

Minutes of the 49th meeting of the Expert Appraisal Committee held on 22nd October, 2019 for appraisal of coal mining projects at Indira Paryavaran Bhawan, Ministry of Environment, Forest and Climate Change, New Delhi-3

The 49th meeting of the Expert Appraisal Committee (EAC) for Coal mining projects was held on 22nd October, 2019 in the Ministry of Environment, Forest & Climate Change at Teesta Meeting Hall, Vayu Wing, First 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. Navin Chandra	-	Chairman
2.	Dr. N. P. Shukla		Member
3.	Shri Surmya D Vora		Member
4.	Shri G.P. Kundargi	-	Member
5.	Shri N. Mohan Karnat		Member
6.	Shri N. S. Mondal		Member
7.	Dr. Jai Krishna Pandey	-	Member
8.	Dr. S K Gupta		Member
9.	Shri Sharath Kumar Pallerla	-	Member Secretary

Confirmation of minutes

There being no comments from any of the members of the Committee, minutes of the 48th meeting of the EAC held during 3-4 October, August, 2019 were confirmed in the presence of the members who had been present in the 49th 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:-

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Agenda No. 49.1

Manuguru opencast coal mining project from (1.50 MTPA to 2.10 MTPA) in ML area 668.42 ha of M/s The Singareni Collieries Company Limited located near Village Rajupeta, Manuguru Mandal Bhadradi, District Kothagudem (Telangana) - Environmental clearance under the provision of clause 7(ii) of EIA Notification, 2006

[IA/TG/CMIN/114765/2019; F.No. J-11015/905/2007-IA.II(M)]

49.1.1 The proposal is for grant of environmental clearance for expansion of Manuguru Opencast Mine for a capacity from 1.5 MTPA to 2.1 MT in mine lease area of 668.42 ha located near Village Rajupeta, Manuguru Mandal Bhadradi, District Kothagudem (Telangana) under the provision of clause 7(ii) of EIA Notification, 2006

49.1.2 Details 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 Mine take area is covered under Survey of India Topo Sheet No. 65 C/13 and is bounded by the geographical co-ordinates ranging from Latitudes 17°57'48" to 17°59'19" N and longitudes 80°48'58" to E 80°51'11" E.
- (ii) Coal linkage of the mine is proposed as per Fuel Supply Agreement of the Company.
- (iii) Joint venture cartel has been formed - Not Applicable.
- (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, Permanent / Contractual employment to about 408 persons out of which about 220 permanent and 188 contractual (men on roll) will be provided from the project.
- (vi) The project is reported to be beneficial in terms of socio-economic and improving living standards.
- (vii) Mining Plan (Revision-2) including mine closure plan for Manuguru mining lease (Manuguru OC mine) was approved by vide 38011/12/2017-PCA dt. 22.04.2019.
- (viii) Earlier, Environment clearance to the Mine : Environmental Clearance was obtained from MoEF&CC vide Lr. No.J-11015/905/2007-IA-II (M), dated 24th October 2008 for a rated capacity of 1.50 MT.
- (ix) MNG OC mine is covered under two mining leases.
- 294.52 ha of Lease area is covered in 1st renewal of Mining Lease for coal over an extent of 2082 ha obtained vide G.O.Ms. No. 217 dt. 12.08.2008 which is valid up to 22.07.2035 i.e., for a period of 30 years.
 - 373.90 ha is covered in Mining lease for coal over an extent of 373.90 ha of NFL for a period of 20 years from the year 2015, obtained vide G.O.Ms No.6, dated 06.02.2015, which is valid up to 15.04.2035.
- (x) The land usage pattern of the project is as follows:

Pre-mining land use details (Area in ha)

Post

Description	Type	Within ML area (ha)	Outside ML area (ha)	Total (ha)
Tenancy/Private Land	Agricultural	324.28	0	324.28
	Water Bodies	0.45	0	0.45
	Road	1.47	0	1.47
	Village	5.16	0	5.16
Sub total		331.36	0	331.36
Govt /Non Forest	Agricultural	270.30	0	270.30
	Township	22.78	0	22.78
	Road	0.86	0	0.86
	Water body	8.17	0	8.17
Sub total		302.11	0	302.11
Forest	Reserve	34.95	0	34.95
Total Project area		668.42	0	668.42

Closure Land Use Details (Area in ha)

Type	Land Use (Post Closure) (in ha)					
	Agri-cultura l land	Plantatio n	Water Body	Public/ Company Use/ undisturbed	Forest Land to be returned	Total
Excavation Area						

i. Backfilled Area		49.96				49.96
ii. Excavated Void			134.98		23.98	158.96
Without plantation						
Top Soil Dump & top soil dump		244.56				244.56
Safety Zone /Rationalization area:		49.72	23.96	17.50	9.14	100.32
Service Buildings & Infrastructure area				34.05		34.05
Embankment		44.03			1.83	45.86
Green Belt		34.71				34.71
Total	-	422.98*	158.94	51.55	34.95	668.42

* In addition to the above in the FL land of 34.95 ha an area of 6.85 ha area will be reclaimed and plantation will be done before being handed over to Forest Department. So, the gross plantation is 429.83 ha.

(xi) Total geological reserve reported in the mine lease area is 19.96 MT with 16.66 MT mineable reserves. Out of total mineable reserve of 16.66 MT, 15.94 MT are extractable, out of which 2.25 MT were already extracted by UG mining and 13.69 MT are available for extraction by OC Mining. Percent of extraction is 79.85 %.

(xii) Out of 10 seams present 8 seams viz., H1, H2, H3, H4 Top, H4 Bottom, TS Top, TS Bottom and Index-1 are workable. Grade of coal is in the range of G-9 to G-12. Stripping ratio 13.00 Cum of OB per 1 tonne of coal, while gradient is varying from 1 in 3.3 to 1 in 5.5.

(xiii) Method of mining operations envisages is by opencast method.

(xiv) Life of mine is 7 years from 2018-19.

(xv) The Manuguru Opencast Mine has one external OB dump. The area of external dump including top soil dump is 244.56 ha.

(xvi) Total quarry area is 208.92 ha out of which backfilling will be done in 49.96 ha and 158.96 ha will be left as water body with a depth of 200 m. Backfilled quarry area of 49.96 ha shall be reclaimed with plantation.

(xvii) Transportation of coal has been proposed by Trucks / Dumpers up to pit head, from pit head surface to KCHP , BTPP and other customers through covered trucks.

(xviii) Reclamation Plan in an area of 668.42 ha, comprising of 49.96 ha of internal dump, 244.56 ha on the external dump, 34.71 ha of green belt area, 49.72 ha of the safety zone/rationalization/others area in addition to this, an area of 44.03 ha of the embankment area has also been proposed for green belt development and 6.85 ha of forest land diversion area will be reclaimed during the post closure stage. So, the cumulative plantation area at Manuguru OC Expansion Mine during Mining and Post closure stage is 429.83 ha.

(xix) 34.95 ha of forest land is involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 33.58 ha of forest land was obtained vide F.No. 8-73/2005-FC dt 09.05.2016 & remaining 1.37 ha of land was obtained vide F.No. 8-73/2005-FC dated 06.11.2009.

(xx) Ecologically sensitive zone of Kinnersani wild life sanctuaries is at a distance of about 5.67 km from the project boundary.

(xxi) The ground water level has been reported to be varying between 3.00 m to 19.30 m during pre-monsoon and 1.66 to 17.58 during post-monsoon period. Total water requirement for the mine is about 1680 KLD.

(xxii) Ground Water Clearance was issued by the State Government vide Memo No.14536/ Hg.II (1)/07 dt.04.06.2008. Requisition for Ground water clearance for the proposed capacity was also made vide Lr. MNG/ENV/28/2018-19/267, dated 23.02.2019.

(xxiii) Public hearing was conducted on 04.04.2008 at Govt. Primary school, Eggadigudem near Manuguru village. Major issues raised in the public hearing include proper compensation to the land losers in the land acquisition, proper mitigation measures to control pollution, employment to local and land losers, providing proper drinking water, exploring the possibilities of extraction of coal by underground mining.

- *R&R package is given as per G.O.M.No.68. R&R Villages namely Eggagudem, Kommugudem, Padmagudem and Mallepalli villages.*
- *Water spraying arrangements are being made by four 28KL water tankers to suppress the dust on haul roads. Mist spray arrangements are made at crushers and coal transferring points of conveyor belts. One 3KL tractor tanker is being used for suppression of dust on coal transportation road from Rajupet village to Bayyaram Road junction.*
- *SCCL has provided more than 400 employment opportunities to land losers and unemployed youth in different contract works i.e. in OB removal work, coal transport work, drivers for vehicles etc., in Manuguru Opencast mine.*
- *SCCL is providing 6.77 Lakh Gallons per Day (LGD) drinking water to Manuguru municipality and gram panchayats surrounding to the coal mining projects.*
- *The reserves feasible for extraction of underground mining method were exhausted; the remnant coal is being extracted by OC method.*

(xxiv) Consent to Operate was obtained vide order No. 17052553274 dt. 13.03.2017 by TSPCB, Telangana state and is valid up to 31th October, 2021.

(xxv) No River/ major Nallahs/Streams are flowing across the boundary of the mining lease. However, river Godavari is flowing along the North East of the Mine and Flood Protection Bund with minimal disturbance to the downstream users is constructed..

(xxvi) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to State Pollution Control Board and also to MoEF & CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations which can be attributed the specific local conditions during the day of sampling.

(xxvii) No court cases, violation cases are pending against the project of the PP.

(xxviii) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under.

(xxix) The coal production from the mine was started from the year 2016-17 onwards. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations.

(xxx) The coal production, realized from the project, from 2016-17 onwards, is as under:

Year	EC capacity (MT)	Actual production in MT
2016-17	1.5	0.45
2017-18		1.50
2018-19		1.50
Total		3.45

(xxxi) The project involves R&R of the 4 villages (1124-PAFs/PDFs). R&R completed and an Compensation amount of Rs. 62.17 Crores paid to the land losers as per the directions of the State Govt.

(xxxii) The capital sanctioned is Rs.415.70 Crores as per RCE-2015. The cost of production of the mine as on Feb'2019 is Rs.2136 per tonne and CSR cost is 2% of average net profits of the company made during last three years will be allocated for CSR at company level.

(xxxiii) An amount of Rs.3.12 Crores has been provided towards Environmental related direct cost, which includes Effluent Treatment Plant/ oil & Grease Trap, Green belt development around the quarry, service buildings, pollution abatement cost, construction of

toe walls & rock filler dams etc., In addition 0.90 Crores provided beyond 3rd year, hence total funds provided towards EMP cost is 4.02 Crores.

- Indirect cost for EMP: 4.18 Crores
- Revenue cost for EMP related works is 6.50 Crores which out to be ₹43.35 per tonne of coal

49.1.3 The EAC, after deliberations noted the following

- The proposal is for grant of environmental clearance for expansion of Manuguru Opencast Mine for a capacity from 1.5 MTPA to 2.1 MT in mine lease area of 668.42 ha located near Village Rajupeta, Manuguru Mandal Bhadradi, District Kothagudem (Telangana) under the provision of clause 7(ii) of EIA Notification, 2006, based on Ministry's OM dated 15th September, 2017 (i.e. 40% expansion)
- Environmental Clearance for Manuguru Opencast Coal Mine Project (1.5 MTPA) of M/s Singareni Collieries Company Ltd., located in village and Mandal Manuguru, District Khammam (presently Bhadradi Kothagudem District), Andhra Pradesh (Presently in the State of Telangana) was granted on 24th October, 2008. Life of mine mentioned EC dated 24th October, 2008 is 12 years for 1.5 MTPA capacity.
- Public hearing was conducted by APPCB on 4th April, 2008, at Govt. Primary school, Eggadigudem near Manuguru village.
- Ministry's Regional Office, Chennai has monitored the site on 17th July, 2019 and certified compliance report of the said project was forwarded. The non-compliances of EC conditions have been observed. The action taken by the Project proponent is not satisfactory
- Further, the committee observed that the OB dump reclamation and stabilization shall be conducted progressively and should not exceed 90 m height and advised to provide geotextile while stabilization of OB dump.
- CAAQMS shall be provided with analyzer of CO.
- Project proponent presented the ambient air quality concentration and predicted concentration considering 40% expansion.

