M/s SECL.
- (v) Project does not fall in the Critically Polluted Area (CPA). Moratorium was lifted from Korba district vide notification no. J-11013/5/2010-1A.11(1) dated 17th September, 2013.
- (vi) Manpower engaged in the project is 939.
- (vii) The project is reported to be beneficial for generation of electricity to meet the national needs besides contributing to the society through generation of employment, development of infrastructure.
- (viii) Land use detail of the mine is given as under:

Pre-mining (in Ha)

S. No.	Land Use	Within ML Area (ha)	Outside ML Area (ha)	Total
1.	Agricultural land	531.856	-	531.856
2.	Forest land	371.619	-	371.619
3.	Waste land	111.170	-	111.170
4.	Grazing land	-	-	-
5.	Surface water bodies	*4.280	-	*4.280
6.	Settlements	-	_	-
7.	Others (Specify)	-	_	-
	TOTAL	1018.925	-	1018.925

^{* 4.280} Ha surface water bodies in total 375.899 Ha forest land

Core - Zone:

•	Particulars	Tenancy	Forest	Government Land (ha)					Grand
S No.		land (ha)	land (ha)	Grazing land	Waste land	Water body	Others	Total	Total (ha)
1	Quarry Area	56.96	256.53	-	7.86	-	-	7.86	321.35
2	Backfilled Area	75.949	105.752	-	7.884			7.884	189.585
2	Area for Top Soil	10.0	-	-	-	-	-	-	10.0
3	External dump	94.97	3.74	-	88.99	-	-	88.99	187.70
4	Infrastructure	4.66	2.35	-	2.13	-	-	2.13	9.14
5	Roads	5.99	2.02	-	-	-	-	-	8.01
6	Residential Colony	18.04	-	-	-	-	-	-	18.04
7	R & R site	-	-	-	-	-	-	-	-
8	Nala Diversion, if any	-	-	-	-	12.45	-	12.45	12.45
9	Safety Zone	12.75	-	-	-	-	-	-	12.75
10	Others	210.257	5.507	-	34.136	-	-	34.136	249.90
Tota	I Land (in ha)	489.576	375.899	-	141.00	12.45	-	153.45	1018.925

Post – mining:

S. Land Use Land Use (ha)					a)	
No.		Plantation	Water body	Public use	Undisturbed	Total
1.	External OB Dump	187.700	-	-	-	187.700
2.	Internal Dump/ Backfilled Area	189.585	-	-	-	189.585
3.	Excavation	-	321.350	-	-	321.350
4.	Roads	-	-	1.090	-	1.090
5.	Built up area	-	-	88.510	-	88.510
6.	Green Belt	5.000	-	-	-	5.000
7.	Undisturbed Area	-	-	-	225.690	225.690
	Total	382.285	321.350	89.600	225.690	1018.925

- (ix) Total geological reserve reported in the mine lease area is 117.23 MT, out of which mineable reserve is 101.50 MT and balance extractable reserve as on 01.04.2018 is 76.22 MT. The percent of extraction would be about 90%.
- (x) Thickness of workable coal seams varying from: Seam XVIII 32.27 38.84 m, Seam XIX 5.98 24.65 m and Seam XX 7.13 7.87 m. Grade of coal is G-13, G-14 and average gradient is 4.80 to 9.50.
- (xi) Mining Plan of Manikpur OC Project for 3.50 MTPA was approved on 11.12.2009. Mine Closure Plan for 3.50 MTPA was approved on 18.05.2013 by the Board of Directors of SECL.
- (xii) Total forest land involved in the project is 375.899 ha.
- (xiii) There are no national park or eco-sensitive zones within 10 km radius of the project.
- (xiv) Application for obtaining the approval of the Central Ground Water Authority for dewatering of mine has been submitted on 22.12.2017.
- (xv) The main drainage is controlled by Kachandi Nala which flows along the mine boundary and joins Hasdeo River.
- (xvi) Availability of ground water has been reported to be varying between 3.42 m to 11.58 m below ground level during pre-monsoon season and between 0.72 m to 10.26 m below ground level during post-monsoon season. Total water requirement for the project has been reported to be 540 KLD.
- (xvii) Method of mining is opencast mining with shovel dumper and excavator-tipper combination.
- (xviii)Transportation of coal in mine pit head has been proposed through Truck/tippers, surface to sidings by covered tippers and at siding to consumer through rail and to local consumers by road.
- (xix) Remaining Life of mine has been reported to be 16 years @ 4.90 MTPA as on 01.04.2018.
- (xx) The project, being an opencast mine, involves external and internal OB dumps...
- (xxi) Number of External OB Dumps is 2 with maximum height of 60 m and 90 m, involving total area of 187.70 ha to accommodate 103.20 MCum of external OB.
- (xxii) Number of Internal OB Dumps is 3 with maximum height of 60 m and 90 m, involving total area of 189.585 ha to accommodate 169.10 MCum of internal OB
- (xxiii)Total quarry area is 321.35 ha. Backfilled quarry area of nil ha shall be reclaimed with plantation and a void of 321.35 ha at a depth of 40m is proposed to be converted into a water body.
- (xxiv) The PP has reported that no court cases, violation cases are pending against the project of the PP.
- (xxv) The project does not involve R&R.
- (xxvi) No violation cases have been reported to be pending against the project.
- (xxvii) Regular monitoring of ambient air quality is being carried out on fortnightly basis.
- (xxviii) Total cost of the project is Rs 37628.38 Lakhs, cost of production is Rs. 639.20 per tonne at 90% production while sale price is Rs. 1430 per tonne, CSR cost will be estimated 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. Environment Management Cost is Rs 557.17 per tonne envisaged in the PR.