49.1.4 *The EAC, therefore, after deliberations recommended for grant of environmental clearance for expansion of Manuguru Opencast Mine for a capacity from 1.5 MTPA to 1.8 MTPA (i.e. 20% increase in capacity) in mine lease area of 668.42 ha located near Village Rajupeta, Manuguru Mandal Bhadradi, District Kothagudem (Telangana) under the provision of clause 7(ii) of EIA Notification, 2006 and under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions in addition to the standard environmental conditions notified by the ministry mentioned below:*

- *The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 1.8 MTPA prior to commencement of the increased production.*
- *Transportation of coal from Coal Handling Plant shall be 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.*
- *Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, 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 loading and unloading points, etc.*
- *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.*
- *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.*
- *The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1st May, 2018.*

Agenda No.49.2

Expansion of Mugoli Nirgudda Extension Deep Opencast Coal Mine Project from capacity of 4.0 MTPA to 4.375 MTPA and increase in land area from 818.05 ha to 1317.55 ha of M/s Western Coalfields Limited located in Village Mungoli Tehsil Wani District Yavatmal (Maharashtra) – For Environmental Clearance

[IA/MH/CMIN/117098/2010; F. No- J-11015/299/2010-IA.II(M)]

49.2.1 The proposal is for Environmental Clearance for Expansion of Mugoli Nirgudda Extension Deep Opencast Coal Mine Project from capacity of 4.0 MTPA to 4.375 MTPA and increase in land area from 818.05 ha to 1317.55 ha of M/s Western Coalfields Limited located in Village Mungoli Tehsil Wani District Yavatmal (Maharashtra).

49.2.2 Details of the proposal, as ascertained from the proposal documents and also as informed during the meeting, are given as under:

- Mugoli OC Expansion is an operating mine and having Environmental Clearance vide letter No. J-11015/299/2010-IA.II(M) Dated 30/03/2011 for a production capacity of 4.00 MTPA and total leasehold area of 818.05 Ha.
- Earlier the subject project for further expansion namely Expansion of Mugoli Nirgudda Extension Deep OC was discussed in 4th EAC meeting held on 31.01.2017. ToR was issued vide letter no. J-11015/77/2016-IA.11 (M) dt. 07/03/2017.
- The area of Mugoli Nirgudda Extension Deep OC is bounded by Latitude N 19° 50' 54.36" and N 19° 54' 57.17" and Longitude E 79° 05' 24.04" and E 79° 07' 34.02". The block is covered in the Survey of India Toposheet No. 56 M/1
- Coal linkage of the project was for Basket Linkage consumers. There is no Joint venture involved.
- 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.
- Employment generation: The existing Manpower of Mugoli-Nirgudda OCM is 875 (as on 01.10.2019).
- This project will bridge the gap (to the extent of the peak production capacity of the project) between demand & supply of non – coking coal for power houses & other bulk consumers of Northern as well as Southern part of the country. In addition to provide direct employment to about 875 personnel, it will provide further employments to land losers of about 500 (Out of which 422 nos. is already sanctioned and 130 has already been provided employment). Further CSR fund will also be utilized in the 15 Km radius of the project which will add to the overall socio-economic development of the area. The continuation of the project will create no of indirect employment in significant numbers. CER provisions of 3.463 Crores proposed. This will also add to improve socio – economic scenario of the area

surrounding the project. Further the project will reduce the import bill to the extent of 0.375 MTPA and subsequently add to state exchequers in form of cess, levies, royalties etc.

(viii) Total mining lease area is 1317.55 Ha. The land is mostly agricultural land and there is no forestland involved in the project. The Project Report for Mugoli Nirguda Extn Deep OC along with Mine Closure Plan has been approved by WCL Board vide letter No. WCL/BD/SECTT/BM-271/2015/2408, dated 24.11.2015

(ix) The land usage pattern of the project is as follows:

Pre-mining land use details

Agricultural Land – 497.30 ha Govt. Land – 31.88 ha
Others - 788.37 (Already acquired by WCL)
Total land – 1317.55 ha

Post-mining land use details

S. No	Land use post mining	Land use (ha)				Total
		Plantation	Water Body	Public use	Undisturbed	
1	External OB Dump	295	0	0	0	295
2	Top soil dump	0	0	0	0	0
3	Excavation	217.82	295.65	0	0	513.47
4	Roads	6	0	24	0	30
5	Built up area	8	0	44.60	0	52.6
6	Green Belt	0	0	0	0	0
7	Land for railway siding	5	0	45	0	50
8	Undisturbed Area	226.48	0	0	80	306.48
9	Embankment around quarry	2.00	0	68	0	70
	Total	760.30	295.65	181.60	80	1317.55

(x) The total net in-situ geological reserves within the quarry works out to 59.45 Mt. The mineable reserves after considering mining losses in quarry area works out to 53.50 Mt.

(xi) There is one composite seam with multiple sections in the Mugoli Nirguda Combined Block. Thickness of sections of seams to be worked on are given below:-

Coal seam/ Parting	Thickness range (m)	
	Minimum	Maximum
Section – A	0.21	4.68
Section – B	0.08	3.75
Section – C	0.24	4.43
Section - D	5.07	12.01
Composite Sections – A+B+C+D	10.07	19.28

(xii) Grade of Coal is G9 (GCV – 4674Kcal/kg),

(xiii) Stripping ratio 1: 5.88 m³/t.

(xiv) Presently Shovel-Dumper combination is being practiced in existing Mugoli OCP Expn. for extraction of coal as well as removal of parting and Top OB. In the expansion project the existing dragline of Ghughus OC is also being deployed.

(xv) Life of mine : 15 years (including one year construction period)

(xvi) Presently Two external OB dumps exist in the existing Mugoli OCP Expn mine. It is proposed that in the balance years of existing mine these two dumps would be used for

external dumping and part of total OB would be backfilled in decoaled void of existing mine. The total area of external dumps is 295.00 ha with maximum height of 90 m above GL and quantity of 59.58 Mm³ of OB. Two internal dumps have been proposed for which the area of 217.82 ha will be utilized with maximum height of 90 above GL and total quantity 221.45 Mm³.

(xvii) Total quarry area is 513.47 ha. Backfilled quarry area of 217.82 ha shall be reclaimed with plantation. Final mine void will be created in an area of 295.65 ha with maximum 150 m depth at the end of mine life.

(xviii) Coal from ground stock will be loaded into discharge trucks/tippers by pay loaders and will be transported at present Ghugus Siding. Further siding is proposed at Penganga/ Mugoli OC to reduce transport of the coal. The coal will be transported to Thermal power plants of MAHAGENCO and to Basket linkage Consumers.

(xix) Total 760.30 Ha out of total 1317.55 Ha (58%) area will be planted till the end of mine life. It includes plantation on 295 ha of external OB dump, 226.48 ha of undisturbed land and 6 ha along roads & infrastructure.

(xx) No forest land has been reported to be involved in the project. Area of 217.82 ha on internal dump will be utilized for plantation.

(xxi) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.

(xxii) The ground water level has been reported to be varying between 4.85 to 8.70 m during pre-monsoon and between 4.15 to 7.75 m during post-monsoon (core zone). Total water requirement for the project is 910 KLD.

(xxiii) Application for NOC from CGWA has been made via application no. 21-4/343/MH/MIN/2016 on 06.06.2016. Based on the query raised vide email dated 25.03.2019 additional data submitted to CGWB Nagpur on 13/09/2019. Currently, the application is under verification stage at CGWB, Nagpur.

(xxiv) Public hearing for the project had been conducted at Manoranjan Kendra, Kailash Nagar Colony, Wani, Yavatmal district on 12.02.2019 as mandated by ToR granted by MoEF&CC. Issues raised were:-

- Rehabilitation of Mugoli Village
- Land Compensation
- Provision of employment
- Pollution control measures
- Plantation activities
- Medical facilities for nearby villages
- CSR work
- Skill development programme
- Drinking water supply to nearby village.
- Blasting practices

The detailed compliance report/ ATR against the aforesaid issues raised during public hearing have been duly addressed in the EIA report.

(xxv) There is no Nala diversion proposed in this project. However, diversion of 150 mm water pipeline will be taken up during proposed expansion for which necessary permission as required by statute will be taken from concerned state authority.

(xxvi) Baseline data for Ambient Air Quality has been generated during 1st November 2015 to 31st January 2016. Baseline data generated has been presented to 4th EAC held on 31.01.2017. Additionally, Baseline data w.r.t ambient air, water & noise has been generated during pre-monsoon season 2019 i.e. Mar – 2019 to June – 2019 to assess the latest baseline scenario surrounding the project. The results have been found to be within prescribed limits.

(xxvii) No court cases, violation cases are pending against the project of the PP pertaining to environment.

(xxviii) The project does not involve violation of the EIA Notification, 2006 and amendment issued thereunder. No excess production of coal from the sanctioned capacity has been realized since grant of EC in 2011.

Financial Year	Sanctioned Capacity as per EC (MTPA)	Actual Production (MTPA)	Excess Production Beyond the EC
2011-12	4.00	3.29	NIL
2012-13	4.00	3.29	NIL
2013-14	4.00	3.60	NIL
2014-15	4.00	4.00	NIL
2015-16	4.00	4.00	NIL
2016-17	4.00	3.22	NIL
2017-18	4.00	3.54	NIL
2018-19	4.00	3.78	NIL

(xxix) Resettlement / rehabilitation of Mugoli village is proposed as it is in the core zone. A Capital provision of ₹ 59.7557 crores have been made in the approved PR for resettlement of Mugoli Village. This includes 12.00 ha land for resettlement site of village. A baseline Socioeconomic survey has been conducted through an NGO as per the provision of R&R policy 2012 of CIL. The BLSES survey indicate in line with the definition of RFCTLARR Act 2013, the total no of affected families is 630. No of non displaced affected family is 333 and no of Displaced affected family is 297.

(xxx) Total cost- Rs 498.4176 Crores including WDV of Rs 36.5857 Crores of existing assets. (as per approved PR, Nov'2015).

(xxxi) As mandated under O.M. dated 30/05/2012, Regional office of MoEF& CC at Nagpur has issued certified report on compliance of existing environmental clearance conditions vide letter no F.No:3-19//2011/(ENV)/5637 dated 22/08/2019 there is no non-compliance recorded in the aforesaid Certified Compliance Report. The ATR against 02 partially complied conditions were submitted by PP on 16.10.2019.

49.2.3 The EAC, after detailed deliberations, noted the following:-

- The proposal is for Environmental Clearance for Expansion of Mugoli Nirgudda Extension Deep Opencast Coal Mine Project from capacity of 4.0 MTPA to 4.375 MTPA and increase in land area from 818.05 ha to 1317.55 ha of M/s Western Coalfields Limited located in Village Mungoli Tehsil Wani District Yavatmal (Maharashtra).
- Mugoli OC Expansion is an operating mine and having Environmental Clearance vide letter dated 30/03/2011 for a production capacity of 4 MTPA in total leasehold area of 818.05 Ha.
- The project was accorded TOR vide letter dated 7th March, 2017.
- Public Hearing has been conducted on 12th February, 2019 at Manoranjan Kendra, Kailash Nagar Colony, WCL.
- Regional office of MoEF& CC at Nagpur has issued certified report on compliance of existing environmental clearance conditions dated 30th March, 2011 vide letter dated 22/08/2019 there is no non-compliance recorded. The Action Taken Report against 02 partially complied conditions was submitted by PP on 16.10.2019.
- No Forest land is involved in the project area.
- Mining Plan has been approved by M/s Western Coalfields Limited Board on 18th November, 2015 and communicated vide letter dated 24th November, 2015.
- Baseline data has been collected during the period of November, 2015 to January, 2016 and again during March-2019 to June, 2019

49.2.4 The Committee, after deliberations, recommended grant of environment clearance to Expansion of Mugoli Nirgudda Extension Deep Opencast Coal Mine Project from capacity of 4.0 MTPA to 4.375 MTPA and increase in land area from 818.05 ha to 1317.55 ha of M/s Western Coalfields Limited located in Village Mungoli Tehsil Wani District Yavatmal (Maharashtra), under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions in addition to the standard environmental conditions notified by the ministry mentioned below:-

- The distance of about 150 m from bank of river shall be maintained through out the OB dump area. Stability of OB dump shall be checked periodically.
- No shrubs/bushes shall be planted and only trees of native species shall be planted.
- The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 4.375 MTPA prior to commencement of the increased production.
- Transportation of coal from Coal Handling Plant shall be 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.
- Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, 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 loading and unloading points, etc.
- The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 4.375 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.
- Permission for diversion of road and power line from authorised statutory body
- 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.
- The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1st May, 2018.

Agenda No.49.3

Adasa UG to OC with Expansion in production capacity from 0.50 MTPA to 1.50 MTPA (Normative) & 1.85 MTPA (Peak) and increase in land area from 221 ha to 594.41 ha M/s Western Coalfields Limited located in village Adasa District Nagpur (Maharashtra) - For Environmental Clearance

[IA/MH/CMIN/108663/2019; F. No- J-11015/387/2015-IA.II (M)]

49.3.1 The proposal is for Environment Clearance for Conversion of Adasa UG to OC involving expansion in capacity from 0.50 MTY to 1.50 (Normative) & 1.85 MTY (Peak) and

increase land area from 221.00 Ha to 594.41 ha of M/s Western Coalfields Limited located - near Kotodi village in Saoner Tahsil of Nagpur district (Maharashtra).

49.3.2 Details of the proposal, as ascertained from the proposal documents and also as informed during the meeting, are given as under:

(i) The existing Adasa UG has been granted environmental clearance vide J-11015/341/2008-IA.II(M) Dated – 15th July, 2009 for Production capacity of 0.50 MTPA within ML area of 221.0 ha.

(ii) The mine was proposed for conversion from Underground to Opencast with increasing in Capacity from 0.50 MTY to 1.50 (Normative) & 1.85 MTY (Peak) & increase in land area from 221.00 Ha to 594.41 ha.

(iii) The proposal for obtaining ToR for conversion of Adasa UG to OC involving expansion from 0.50 to 1.50 (Normative) & 1.85 MTY (Peak) & increase in land area from 221.00 Ha to 596.27 ha was discussed in 51st EAC (Thermal & Coal Mining) meeting held on 05.02.2016 for grant of ToR. Terms of References (TORs) was granted vide MoEF&CC letter no J-11015/387/2015.IA-II(M) Dated 29.02.2016.

Extension in ToR validity was recommended in 45th EAC meeting held on 19-06-2019 and extension in TOR validity till 29.02.2020 was issued vide MoEF&CC letter no J-11015/387/2015.IA-II(M) dated 19.06.2019.

(iv) The project area is covered under Survey of India Topo Sheet No 55 K/15 and is bounded by the geographical coordinates ranging from N 21° 19' 29" to N 21° 21' 4" and longitudes E78° 56' 28" to E78° 58' 46".

(v) Coal linkage of the project was for Thermal power plants of MAHAGENCO & Miscellaneous consumers. There is no Joint venture involved.

(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) Employment generation: Required Manpower for the project is 155 Nos as direct employment.

(viii) The project is reported to be beneficial as it is an opencast mining method, the extraction of reserves increases which lead to coal conservation. This project will thus bridge the gap (to the extent of the peak production capacity of the project) between demand & supply of non – coking coal for power plants & other bulk consumer.

(ix) Total mining lease area is increased from 221.00 Ha to 594.41 Ha. The Mine Plan along with Mine closure Plan for Conversion of Adasa UG to OC was approved by the WCL Board vide its letter ref no WCL/BD/SECTT/BM-306/2018/731 dated 24.11.2018.

(x) The land usage pattern of the project is as follows:

Details of changes in land use as per Present sanctioned ToR is provided below:

Pre-mining land use details

Sl. No.	Particulars	Existing Land (ha)	Additional land (ha)	Total Land (ha)
1)	Tenancy land	3.83	530.66	534.49
2)	Government land	8.83	21.09	29.92
3)	Forest land	0.00	0.00	0.00
4)	Land for Kotodi & Erangaon village rehabilitation (Outside mine leasehold)	0.00	30.00	30.00
	Total	12.66	581.75	594.41

Post-mining land use details

S. No.	Land use during mining	Land use (ha)				
		Plantation	Water Body	Public use	Undisturbed	Total
1	External OB Dump	85.00	0.00	0.00	0.00	85.00
2	Top Soil Dump	0.00	0.00	0.00	0.00	0.00
3	Excavation	148.03	139.55	0.00	0.00	287.58
4	Roads	1.00	0.00	2.00	0.00	3.00
5	Built up area	1.00	0.00	11.00	0.00	12.00
6	Undisturbed Area	120.00	0.00	0.00	32.83	152.83
7	Embankment	6.00	0.00	0.00	18.00	24.00
8	Land for Village Rehabilitation	0.00	0.00	30.00	0.00	30.00
Total		361.03	139.55	43.00	50.83	594.41

(xi) Total geological reserve reported in the mine lease area is 29.46 MT. Extractable reserves are 22.48 MT. Percent of extraction is 90%.

(xii) The Number of seams to be worked on are 5 (Five). Thickness of Seams to be worked on are given below

S.No	Seam	Thickness (m)	
		Min	Max
1	V	1.60	5.25
2	IV (T)	0.15	2.16
3	IV (T) A	0.16	3.06
4	IV (M)	1.13	7.42
5	IV (B)	0.15	2.49

(xiii) Grade of Coal GCV – 5020 Kcal/kg, G8, stripping ratio 1: 6.64 m³/t/ (overall average).

(xiv) Mining operations will undertaken by opencast method with shovel dumper Combination.

(xv) Life of mine: 18 years (including 1 year of land acquisition period).

(xvi) The project will have one no. internal dump in an area of 148.03 ha (reclaimed with plantation) with Maximum height of 30 m above ground level and quantity of 116.19 Mm³ of OB. One external OB dump is envisaged in an area of 85.0 ha and a height of 90 m above ground level and quantity of 29.54 Mm³ of OB.

(xvii) Total quarry area is 287.58 ha. Backfilled quarry area of 148.03 ha shall be reclaimed with plantation. Final mine void will be created in an area of 139.55 ha with a maximum depth of 114 m. Final mine void will be converted into water body.

(xviii) Transportation of coal in pits by dumpers, from surface to Railway sidings by tippers. The coal will be transported to Thermal power plants of MAHAGENCO and to Miscellaneous Consumers.

(xix) Reclamation Plan/afforestation plan is for 361.03 ha. It includes 85.0 ha of external OB dump, 148.03 ha of internal dump, 120.0 ha on undisturbed land and 8 ha along roads & infrastructure. Plantation has been carried out over an area of 1.0 ha with 2500 saplings.

(xx) No forest land has been reported to be involved in the project.

(xxi) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.

(xxii) The ground water level has been reported to be varying between 8.20 to 14.55 m during pre-monsoon and between 7.00 to 14.35 m during post-monsoon (core zone). Total water requirement for the project is 390 KLD.

(xxiii) Application for Ground Water Clearance has been made to CGWA vide Application Number: 21-4/2254/MH/MIN/2019 on 17.07.19.

(xxiv) Public hearing for the project of 1.50 (Normative) & 1.85 MTPA (Peak) capacity in an area of 596.27 ha was conducted on 06.02.2019 at project site of Adasa UG to OC mine, Saoner Tahsil, District -Nagpur. The minutes of Public Hearing has been received from Maharashtra Pollution Control Board vide letter MPCB/NSRO-1/940/2019 dated 17.05.2019.

(xxv) Consent to Operate: The mine is a proposed mine and being considered for grant of EC for the first time. After receipt of EC Consent to Establish and then subsequently Consent to Operate will be secured from MPCB.

(xxvi) A Seasonal Nallah flows through the core zone is proposed to be diverted along the mine boundary. Chandrabagha Nadi, another seasonal stream, flows along the south-eastern boundary of the project.

(xxvii) Baseline for Ambient Air Quality has been generated from Oct'2016 to Dec'2016 for proposed conversion of Adasa UG to OC Mine. The results were found to be within prescribed limits.

(xxviii) No court cases, violation cases are pending against the project of the PP pertaining to environment.

(xxix) Adasa UG to OC is new mine which will be opened after obtaining EC and other necessary/statutory clearances.

However the production of erstwhile Adasa UG (which is closed since 19.04.2019) for last 5 years is as follows :-

Year	EC sanctioned capacity (MTPA)	Actual production (MTPA)	Excess production beyond the EC sanctioned capacity
2014-15	0.50	0.319	Nil
2015-16	0.50	0.304	Nil
2016-17	0.50	0.244	Nil
2017-18	0.50	0.139	Nil
2018-19	0.50	0.096	Nil
2019-20 (Adasa UG mine closed since 19.04.2019)	0.50	0.004	Nil

(xxx) The project involved 797 project affected families from Kotodi and Erangaon Village. Both village has been proposed to rehabilitated. R&R cost is Rs. 94.33 Crores.

(xxxi) Total capital cost of the project is Rs. 333.4393 Crores (including WDV of Rs 17.4304 crores). Capital cost on Environment management plan is 22.09 crore. Revenue cost on EMP will be 6 Rs/tonne.

49.3.3 The EAC, after deliberations, the committee observed the following:

- The proposal is for Environmental Clearance for Conversion of Adasa UG to OC involving expansion in capacity from 0.50 MTY to 1.50 (Normative) & 1.85 MTY (Peak) and increase land area from 221.00 Ha to 594.41 ha of M/s Western Coalfields Limited located -near Kotodi village in Saoner Tahsil of Nagpur district (Maharashtra).
- The existing Adasa UG has been granted environmental clearance vide J-11015/341/2008-IA.II(M) Dated – 15th July, 2009 for Production capacity of 0.50 MTPA within ML area of 221.0 ha
- The proposal for obtaining ToR was granted vide MoEF&CC letter no J-11015/387/2015.IA-II(M) Dated 29.02.2016.
- Further Extension in ToR validity till 29.02.2020 was issued vide MoEF&CC letter no J-11015/387/2015.IA-II(M) dated 19.06.2019.
- Public hearing for the project of 1.50 (Normative) & 1.85 MTPA(Peak) capacity in an area of 596.27ha was conducted on 06.02.2019 at project site of Adasa UG to OC mine, Saoner Tahsil, District -Nagpur
- No Forest land is involved in the project area.
- Mining Plan has been approved by M/s Western Coalfields Limited Board on 18th November, 2015 and communicated vide latter dated 24th November, 2015.
- Baseline for Ambient Air Quality has been generated from Oct'2016 to Dec'2016 for proposed conversion of Adasa UG to OC Mine

48.3.4 *The EAC, therefore, after deliberations, desired the following-*

- *Specific response of specific ToR shall be provided*
- *Distance of mine boundary/quarry/OB Dump from Chandrabagha Nadi*
- *Permission for dumping of OB for construction of embankment against Chandrabagha river and proposed diversion of season nallah.*
- *Permission of diversion of Nallah, 132 K V power line and Patansaongi-Adasa Village Road from authorized statutory body.*
- *A Seasonal Nallah flows through the core zone is proposed to be diverted along the mine boundary, another seasonal stream, flows along the south-eastern boundary of the project.*
- *Certified Compliance of EC dated 15th July, 2009 for production capacity of 0.50 MTPA within in mine lease of 221 ha and action points with timeline for the Non-compliance of observation*
- *Action points with timeline and allocated funds for issues raised in public hearing*
- *Proposed plantation shall be of native/local species*

The proposal was deferred on the above lines for compliance of observation of EAC.