(xxix) Public Hearing for the last EC for 3.50 MTPA for an area of 1018.925 ha was held on 27.08.2009.

(xxx) Reclaimed external OB dump will be 187.70 ha and internal dump will be 189.585 ha. Plantation in safety zone is 12.75 ha. Density of tree plantation is 2500 plants per ha.

40.17.3 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of Manikpur Opencast Coal Mine from 3.5 MTPA to 4.9 MTPA of M/s South Eastern Coalfields Limited in an area of 1018.925 ha in Tahsil Korba, District Korba (Chhattisgarh), seeking its appraisal under para 7(ii) of the EIA Notification, 2006.

Earlier, the project for its capacity of 3.5 MTPA in an area of 1018.925 ha was granted environmental clearance vide letter dated 22nd August, 2014 based on Public hearing conducted on 27th August, 2009.

Subsequently, the PP had approached the Ministry for expansion of mining from 3.5 MTPA to 5.25 MTPA, and the Ministry (based on the EAC recommendations) had granted ToR vide letter dated 11th September, 2017 for preparation of EIA/EMP report along with Public Consultation.

However, the PP now states that they are facing difficulties in this expansion, and hence, scope of the project was reduced to expansion up to 4.9 MTPA in the existing area of 1018.925 ha.

Total forest land involved under the project is 375.905 ha (includes 4.820 ha as surface water bodies). Stage-II approval for diversion of 194.728 ha of forest land for non-forestry use has been obtained vide letter dated 19th August, 2011. Stage-I approval for diversion of 181.177 ha of forest land for non-forestry use has been obtained vide letter dated 14th June, 2006.

Ambient Air Quality modelling has been carried out based on full season baseline air quality data collected during November, 2017 to February, 2018. Micro meteorological data have been used for prediction of impact of proposed incremental expansion of 1.75 MTPA on ambient air quality (PM_{10}) at 9 control locations. The predicted air quality values are found to be within the prescribed limits.

Mining scheme for 5.25 MTPA has been approved by SECL board on 15th September, 2015. Mine Closure Plan was approved by the Board of SECL in its 213th meeting held on 18th May, 2013.

Evacuation of coal in pits and from surface to sidings will be done by tippers and from sidings to loading by closed conveyor belts. Coal will be transported from siding to CGSPGCL by their own wagon system through rail.

The Regional Office, Nagpur has conducted site inspection of the area on 20th May, 2017 to monitor the status of compliance of conditions stipulated in the environment clearance dated 22nd August, 2014 and submitted report vide their letter dated 12th June, 2017. The same found to be satisfactory.

Consent to operate for the existing production level has been obtained from the CECB and the same is valid till 31st July, 2019.

The EAC, however, noted that the PP already had an existing TOR (issued in September 2017) for the expansion from 3.5 MTPA to 5.25 MTPA, and that this was clearly the long-term goal of the project. This expansion proposal would then have to stand withdrawn and the TOR cancelled. The PP needs to submit a motion to withdraw the TOR issued in September 2017. Proposal submission and TOR issuance are not processes to be taken lightly, to be discarded at will. Moreover, the OM dt. 15th September 2017 only provides the possibility of exemption from public hearing for expansion of upto 40%. It still requires that a TOR be granted and an EIA/EMP be developed and presented to the EAC as per this TOR.

On the other hand, the EAC noted the following mitigation circumstances, viz., that

- a) no expansion of mining capacity had taken place so far beyond its original capacity of 3.5 MTPA.
- b) there was no change in land area between the earlier proposed expansion to 5.25 MTPA and the subsequent proposal to expand only up to 4.9 MTPA.
- c) Hence the TOR issued for the expansion till 5.25 MTPA would remain the same if the expansion had been till 4.9 MTPA.

40.17.4 The Committee, after detailed deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006 and giving due consideration to the parameters mentioned in the Ministry's OM dated 15th September, 2017,

Allowed the PP to withdraw its original application for expansion to 5.25 MTPA, considered the TOR given for the expansion to 5.25 MTPA as the TOR required for expansion to 4.9MTPA, and upon perusal of the EIA/EMP submitted on the basis of this TOR, and in light of the proposed expansion being 40% of the original capacity, and in light of the fact that no earlier expansion had been granted, exempted the project from the public hearing, and recommended for grant of environmental clearance to the project for expansion of Manikpur Opencast Coal Mine from 3.5 MTPA to 4.9 MTPA of M/s South Eastern Coalfields Limited in an area of 1018.925 ha in Tahsil Korba, District Korba (Chhattisgarh), subject to the compliance of terms and conditions as applicable, and the additional conditions as under:-

- The project proponent shall obtain Consent to establish from the State Pollution Control Boards of Chhattisgarh for the proposed peak capacity of 4.9 MTPA prior to commencement of the increased production.
- Transportation of coal from face to coal heap shall be carried out by tippers. Further, the coal transportation from coal heap to Coal Handling Plant shall be carried out through covered trucks.
- To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.
- 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.
- The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 4.9 MTPA.
- Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- Persons of nearby villages shall be given training on livelihood and skill development to make them employable.

- To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.
- Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.
- No further applications for expansion without TOR, EIA/EMP and Public Hearing, will be entertained after this expansion.