Agenda No.49.4

Batura Opencast Coal mining Project 2.00 MTPA Normative and 3.00 MTPA Peak under EIA Notification,2006 Project Area 967.473 ha of M/s South Eastern Coalfields, located in District Shahdol and Anuppur, (Madhya Pradesh) - For Environmental Clearance

[IA/MP/CMIN/60381/2016] F.No. J-11015/65/2016-IA.II(M)

49.4.1 The proposal is for grant of Environmental Clearance to Batura Opencast Project 2 MTPA Normative & 3 MTPA Peak in ML area of 967.473 ha of M/s South Eastern Coalfields Limited in District Shahdol and Anuppur (Madhya Pradesh).

49.4.2 The proposal was earlier considered by the sectoral EAC in its meeting held on 24th January, 2019, wherein the Committee desired for information in respect of the following:-

- Base line air quality data more than three years old and thus not in conformity with the extant norms/guidelines in this regard.
- Air quality for PM₁₀ (98th percentile values) already on much higher side at many of the locations, would not allow more mining operations without adequate mitigating measures.
- Diversion plan for Katna Nallah requires approval of the concerned regulatory authority (Water Resources/Irrigation Department).
- Mine Plan for the project duly approved by the competent authority.
- R&R Plan for the project affected families.
- Diversion of 24.6 ha of forest land for non-forestry purposes.

49.4.3 In response to the above observations of EAC, para-wise replies submitted by the project proponent are as under:-

S. No.	Observations	Comments/Compliance
1	Base line air quality data more than three years old and thus not in conformity with the extant norms/guidelines in this regard	The baseline air quality data is generated for April to June, 2019
2	Air quality for PM ₁₀ (98 th percentile values) already on much higher side at many of the locations, would not allow more mining operations without adequate mitigating measures.	The baseline air quality data is generated for April, to June, 2019 and values are well within limit. Previously, values were higher due to road construction activities on the Nearby National Highway
3	Diversion Plan for Katna Nallah requires approval of the concerned regulatory authority (Water Resources/Irrigation department)	Water Resource Division, Shahdol issued permission for diversion of Katna Nala vide his letter no 1317 dated 23.08.17
4	Mine Plan for the project duly approved by the competent authority.	The mine plan for the project has been approved by the SECL Board on 16.09.2008.
5	R&R Plan for the project affected families	In this project total Tenancy Land notified is around 709 ha and thus 875 direct employments are to be provided. Total PAFs are 1870. The R&R for the project affected families is proposed to be done under the CIL R&R Policy 2012. R&R cost accumulates to Rupees 29.29 Crores.
6	Diversion of 24.60 ha of forest land	Forest land is diverted to the extent of bare minimum requirement, though as per PR,

	for non-forestry purposes.	total Forest land has been indicated as 101.44 ha. The minimum requirement for working of mine is of 76.84 ha for which final stage II clearance has been obtained. Since no working is proposed in balance 24.60 ha of land falling in mining safety zone, diversion for non-forestry purpose is not required.
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49.4.4 During deliberations on the proposal, the EAC took note

The proposal is for grant of Environmental Clearance to Batura Opencast Project 2 MTPA Normative & 3 MTPA Peak in ML area of 967.473 ha of M/s South Eastern Coalfields Limited in District Shahdol and Anuppur (Madhya Pradesh).

Terms of Reference for the proposal was granted by Ministry on 21st March, 2017.

It was observed that EIA report submitted by the proponent is not according to generic structure specified in the EIA notification, 2006. The content of the report does not give any meaning to the committee for any appraisal. The enclosed document is not hazy and not readable. The report consists of several correspondence made internally were attached to the EIA, which are not relevant to the EIA.

Mine Plan approved for the proposed peak capacity of 3 MTPA by the SECL Board on 16th September, 2008.

49.4.5 *The EAC, after deliberations at the first instant was not happy with the submitted EIA report and observed that the project proponent and consultant (CMPDI) are casually putting up the contents in EIA report. Further, desired that Project proponent shall prepare EIA report as per Ministry's guidelines. The report should include chapter wise details such as project details, description of the baseline environment, impact assessment and environment management, action plan for points raised during public hearing which is specific to the project. The latest methodology for ground water estimation shall be done by using GEC-2015.*

The proposal was deferred as it is for compliance of observations of EAC

Agenda No.49.5

Expansion of Rajmahal opencast coal mine project of 17 MTPA capacity in an ML area of 1978.0 ha of M/s Eastern Coalfields Limited located in villages Bara Bhorai, Chhota Bhorai, Lohandiya, Paharpur and Talijhari, Tehsil Boarijore, District Godda, (Jharkhand) - For Revalidation of Environmental Clearance

[IA/JH/CMIN/8406/2004;F.No. J-11015/30/2004-IA.II(M)]

49.5.1 The proposal is for revalidation of Expansion of Rajmahal opencast coal mine project of 17 MTPA capacity in an ML area of 1978.0 ha of M/s Eastern Coalfields Limited located in villages Bara Bhorai, Chhota Bhorai, Lohandiya, Paharpur and Talijhari, Tehsil Boarijore, District Godda, (Jharkhand) based on Ministry's Notification dated 6th April, 2018.

49.5.2 The proposal was earlier considered by the sectoral EAC in its meeting held on 27th September, 2018, wherein the Committee desired for information in respect of the following:-

- *Desired for the EIA/EMP report based on one season (12 weeks) baseline data*
- *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.*

49.5.3 In response to the above observations of EAC, para-wise replies submitted by the project proponent are as under:-

S. No.	Observations	Comments/Compliance
1	EIA/EMP report based on one season (12 weeks) baseline data	Baseline data w.r.t. water quality, noise level measurement, soil quality, flora and fauna survey & listing and Socio-Economic Studies along with Occupational Health Studies have been generated and the same have been incorporated in the Final EIA & EMP report. Long-term fortnightly Routine Environment monitoring data w.r.t. ambient air has been taken as baseline.
2	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.	Public Notice was issued in two national and local dailies of 'The Indian Express' and 'Hindustan' on 03.08.2019. Comments/suggestions received till 2 nd September, 2019 is attached. It is observed that the local population is in support of the project.

3	Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority.	Project Report duly approved by Ministry of Coal on 22.09.2009 and Progressive Mine Closure Plan duly approved by ECL Board on 15.10.2013.
4	Compliance status of the conditions stipulated in the environmental from the concerned Regional Office of the Ministry.	Certified Compliance Report conducted by RO, MoEF&CC, Ranchi Action Taken Report has been submitted
5	Consent to operate from the State Pollution Control Board for the present mining operations.	Consent to Establish and Consent to operate from Jharkhand State Pollution Control Board for the present mining operations along with Action Taken Report
6	Redressal of issues raised during the last public hearing conducted by the SPCB.	Redressal of issues raised during the last public hearing conducted by SPCB.
7	Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.	Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance.
8	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.	Need assessment survey for the activities proposed under the CSR conducted by TISS. Impact of the CSR activities
9	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.	Stage –II Forest Clearance obtained.
10	Details of court cases and the compliance status.	Court of Enquiry has been setup and is presently undergoing in connection with accident owing to dump failure in December, 2016. There is no case concerning environment.

49.5.4 During deliberations on the proposal, the EAC noted

The proposal is for revalidation of Expansion of Rajmahal opencast coal mine project of 17 MTPA capacity in an ML area of 1978.0 ha of M/s Eastern Coalfields Limited located in villages Bara Bhurai, Chhota Bhurai, Lohandiya, Paharpur and Talijhari, Tehsil Boarijore, District Godda, (Jharkhand) based on Ministry's Notification dated 6th April, 2018

The environmental clearance for the said mine was granted by the Ministry on 11th May, 2005.

Balance life of the mine is 12 years

Total forest land involved in the project was 107.39 Ha (as per Project report). Stage – II Forestry clearance for diversion of a total of 107.42 Ha area has been obtained on 26.10.1993 (for 17.64 Ha), 11.12.2002 (for 20.03 Ha) and 27.08.2004 (for 69.75 Ha)

Reclamation and Plantation on OB dump was not satisfactory

49.5.5 *The EAC, after detailed deliberations on the proposal and taking note of compliance of its earlier observations (para 49.5.3 above), recommended for revalidation of the environmental clearance dated 11th May, 2005, as mandated under the Ministry's Notification dated 6th April, 2018, subject to terms and conditions stipulated therein remaining the same with and additional conditions mentioned below:-.*

- *Recommendation of IIT-BHU regarding OB Dump Slope stability should be complied*
- *Proponent should conduct progressive reclamation of OB dump*
- *Compliance of observation of Regional Office vis-à-vis EC conditions shall be expedited.*

Further, Committee opined that proposal of expansion cannot be considered at this stage as compliance of observation of Regional Office vis-à-vis EC conditions is unsatisfactory and needed to be expedited.

Agenda No.49.6

Expansion of Umrer Opencast Coal Mine Project from (3.5 MTPA to 4.9 MTPA) an ML area 944.65 ha of M/s Western Coalfields Limited, located in village Kanhwa, Tehsil Umrer, District Nagpur (Maharashtra) - For Extension in validity of EC

[IA/MH/CMIN/119667/2019; F.No. J-11015/86/2005-IA.II(M)]

49.6.1 The proposal is of extension/continuation of environmental clearance to the expansion of Umrer Opencast Coal Mining Project for expansion from 3.5 MTPA to 4.9 MTPA capacity in mine lease area of 944.65 ha of M/s Western Coalfields Limited located in village Kanhwa, Tehsil Umrer, District Nagpur (Maharashtra).

49.6.2 The proposal was earlier considered by the 41st EAC in its meeting held on 13/14th December, 2018 for grant of EC. During the meeting, the Committee recommended for grant of EC to the expansion of Umrer Opencast Coal Mining Project from 3.50 to 4.90 MTPA in mine lease area of 944.65 ha of M/s Western Coalfields Limited located at village Kanhwa, Tehsil Umrer, District Nagpur (Maharashtra) for a period of one year, subject to revalidation of the existing environmental clearance dated 20th May, 2005 and further subject to compliance of terms and conditions as applicable, and the additional conditions as under:-

- (i) The project proponent shall collect and analyze one season data for environmental parameters and submit for consideration of the EAC before 31st December, 2019.
- (ii) The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 4.90 MTPA prior to commencement of the increased production
- (iii) Transportation of coal from face to Coal heap shall be carried out by truck. Further, the coal transportation from Coal heap to Coal Handling Plant shall be carried out through covered trucks.
- (iv) To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers
- (v) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, 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.

(vi) The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 4.90 MTPA.

(vii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.

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

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

(x) 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.

(xi) 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.

(xii) 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.

49.6.3 During deliberations, the EAC noted the following:

The proposal is for continuation of environmental clearance dated 11th January, 2019 to the expansion of Umrer Opencast coal mining project from 3.5 to 4.9 MTPA capacity in an area of 944.65 ha of M/s Western Coalfields Limited located in village Kanwha, Tehsil Umrer, District Nagpur (Maharashtra).

Para wise compliance of the earlier observations are reported to be as follows:-

S.No.	Observations	Compliance status
1	The project proponent shall collect and analyze one season data for environmental parameters and submit for consideration of the EAC before 31st December, 2019.	The one season data for environmental parameters / one season baseline data has been collected during Pre-Monsoon Season i.e. April 2019 to June 2019 by external agency M/s. IDMA Laboratories Limited, Panchkula in accordance with the Guidelines issued by the MoEF & CC, New Delhi.
2	The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 4.90 MTPA prior to commencement of the increased production	Application for Consent To Establish and Consent To Operate for 4.90 MTPA has been made to Maharashtra State Pollution Control Board (MPCB) through its online portal on 19.01.2019 vide its application no. MPCB – CONSENT- 0000065263. CTO for 4.9 MTPA issued by MPCB vide letter dated 03-10-2019 with validity upto 31-03-2021.
3	Transportation of coal from face to Coal heap shall be carried out by truck. Further, the coal transportation from Coal heap to Coal Handling Plant shall be carried out through covered trucks.	Transportation of coal from face to coal heap and coal heap to Coal Handling Plant is carried out by Trucks / tippers / dumpers. All the trucks/ tippers leaving the mine premises are covered with tarpaulin.
4	To control the production of dust at	In order to control generation of dust at

S.No.	Observations	Compliance status										
	source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers	source, the crusher and in-pit belt conveyors are provided with mist spray system at Coal handling plant.										
5	Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, 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.	<p>Fugitive dust emissions from all the dust generating sources are controlled by Fixed Water Sprinklers along weigh bridge, approach road & coal transportation road. Rain guns are provided at railway siding and Mist spray arrangement is provided at all transfer points of CHP to prevent the dust formation.</p> <p>In addition to fixed water sprinklers & rain guns, Mobile Water Sprinklers are used in all three shifts for dust suppression at approach roads, haul roads, coal transportation roads and coal stock yard. The Fugitive dust is also monitored regularly and is kept under control.</p> <p>Details of Air pollution control measures installed:</p> <ul style="list-style-type: none">• Automatic tyre washing system is installed at main check post of Umrer Area.• 3 No. of mobile water tankers of 28 KL capacity are in operation.• 65 nos. fixed sprinklers are installed along coal transportation road, railway siding, weigh bridge, dozer section and CHP, details are as follows: <table><tr><th>Location</th><th>Nos. of fixed sprinklers</th></tr><tr><td>Weigh bridge to workshop</td><td>14</td></tr><tr><td>CHP</td><td>10</td></tr><tr><td>Dozer section</td><td>7</td></tr><tr><td>Wharf wall</td><td>34</td></tr></table> <p>Mist Spray Arrangement system is provided at CHP.</p>	Location	Nos. of fixed sprinklers	Weigh bridge to workshop	14	CHP	10	Dozer section	7	Wharf wall	34
Location	Nos. of fixed sprinklers											
Weigh bridge to workshop	14											
CHP	10											
Dozer section	7											
Wharf wall	34											
6	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 4.90 MTPA.	No Objection Certificate (NOC) has been secured from CGWA for dewatering of ground water vide its NOC no. CGWA/NOC/MIN/ORIG/2019/5653 with a validity upto 10.07.2021.										
7	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	For surveillance of occupation health among workers IME is being done for every employee at the time of appointment and periodic medical examination is being done once in 3 years as per statute in all the mines.										

S.No.	Observations	Compliance status														
		<p>Details of IME/ PME done in last 3 years are given below:</p> <table> <tr> <th rowspan="2">Year</th><th colspan="2">No. of workers (Dept. & Cont.)</th></tr> <tr> <th>IME</th><th>PME</th></tr> <tr> <td>2017</td><td>121</td><td>389</td></tr> <tr> <td>2018</td><td>363</td><td>371</td></tr> <tr> <td>2019</td><td>205</td><td>155</td></tr> </table>	Year	No. of workers (Dept. & Cont.)		IME	PME	2017	121	389	2018	363	371	2019	205	155
Year	No. of workers (Dept. & Cont.)															
	IME	PME														
2017	121	389														
2018	363	371														
2019	205	155														
8	Persons of nearby villages shall be given training on livelihood and skill development to make them employable	<p>Skill development programs are carried out at Area level Under CSR head.</p> <p>In 2016-17, 85 persons were trained for Apparel designing, beauty parlor and electrician.</p> <p>In 2017-18, 26 persons were trained for office automation and data entry operator.</p> <p>In 2018-19, 60 persons were trained for Tailoring and Apparel designing.</p>														
9	To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.	<p>Medical camps are conducted regularly to ensure the health and welfare of nearby villages Under CSR and welfare head.</p> <p>Details of medical camps conducted in last 3 years are given below:</p> <table> <tr> <th>Year</th><th>No. of Medical Camps</th><th>Nos. of beneficiaries</th></tr> <tr> <td>2016</td><td>27</td><td>2388</td></tr> <tr> <td>2017</td><td>32</td><td>2831</td></tr> <tr> <td>2018</td><td>65</td><td>5403</td></tr> </table>	Year	No. of Medical Camps	Nos. of beneficiaries	2016	27	2388	2017	32	2831	2018	65	5403		
Year	No. of Medical Camps	Nos. of beneficiaries														
2016	27	2388														
2017	32	2831														
2018	65	5403														
10	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.	<p>The mine is in last phase of operation and has reached the quarry edge. Undisturbed area of 108.36 Ha is brought under plantation which includes plantation on vacant land, embankments, township, plantation along the roads and mine boundary.</p> <p>Thick green belt is developed all along the mine boundary to provide a buffer against dust pollution. The overall length of this green belt is approx. 9.5 kms and width ranges from 200 m to 30m in the downwind direction</p>														
11	Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability	Mine discharge water is the primary source of water for all the industrial purposes. Mine water is collected in two sumps in the quarry area of mine (Central quarry sump = 127.286														

S.No.	Observations	Compliance status
	on a single source.	Million gallons capacity, Eastern quarry sump = 156.388 Million gallons capacity). These sumps allow settlement of suspended particles present in water. The supernatant from these sumps is then pumped out on surface and fed into the surface sedimentation tank. This mine water is used for industrial purposes such as dust suppression, fire fighting and plantation etc. Domestic requirement of water is fulfilled by two nos. of tube well in Umrer Colony. As such no surface water used for any industrial or domestic purpose.
12	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.	The third part assessment of EC compliance has been undertaken through CSIR-NEERI (Expert Agency identified by Ministry). The inspection has been carried out by CSIR-NEERI for assessment of EC compliance in respect of Umrer Opencast on 30.08.2019. The third party assessment of EC compliance report has been secured from CSIR-NEERI vide its letter dated 25.09.2019.

49.6.4 *The EAC, after detailed deliberations and duly considering the compliance status of conditions stipulated in environmental clearance dated 11th January, 2019, recommended for continuance of the project and validity of environmental clearance dated 11th January, 2019, for a period of 30 years or life of the mine, whichever is earlier, subject to the terms and conditions stipulated therein remaining the same.*

Agenda No.49.7

Expansion of Gondagaon Extension OC Coal Mining Project for a production capacity of 3.50 MTPA in an area of 917.0 ha (mine lease area of 845.74 ha) of M/s Western Coalfields Limited, Located in Tehsil Parseoni District Nagpur, (Maharashtra) – For EC Amendment

[IA/MH/CMIN/117831/2019; F.No. J-11015/106/2009-IA-II(M)]

49.7.1 The proposal is for amendment in Environmental Clearance for Expansion of Gondagaon Extension OC coal mining project for a production capacity of 3.50 MTPA in an area of 791.40 ha of M/s Western Coalfields Limited, located in Teshil Parseoni, District Nagpur (Maharashtra)

49.7.2 During deliberations, the EAC noted the following:

Earlier, the environment clearance to the project was obtained under EIA Notification, 2006 vide Ministry's letter No. J-11015/106/2009- IA.II(M) dated 14.03.2018 for 3.5 MTPA in mine lease area of 917.0 ha with one year validity.

Extension of EC validity to Expansion of Gondagaon Extension Opencast Coal Mine Project accorded by MoEF & CC vide letter no. J-11015/106/2009-IA.II(M) dated 28.03.2019 with one year validity.

The Revised Mining Plan (built-in Mine Closure Plan) of Expansion of Gondagaon Extension OC has been approved by WCL board its Board vide its resolution no. WCL/ BD/ SECTT/ BM-314/ 2019/ 852 dated 12.09.2019 with a production capacity of 3.50 MTPA for lease area of 791.40 ha

Pre-mining land use details: The total land requirement for this project is 791.40 ha. The land use pattern for the project as follows:

S.N.	Land use	Area (Ha)
1	Quarry Area	277.13
2	Embankment Area	13.05
3	External OB Dump	252.25
4	Infrastructure	57.26
5	Roads	5.74
6	Project township	13.00
7	Rehabilitation site	21.66

S.N.	Land use during mining	Land use (ha)				
		Plantation	Water Body	Public use	Undisturbed	Total
1	External OB Dump	40.0	0.00	0.00	0.00	252.25
2	Excavation	40.00	237.13	0.00	0.00	277.13
3	Roads	1.00	0.00	4.74	0.00	5.74
4	Built up area	44.64	0.00	47.33	0.00	91.97
5	Undisturbed Area	130.00	0	0	16.92	164.31
	Total	255.64	237.13	52.07	16.92	791.40

8	Area needed for rationalization and blasting zone	151.31
	Total	791.40

Post Mining

Post-mining Land use pattern are as follows:

Stage-wise Land use and Reclamation Area (ha)

S.N.	Land use category	Present (1st year)	4th year	6th year	3 years after end of mine life
1	Backfilled Area (Reclaimed with plantation)	0	20	79	79
		0	0	0	40
2	Excavated Area (Not reclaimed)/void	146.98	166.98	198.13	198.13
3	External OB dump (Reclaimed with plantation)	163.07	232.03	232.03	252.25
		28	30	40	40
4	Top soil dump ((Reclaimed with plantation)	20.22	20.22	20.22	0
		0	0	0	0
6	Undisturbed area (brought under plantation)	367.67	254.46	164.31	164.31
		96	100	120	130

7	Roads (avenue plantation)	5.74	5.74	5.74	5.74
		1.00	1.00	1.00	1.00
8	Area around buildings and Infrastructures	57.26	57.26	57.26	57.26
		24.20	24.20	24.20	24.20
9	Embankment	8.80	13.05	13.05	13.05
		8.00	8.00	8.00	8.00
10	Rehabilitation	21.66	21.66	21.66	21.66
		12.44	12.44	12.44	12.44
	Total	791.40	791.40	791.40	791.40
	(Plantation)	169.64	175.64	205.64	255.64

Life of mine is 6 Years (as on 01.04.2019).

Earlier, during the EAC meeting held on 25.06.2019 while deliberating proposal for Amendment in EC in respect of Expansion of Kamptee deep OC mine project, EAC observed that the proposed amalgamation involves carving out some area of adjoining Gondagaon Opencast coal mining project and thus requiring amendment in its environmental clearance also. There being no proposal in this regard, the Committee was not inclined to take the proposal forward.

The Committee further observed that out of the total area of 1125.45 ha covered under the existing ECs for Inder Opencast coal mining project and Kamptee Deep Opencast coal mining project, only 566.79 ha has so far been acquired. Even for the proposed amalgamation covering an area of 857.6 ha, an area of 290.81 ha is still to be acquired. The same was not found to be convincing and requires proper justification and action plan to consider the present proposal.

The Committee was also concerned with the proposed final void depth and the permission for diversion of nallah from the concerned regulatory authority.

The details submitted by the Project proponent as are as follows:

S.No	Particulars	Submission by Project Proponent
1	The proposed amalgamation involves carving out some area of adjoining Gondagaon Opencast coal mining project and thus requiring amendment in its environmental clearance also. There being no proposal in this regard, the Committee was not inclined to take the proposal forward	<ul style="list-style-type: none"> In compliance of EAC directives, the Mining Plan of Expansion of Gondagaon Extension OC coal mining project has been revised with a production capacity of 3.50 MTPA (same as approved in EC dated 28.03.2019) for lease area of 791.40 ha (845.74 – 54.34) instead of 845.74 ha (as approved in EC dated 28.03.2019). This reduction of area by 54.34 ha has been done based on approved Revised Project Report of Amalgamated Inder-Kamptee Deep OC mine (approved by WCL Board vide its resolution no. WCL/BD/SECTT./BM-304/2018/538 dated 09.10.2018) wherein it has been mentioned that, this 54.34 ha land is proposed to be transferred from Gondagaon OC to amalgamated Inder-Kamptee deep OC project.

		<ul style="list-style-type: none"> • The Revised Mining Plan of Expansion of Gondagaon Extension OC has been approved by WCL board its Board vide its resolution no. WCL /BD/ SECTT. / BM-314/ 2019/ 852 dated 12.09.2019 with a production capacity of 3.50 MTPA for lease area of 791.40 ha. In the approved Mining Plan there is no change in physical parameters of mine except for the land component. • Hence in confirmation to the EAC directives, the application for amendment of EC for Expansion of Gondagaon Extension OC coal mining project for a production capacity of 3.50 MTPA for lease area of 791.40 ha has been made as required under EIA notification, 2006..
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49.7.3 *The EAC, after detailed deliberations and duly considering approved Mine Plan of the proposal with a production capacity of 3.50 MTPA for lease area of 791.40 ha from earlier lease area of 845.74 ha, recommended the amendment in Environmental Clearance vide letter dated 28th March, 2019, for Expansion of Gondagaon Extension OC coal mining project for a production capacity of 3.50 MTPA in an area of 791.40 ha of M/s Western Coalfields Limited, located in Teshil Parseoni, District Nagpur (Maharashtra), subject to the terms and conditions stipulated therein remaining the same. Also, EAC insisted that the extension of environmental clearance dated 28th March, 2019 will be considered only after submission of Certified Compliance Report from Regional Office.*

Agenda No.49.8

Amalgamation of Kamptee Deep and Inder Opencast Coal Mine Project (1.50 MTPA (normative) and 2 MTPA(Peak) in ML area 661.65 ha and production capacity of 1.20 MTPA in mine lease area of 463.80 ha of M/s Western Coalfields Limited located in Village Tekdi, Tehsil Parseoni, District Nagpur, (Maharashtra) – For amendment in Environmental Clearance

[IA/MH/CMIN/20125/2010; F.No. J-11015/287/2010-IA.II(M)]

49.8.1 The proposal is for amendment in environmental clearance for Expansion Kamptee deep OC of 3.2 MTPA capacity in mine lease area of 857.60 ha of M/s Western Coalfields limited located in village Tekdi, Tehsil Parseoni, District Nagpur (Maharashtra).

49.8.2 Details 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, the environment clearance to Expansion of Kamptee deep OC project was obtained under EIA Notification, 2006 vide Ministry's letter NoJ-11015/287/2010-IA.II(M) dated 11.05.2015 for 1.50 MTPA (normative), 2.0 MTPA (peak) in mine lease area of 661.65 ha.

(ii) The environment clearance to Inder UG to OC Expansion project was obtained under EIA Notification, 2006 vide Ministry's letter No J-11015/35/2010-IA.II(M) dated 06.02.2013 for production capacity of 1.20 MTPA in mine lease area of 463.80 ha.

(iii) Total mining lease area is 857.60 ha. Project Report (including Mining Plan with built in Mine Closure Plan) has been approved by the WCL Board Vide its resolution no WCL/BD/SECTT/BM-304/2018/538 dated 09.10.2018.

(iv) The land usage pattern of the project based on the approved PR (Sept'2018) of amalgamated Inder-Kamptee deep OC is as follows:

Pre-mining land use details : Total land involved in present proposal is 857.60 ha. The existing land in Inder UG to OC Expansion mine and Kamptee Deep OC mine are 267.76 ha and 299.03 ha respectively. Thus total existing land in these two mines is 566.79 ha. Balance 290.81 ha land (857.60 ha – 566.79 ha) is proposed to be acquired. Out of 290.81 ha land proposed for acquisition, 280.96 ha is tenancy land and 9.85 ha is government land. The acquisition of this additional land is one of the most critical activities for development of this mine

Type of Land	Existing Land (ha)				Additional land (ha)	Total Land (ha)
	Inder UG to OC Expn.	Land to be transferred from Gondegaon-Ghatrohan OC	Kamptee Deep OC	Total		
Tenancy land	213.42	54.34	299.03	566.79	280.96	857.60
Govt. land					9.85	
Forest land	-	-	-	-	-	-
TOTAL	213.42	54.34	299.03		290.81	857.60

Post Mining

The total land requirement for present proposal is 857.60 ha. The land use of the entire land is tabulated below:

Land Use Details

Sl. No.	Particulars	Area (ha)
1.	Entire Quarry Area	378.98
2.	External OB dump	260.56
3.	Infrastructure	40.00
4.	Embankment	28.00
5.	Colony	20.00
6.	Road	12.00
7.	Area needed for rationalization and blasting zone	118.06
	Total Land	857.60

Land Use Details

Sl. No.	LAND USE	Within ML Area (ha)	Outside ML Area (ha)	Total
1	Agricultural land	847.75	-	847.75
2	Forest	-	-	
3	Waste land	9.85	-	9.85
4	Grazing land	-	-	-
5	Surface Water bodies	-	-	-
6	Settlements	-	-	-

7	Others (Specify)	-	-	-
	Total	857.60	-	857.60

(v) Life of mine is 14 years (at rated output of 3.20 MTPA starting from 01.04.2019).

(vi) The nallah proposed to be diverted has been detailed out in the approved Revised Project Report / Mining plan. Before actual execution of work permission / clearances from the concerned regulatory authority will be taken. The diversion is required in about 3 years from now, as such necessary applications are under preparation to secure permission.

(vii) The project report (Mining Plan including Mine closure plan) has approved by WCL board on dated 09.10.2018 for production capacity of 3.20 MTPA (1.20 + 2.0) in an area of 857.60 ha

(viii) Expansion of Kamptee deep OC-The project does not involve violation of the EIA Notification, 1994 and amendment issued thereunder. Annual Coal Production details vis-à-vis EC capacity (for last 5 years) is as follows:

Year	EC sanctioned capacity (MTPA)	Actual production (MTPA)	Excess production beyond the EC sanctioned capacity
2014-15	1.50	1.14	Nil
2015-16	2.0	0.92	Nil
2016-17	2.0	0.95	Nil
2017-18	2.0	0.52	Nil
2018-19	2.0	0.61	Nil
2019-20 (up to 30.09.2019)	2.0	0.20	Nil

(ix) Inder UG to OC Expansion Mining project -The project does not involve violation of the EIA Notification, 1994 and amendment issued thereunder. Annual Coal Production details vis-à-vis EC capacity (for last 5 years) is as follows:

Year	EC sanctioned capacity (MTPA)	Actual production (MTPA)	Excess production beyond the EC sanctioned capacity
2014-15	1.20	0.13	Nil
2015-16	1.20	0.78	Nil
2016-17	1.20	0.80	Nil
2017-18	1.20	0.75	Nil
2018-19	1.20	0.72	Nil
2019-20 (Upto 30.09.2019)	1.20	0.23	Nil

49.8.3 Earlier the proposal was considered in EAC meeting held on 25th June, 2019 for amendment in EC proposal for Expansion of Kamptee deep OC mine project . Following clarification/justification has been submitted by the project proponent on observation of EAC and EAC has noted the following submission

Sl. No	Particulars	Submission by Project Proponent
1	The proposed amalgamation involves carving out some area of adjoining Gondgaon Opencast coal mining project and thus	<ul style="list-style-type: none"> In compliance of EAC directives, the Mining Plan of Expansion of Gondgaon Extension OC coal mining project has been revised with a production capacity of 3.50 MTPA (same as approved in EC

	<p>requiring amendment in its environmental clearance also. There being no proposal in this regard, the Committee was not inclined to take the proposal forward</p>	<p>dated 28.03.2019) for lease area of 791.40 ha (845.74 – 54.34) instead of 845.74 ha (as approved in EC dated 28.03.2019).</p> <ul style="list-style-type: none"> • This reduction of area by 54.34 ha has been done based on approved Revised Project Report of Amalgamated Inder-Kamptee Deep OC mine (approved by WCL Board vide its resolution no. WCL/BD/SECTT./BM-304/2018/538 dated 09.10.2018) wherein it has been mentioned that, this 54.34 ha land is proposed to be transferred from Gondegaon OC to amalgamated Inder-Kamptee deep OC project. • The Revised Mining Plan of Expansion of Gondegaon Extension OC has been approved by WCL board its Board vide its resolution no. WCL /BD/ SECTT. / BM-314/ 2019/ 852 dated 12.09.2019 with a production capacity of 3.50 MTPA for lease area of 791.40 ha. In the approved Mining Plan there is no change in physical parameters of mine except for the land component. • Hence in confirmation to the EAC directives, the application for amendment of EC for Expansion of Gondegaon Extension OC coal mining project for a production capacity of 3.50 MTPA for lease area of 791.40 ha has been made as required under EIA notification, 2006.
2	<p>The Committee further observed that out of the total area of 1125.45 ha covered under the existing ECs for Inder Opencast coal mining project and Kamptee Deep Opencast coal mining project, only 566.79 ha has so far been acquired. Even for the proposed amalgamation covering an area of 857.6 ha, an area of 290.81 ha is still to be acquired. The same was not found to be convincing and requires proper justification and action plan to consider the present proposal.</p>	<p>Total area of 1125.45 ha covered under the existing ECs for Inder Opencast coal mining project and Kamptee Deep Opencast coal mining project.</p> <p>The total land involved in the amalgamated Inder-Kamptee deep OC mine (considering the rationalized land usage) is 857.60 Ha.</p> <p>The actual status of land acquisition (as on date) in respect of Amalgamated Inder Kamptee deep OC mine is as follows:</p> <ul style="list-style-type: none"> • Total land requirement as per approved Project Report of Amalgamated Inder Kamptee deep OC mine : 857.60 Ha • Land acquired / physical possession by Inder Opencast coal mining project : 213.42 Ha • Land acquired / physical possession by Kamptee Deep Opencast coal mining project : 436.52 Ha • Total land in physical possession : 649.94 Ha which is about 76 % of total land • Land (already in physical possession) to be transferred from Gondegaon deep OC mine (as per approved Mining Plan of Expansion of Gondegaon OC mine vide dated 12.09.2019) : 54.32 Ha

		<ul style="list-style-type: none"> • Thus, total land in physical possession : 704.28 Ha. Hence, total land in physical possession is 704.28 Ha out of 857.60 ha i.e. 82 % approx. The amalgamated Inder - Kamptee deep OC mine project can work without any hindrance for next 7-10 years. • Remaining land to be acquired : 153.32 Ha However, the remaining land (153.32 ha out of 857.60 ha i.e. 18 % approx.) will be acquired in due course of time.
3	The Committee was also concerned with the proposed final void depth	<ul style="list-style-type: none"> • Mine is having a steep gradient (1 in 3.5 to 1 in 5.0) which considerably reduces the quantum of quantity of internal dumping because of safety concerns. • Due to steep gradient, very meager quantity (6.82 Mm³ upto ground level and 4.70 Mm³ OB by merging of internal dump with rise side external dump) can be accommodated inside the quarry. • 64.44 Mm³ OB is proposed to be backfilled in void of existing Kamptee deep OC including void of old Kamptee OC. • As the bottom seams below the seam-IVB is likely to be extracted in future through deepening of the proposed quarry which has restricted the filling up of the quarry void. • Further, there is scope of future expansion beyond 250 m in western part and 156 m in eastern part. This has restricted the backfilling / reducing the quarry depth considerably as the void is to be kept open for future working.
4	The permission for diversion of nallah from the concerned regulatory authority.	The nallah proposed to be diverted has been detailed out in the approved Revised Project Report / Mining plan. Before actual execution of work permission / clearances from the concerned regulatory authority will be taken. The diversion is required in about 3 years from now, as such at necessary applications are under preparation to secure permission.

49.8.4. *The EAC, after detailed deliberations and duly considering approved Mine Plan of the proposal dated 9th October, 2018 with a production capacity of 3.20 MTPA for lease area of 857.60 ha ha recommended the amendment vis-a-viz amalgamation of Environmental Clearance vide letter dated 11th May, 2015 and 6th February, 2013, subject to the terms and conditions stipulated therein remaining the same.*

Agenda No.49.9

Naini Opencast Coal Mine Project of capacity 10 MTPA and Coal Washery capacity 8 MTPA (Peak 9 MTPA) of M/s The Singareni Collieries Company Limited in mine lease area of 912.799 ha located in Village & Mandal Chhendipada, District Angul (Odisha) - Terms of Reference – reg.

[IA/OR/CMIN/102794/2019; F.No. J-11015/49/2019-IA.II(M)]

49.9.1 The proposal is for Terms of Reference for Naini Opencast Coal Mine Project of capacity 10 MTPA and Coal Washery capacity 8 MTPA (Peak 9 MTPA) of M/s The Singareni Collieries Company Limited in mine lease area of 912.799 ha located in Village & Mandal Chhendipada, District Angul (Odisha)

49.9.2 The EAC during deliberation noted the following:-

The proposal was earlier considered by EAC in its meeting held on 22nd August, 2019. The Committee took note of the order dated 10th July, 2019, passed by Hon'ble NGT, Principal Bench, New Delhi in OA No.1038 of 2018 in the matter of News item published in the Asian Age authored by Sanjay Kaw titled 'CPCB to rank industrial units on pollution levels'.

The proposal was deferred considering the above Hon'ble NGT Judgement and in view of the project site in Angul, Talcher (Odisha), covered under the said orders of NGT,

Project proponent has submitted a letter from Odisha State Pollution Control Board stating the proposed Naini Coal Mine project is located at a distance of 26.5 km from the boundary of Critically Polluted Area (CPA) of Angul-Talcher.

The project involves 783.275 ha of Forest Land which is required to be diverted for non-forestry activity.

49.9.3 *The EAC, after detailed deliberations, recommended for grant of Terms of Reference for the proposal of Naini Opencast Coal Mine Project of capacity 10 MTPA and Coal Washery capacity 8 MTPA (Peak 9 MTPA) of M/s The Singareni Collieries Company Limited in mine lease area of 912.799 ha located in Village & Mandal Chhendipada, District Angul (Odisha), for preparation of EIA/EMP reports, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-*

- *The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1st May, 2018.*
- *Stage-I clearance for the entire forestland involved the project shall be obtained before making an application for the environmental clearance.*
- *Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority*
- *Permission of proposed diversion of three nallahs namely Shiarimali, Kudoposi and Ullani passing over the proposed quarry area for authorized regulatory bodies.*
- *Permission of proposed diversion of 440 V OHT Powerline situated along the proposed excavation line.*
- *Safe distance of about 100-150 mts should be kept from Goudhani Nallah to prevent water pollution which ultimately merges with Tikara river at around 12 km.*
- *Mechanism to preserve top soil of about 7.61 Mm3 in temporary storage dump yards and spread over the finished decks of dumps in later stage.*

- *Water body of about 0.238 ha should be proposed to be created in the nearby villages and alternate mechanism for 4.514 ha of grazing should be proposed.*
- *The ground water permission from Central Ground Water Authority (CGWA) shall be obtained, if applicable.*
- *Explore the possibility of transportation of coal by rail instead of proposed road transport for a initial period of 3 to 4 years.*
- *An integrated hydrological study would be carried out of the impact of coal mining on the base flows 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. Buffer area of 10 km shall be covered with adequate monitoring stations.*
- *Ecological restoration and mine reclamation plan to be prepared with afforestation of local/native species found in the area.*
- *Conservation plan in case presence of Schedule-I species. PP shall study the presence of elephant corridor (if any) and propose the necessary action points*
- *Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ will be planned by the collection of air quality data*
- *Details of court cases and the compliance status (if any).*

Agenda No.49.10

Dipka Opencast Coal Mine Project of capacity 40 MTPA (Peak) of South Eastern Coalfields Limited in an mine lease area of 1999.386 ha located in Tehsil Katghora, District Korba (Chhattisgarh) – For Terms of Reference

[IA/CG/CMIN/103897/2019; F.No. J-11015/487/2007-IA.II(M)]

49.10.1 The proposal is for grant of ToR for Dipka Opencast Coal Mine Project from 35 MTPA to 40 MTPA of M/s South Eastern Coalfield Limited in Mining lease area of 1999.386 Ha located in Tehsil Katghora, District Korba (Chhattisgarh).

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

- Earlier, the Environmental Clearance of Dipka Opencast was accorded vide letter dated 4th October, 2004 for production capacity of 20 MTPA in an area of 1461.51ha.
- Further, the project was accorded Environmental Clearance vide letter dated 03.06.2009 for expansion from 20 MTPA to 25 MTPA in lease areas of 1999.417 ha, under the provision of the EIA Notification, 2006 with public hearing. Public hearing for 25 MTPA was held on 05.09.2008.
- The project was accorded Environmental Clearance vide letter dated 12.02.2013 for the expansion from 25 MTPA to 30 MTPA in an area of 1999.293 ha under clause 7(ii) of EIA Notification, 2006 and subsequent OM J-11015/30/2004-IA.II(M) dated 19.12.2012 issued to facilitate one time capacity expansion without public hearing which inter-alia stipulated an upper limit of 5 MTPA.
- The project was accorded amendment in EC vide letter dated 06.02.2015 for 30 MTPA to 31 MTPA in accordance to the OM J-11015/30/2004-IA.II (M) dated 19.12.2012, which inter-alia stipulated an upper limit of 5 MTPA, was further amended to 6 MTPA vide OM J-11015/30/2004-IA.II (M) dated 02.09.2014.

(v) Further to meet the country's demand of coal, a proposal was made for expansion of project from 31 MTPA to 35 MTPA within the existing infrastructure and leasehold area. ToR was accorded vide letter no.J-11015/487/2007-IA-II(M) dated 28.02.2017 and the revised ToR was issued vide letter no.J-11015/487/2007-IA-II(M) dated 10.07.2017.

(vi) Meanwhile, OM No. J-11015/224/2015-IA.II, dated 15/09/2017, was issued for production capacity expansion up to 40% of PH capacity without Public Hearing with certain conditions.

(vii) The project was accorded Environmental Clearance vide letter dated 20.02.2018 for the expansion from 31 MTPA to 35 MTPA in an area of 1999.293 ha under clause 7(ii) of EIA Notification, 2006 and subsequent OM J-11015/224/2015-IA.II, dated 15/09/2017 issued for production capacity expansion up to 40% of PH capacity without Public Hearing with certain conditions

(viii) As per Environmental Clearance condition No.4(i) The EC for the increased capacity is valid up to 31st March 2019. Further continuance of the project shall be based on evaluation of the proposed control measures and its impact on the ambient air quality by the EAC in the later half of the FY 2018-19.

(ix) The latitude and longitude of the project are 22°18' 59" to 22° 19' 43" N and 82° 30' 47" to 82° 33' 34"E respectively.

(x) Joint Venture: No

(xi) Coal Linkage: NTPC Seepat and various other power plants

(xii) Employment generated / to be generated: 2594 persons

(xiii) Benefits of the project: Project will considerably improve the socio-economic status of the adjoining areas. This will result in following benefits:

- Contribution to the Exchequer
- Meet energy requirement
- Post-mining Enhancement of Green Cover

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

Pre-mining Land Use:

Activity	Types of land are (Ha)			Total land area (Ha)
	Forest	Tenancy/ Agricultural	Govt.	
Nil	409.149	1409.244	180.993	1999.386

Core Area Land Use : (During Mining)

S.No.	Activity	Types of land are (Ha)			Total land area (Ha)
		Forest	Tenancy/ Agricultural	Govt.	
1.	Quarry Area*	52.982	858.314	90.850	1002.146
2.	External OB dump	54.718	125.212	26.070	206.000
3.	Infrastructure, workshop, Administration building etc.,	279.242	313.518	41.114	633.874
4.	Roads	0	4	0	4
5.	Green belt	0	23	0	23
6.	Safety Zone	22.207	85.2	22.959	130.366
Total Land		409.149	1409.244	180.993	1999.386

*Including 756.093 ha Internal dump, 24ha for Top soil & 222.053 ha for water body.

Land Details: (Type of land in Ha.)

S.No.	Land use	Total Area (Ha)
1.	Agricultural land	1266.328
2.	Forest land	409.149
3.	Waste land	0

4.	Grazing land	0
5.	Surface water bodies	9.080
6.	Settlements	142.916
7.	Others (Govt land)	171.913
Total		1999.386

Conceptual Post Mining Land Use:

S.No	Land use during Mining	Land Use (Ha)				
		Plantation	Water body	Public use	Undisturbed	Total
1	External OB dump	206.000	0	0	0	206
2	Top soil dump	24.000	0	0	0	24
3	Excavation	756.093	222.053	0	0	978.146
4	Roads	4.000	0	0	0	4
5	Built up area	633.874	0	0	0	633.874
6	Green belt	23.000	0	0	0	23.000
7	Undisturbed area	130.366	0	0	0	130.366
Total		1777.333	222.053	0	0	1999.386

(xv) The total geological reserve is 617 MT. The mineable reserve 258.84 MT, extractable reserve is 258.84 MT. The percent of extraction would be 100 %.

(xvi) The coal grade is E/G10. The stripping ratio is 1.20 Cum/tonne. The average Gradient is 3.37⁰- 6.34⁰. There will be 3 seams with thickness ranging (E&F Seam- 12.70-19.05 m; Upper Kusmunda-24.69 - 35.82 m; Lower Kusmunda (Top Split) - 34.70 - 44.85 m; Lower Kusmunda (Bottom Split) - 2.19 - 24.50 m).

(xvii) The total estimated water requirement is 8010 m³ /day.

(xviii) The level of ground water ranges (CGM Office- Avg 8.275 m; Pragati Nagar- Shallow Avg-3.125 m Deep Avg-19.17 m).

(xix) The Method of mining would be Open cast mining.

(xx) There is 03 external OB dump with Quantity of 81.00 Mbcm in an area of 206.00 ha with height of 90 meters above the surface level and 03 internal dump with Quantity of 534.00 Mbcm in an area of 780.093 ha with height of 90 meters above the surface level.

(xxi) The final mine void would be in 222.053 Ha with depth 80m and the total quarry area is 1002.146. Backfilled quarry area of 780.093 Ha shall be reclaimed with plantation. A void of 222.053ha with depth upto 80m which is proposed to be converted into a water body.

(xxii) The life of mine is 7 Years as on 01.04.2019.

(xxiii) Transportation: Coal transportation From face to In pit crusher: By Trucks. Surface to siding: By Trucks ; Siding to Consumer : Rail

(xxiv) There is R & R involved. There are 1690 PAFs.

(xxv) Total capital cost of the project is Rs. 1959.36 Crores. 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. 2.00 per tonne of coal production of previous year whichever is higher. R&R Cost Rs. 51.49 Crores. Environmental Management Cost Rs. 19813329.00 for the FY (2016- 17).

(xxvi) Hasdeo river about 8 Kms, Lilagarh Nadi, Kholar Nalla & small channels joining Hasdeo river.

(xxvii) Ground water clearance issued on 14.03.2019.

(xxviii) Mining plan for 40 MTPA was approved by SECL Board on 23.10.2018 and mine closure plan is an integral part of mining plan.

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

(xxx) Total forest land 409.149 ha, Status of Forest clearance: In process. Stage-1 FC available for 409.056 Ha of forest land and 0.093 ha has been applied for stage -1 FC
 (xxxi) Total afforestation plan shall be implemented covering an area of 1009.093 ha at the end of mining including green Belt over an area of 23 ha. Density of tree plantation 2500 trees/ ha of plants.

(xxxii) There are court cases/violation pending with the project proponent as per the following details:-

Case No.	Court	Parties	Brief	Present status
1217/ 2007	Judicial Magistrate Class-I, Korba transferred to Bilaspur HC, criminal revision in the year 2010	Regional Officer, CGEPB Vs Gevra & CGM Dipka Area	Increase of production Without EC	Pending
CRMP 859/2009	HC of C.G	CGEPB, Korba Vs Debasis Chatterjee, Ex CGM Dipka.	Appeal preferred by CGEPB against the order	Pending
NGT court case appeal No. 79/2018	NGT –New Delhi	Laxmi Chouhan Vs U.O.I & Others (Dipka OCP is Respondent No. 4)	challenging the EC from 31 to 35 MTY	Pending

49.10.3 The EAC during deliberations noted the following:-

Earlier, the proposal was considered in EAC in its meeting held on 25th June 2019 and during deliberations, it was observed that Pre-feasibility Report (PFR) submitted by the project proponent was not as per Ministry's guidelines 30th December, 2010. Therefore, it was requested to submit the PFR and deferred the proposal.

The proposal is for grant of ToR to the expansion project of Dipka opencast coal mine from 35 to 40 MTPA of M/s South Eastern Coalfields Limited in the existing mine lease area of 1999.386 ha. Stage one Forest clearance has been obtained for forest land of 409.056 ha and 0.093 ha forest land has been applied for stage-1 FC

The project was accorded Environmental Clearance dated 20.02.2018 for the expansion from 31 MTPA to 35 MTPA in an area of 1999.293 ha under clause 7(ii) of EIA Notification, 2006 and subsequent OM J-11015/224/2015-IA.II, dated 15/09/2017 issued for production capacity expansion up to 40% of PH capacity without Public Hearing with certain conditions.

To verify the status of compliance of EC conditions for Dipka opencast expansion project from 31 MTPA to 35 MTPA, the Regional Office of MoEF&CC, Nagpur has carried out the site inspection and submitted the monitoring report to this Ministry vide their letter No. 3-56/2009(Env)/4794 dated 19.01.2019, which was deliberated in the EAC meeting.

For further continuance of the project Environmental Clearance was accorded dated 20.03.2019 for a further period of one year.

Project proponent submitted the Pre-feasibility Report (PFR) as per Ministry's guidelines 30th December, 2010.

49.10.4 *The EAC, after detailed deliberations, recommended for grant of Terms of Reference for the the proposal of Dipka Opencast Coal Mine Project of capacity 40 MTPA (Peak) of South Eastern Coalfields Limited in an mine lease area of 1999.386 ha located in Tehsil Katghora, District Korba (Chhattisgarh), for preparation of EIA/EMP reports, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-*

- *The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1st May, 2018.*
- *Stage-I clearance for the entire forestland (if any) involved the project shall be obtained before making an application for the environmental clearance.*
- *Valid Mining Plan and the Progressive Mine Closure Plan duly approved by the competent authority*
- *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. Buffer area of 10 km shall be covered with adequate monitoring stations.*
- *Ecological restoration and mine reclamation plan to be prepared with afforestation of local/native species found in the area.*
- *Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ will be planned by the collection of air quality data*
- *A certified report on the updated status of compliance of conditions stipulated in the environmental clearance from the concerned Regional Office of the MoEF&CC.*
- *Explore the possibility to transport 100% coal by rail to linked Power Plant and to avoid coal transportation by road.*
- *Details of court cases and the compliance status (if any).*

Agenda No.49.11

Amod Lignite Opencast Mine Project (G-19 Extension) of capacity 1 MTPA of M/s Gujarat Mineral Development Corporation Limited in mine lease area of 384.96 ha located in District Tinsukia (Gujarat) - For amendment of ToR

[IA/GJ/CMIN/81346/2018;F.No. J-11015/137/2018-IA.II(M)]

49.11.1 The proposal is for ToR amendment for Amod Lignite Mine (G-19 Extension) Project of 1 MTPA capacity in mine lease area of 384.96 ha of M/s Gujarat Mineral Development Corporation Limited located in village Amod, Tehsil :Jhagadia, District Bharuch (Gujarat).

49.11.2 Details 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 NoG 46/2, Survey No. 168 and is bounded by the geographical coordinates ranging from Degree: 21, Minutes : 41, Second :55.9253 To : Degree:21, Minutes : 43, Second :19.1293 N and longitudes Degree:73, Minutes : 12, Second :45.5441 To : Degree:73, Minutes : 14, Second :21.2122E.

- (ii) Coal linkage of the project is proposed for govt power plant and small industries use for fuel.
- (iii) 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.
- (iv) Employment generation, employment to 323 persons will be provided from the project.
- (v) Life of the mine is 6 years.
- (vi) The project is reported to be beneficial in terms of sustained & cheaper power generation by govt thermal power plant and fuel for small scale industries for development of state & nation
- (vii) Earlier, the environment clearance to the project was obtained under EIA Notification, 1994 vide Ministry's letter No J-11015/405/205-IA.II (M) dated 14th July 2006 for 1 MTPA in mine lease area of 384.96 ha. TOR for the validation of existing EC under EIA Notification was granted vide MOEF letter No. IA-J-11015/137/2018-IA-II(M) dated 26.02.2019.
- (viii) Total mining lease area as per block allotment is 384.96ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MOC on Sept 2013.
- (ix) The land usage pattern of the project is as follows:

Pre-mining land use details

S. No.	Land Use	Within ML Area (Ha)
1	Private Land	126.41
3	Govt Wasteland	258.55
	Total Project Area =	384.96

Post Mining

S. No.	Land use	Land use (ha)				
		Plantation	Water Body	Public Use	Undisturbed	Total
1	External OB Dump	3.37	0	0	0	3.37
2	Backfilled Excavated area	201.05	29		0.55	230.6
3	Roads			1		1
4	Built-up Area			0.05		0.05
5	Green Belt	50				50
6	Undisturbed Area				83.62	83.62
7	Diversion / Below River / Nala / Canal		7.96			7.96
8	Rehabilitated Amod village			8.36		8.36
	Total Area =	254.42	36.96	9.41	84.17	384.96

- (x) Public hearing for the project of 1.0 MTPA capacity in an area of 384.96 Ha was conducted on 19.10.2004 and Major issues raised in the public hearing has addressed and completed with Appropriate action
- (xi) Consent to Operate for the existing capacity was obtained from the State PCB on 17/06/2017 and is valid till 16/05/2022.

- (xii) Hankaran Nallah is flowing in the middle of lease. This nallah flows from East to West in the north of the field and turns towards north west where the diversion of this nallah has already been executed to facilitate mining. Water flows in this nallah only on monsoon months.
- (xiii) Regular monitoring of ambient air quality is being carried out on monthly basis. The documented report is submitted to GPCB and also to regional office of MoEF&CC at Bhopal along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits.
- (xiv) No court cases, violation cases are pending against the project of the PP
- (xv) The project involves appx. 25 project affected families. R&R of the PAPs already has done.
- (xvi) Total cost of the project is Rs. 150 lakhs

49.11.3 During deliberation EAC noted the following:-

The proposal is for amendment in ToR of Amod Lignite Mine (G-19 Extension) Project of 1 MTPA capacity in mine lease area of 384.96 ha of M/s Gujarat Mineral Development Corporation Limited located in village Amod, Tehsil Jhagadia, District Bharuch (Gujarat) for exemption in Public Hearing.

Earlier, the environment clearance to the project was obtained under EIA Notification, 1994 vide Ministry's letter No J-11015/405/205-IA.II (M) dated 14th July 2006 for 1 MTPA in mine lease area of 384.96 ha.

Total mining lease area as per block allotment is 384.96ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MOC on Sept 2013.

TOR for the validation of existing EC under EIA Notification was granted vide MOEF letter No. IA-J-11015/137/2018-IA-II(M) dated 26.02.2019.

The proposal is of revalidation of Environmental Clearance based on Ministry's order dated 6th April, 2018. The PP was granted standard ToR (including public hearing) for revalidation of EC. However, some of the cases of revalidation were given exemption of Public Hearing by giving a condition of public notice and redressal of comments through state pollution control.

49.11.4 *The EAC, after deliberations observed that since the project is of revalidation of earlier Environmental Clearance and there is no increase mine lease, some other cases of revalidation has already been given exemption from conducting public hearing and also that PP has conducted public hearing in 2004 for EC dated 14th July, 2006. The EAC with due consideration recommended for exemption of public hearing and asked project proponent to issue public notice through concerned state pollution control board at the cost of PP and the comments shall be addressed accordingly. The EAC also proposed to conduct the site visit for any further additional conditions to be added (if any).*

Discussion on any other item

Correction in Minutes of Meeting held on 3-4 October, 2019 – Agenda No. 48.2

49.12 Change in technology from 2.4 MTPA dry type coal washery to 2.4 MTPA wet type with a combined capacity 3.6 MTPA (wet type) of coal washery of M/s Hind Energy & Coal Beneficiation (India)Ltd in an area of 11.09 ha located at Village Hindadih, Tehsil Masturi District Bilaspur (Chhattisgarh) – Environment Clearance – reg

49.12.1 The proposal is for Change in technology from 2.4 MTPA dry type coal washery to 2.4 MTPA wet type with a combined capacity 3.6 MTPA (wet type) of coal washery in a total area of 11.09 ha of M/s Hind Energy & Coal Beneficiation (India) Ltd located at Hindadih Village, Masturi Tehsil Bilaspur District, Chhattisgarh

The project proponent in a letter dated 16th October, 2019 has sought relaxation/correction in the minutes of the meeting after approval of the Committee. The points are as below:

Specific Conditions	Conditions	Correction/Relaxation requested by PP
No. iv	All the terms and conditions stipulated by the Central Ground Water Authority (CGWA) and Water Resources Department, Govt. of Chhattisgarh while permitting Renewal of NOC for withdrawal of 1,93,050 cum/year (528.9 cum/day) of ground water vide letter dated 30 th June, 2019 and for allocation of 0.17 cum/year from Lilgagarh river letter dated 21 st February, 2018 respt. Shall be strictly adhered to.	Correction from 0.17 cum/year to 0.17 MCM/year
No. v	Maximum transportation of raw coal, clean coal, middling and rejects shall be through rail with wagon loading through silo.	<ul style="list-style-type: none">• It has been submitted that Wagon loading through silo is a system adopted in big integrated steel plant / Mega Power Plant of 4000 MW or above, having own railway siding, which will have coal washery attached to the main plant of the side of 10 MTPA or more. The minimum capacity of loading through Silo is 7-10 rakes per day, whereas in current project it will be around 1-2 rakes per day.• Also, Rail transportation is being served from own Railway siding at Ghatora (at 20 km by road) and the same practice will be followed for present proposal• Wagon loading through silo is itself a big project, with an investment of about Rs. 50 crores, whereas present project cost is only Rs. 12 Crores.

		<ul style="list-style-type: none"> • In view of above, Wagon loading through silo is not feasible for a project, with an investment of Rs. 12 crores
No. vii	Thick green belt of 30-45 m 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.	<ul style="list-style-type: none"> • This is an existing coal washery plant located in a 11.09 Ha (27.42 acres) of land. No additional land is envisaged. Greenbelt of 3.68 ha (9.1 acres) i.e. 33% has already been developed in the existing plant premises and 10 m wide greenbelt has already been developed in the plant. • A Land use detail has been given in the proposal. It is submitted that no additional land is available for further greenbelt development. • However, PP proposed to develop 15-20 m wide avenue plantation along both sides of the approach road i.e. sipat road to plant.

49.12.2 The Committee, after deliberation on above request for relaxation/correction, recommended the said correction in specific conditions no. (iv) and further amended the specific conditions (v) & (vii) as wagon loading through silos not economically viable and technically feasible for smaller washeries. Further, Committee opined that Project proponent must provide adequate pollution control measures during transportation, loading and unloading of coal. Also, PP has to maintain 33% of tree plantation only with native/local trees species of broad leaves (no shrubs and bushes) throughout the periphery of plant premises.

49.13 Durgapur Extension Deep OC Phase-II of 3 MTPA of M/s Western Coalfields Limited in a total area of 1622.50 ha located in District Chandrapur (Maharashtra)- For Amendment in EC

49.13.1 The proposal is for grant of amendment in Environmental Clearance for Durgapur Extension Deep OC Phase-II of 3 MTPA of M/s Western Coalfields Limited in a total area of 1622.50 ha located in District Chandrapur (Maharashtra).

49.13.2 Chronology of the proposals:

- Proposal was granted environmental clearance by the Ministry vide its letter dated 10th November, 2017 *inter-alia* stipulating the following condition:

‘Final mine void depth should not be more than 40 m. The void area should be converted into water body. The remaining areas should be backfilled up to the ground level and covered with thick top soil. The land after mining should be restored for agriculture or forestry purpose.’

- The proposal was considered for amendment by the sectoral EAC in its 30th meeting held on 17-18 May, 2018. The EAC, after deliberations, recommended the proposal for amendment as under:

‘Final mine void should be in conformity with the post mining land-use plan, which remains an integral part of the approved mining plan and the EIA/EMP submitted to MoEF& CC.’

- However, Ministry was in process for the standardization of EC conditions *inter-alia*

including coal sector, the requisite amendment was kept on hold till the finalization of standardized guidelines. The Ministry vide OM dated 9th August, 2018 issued standardized guidelines wherein conditions for 25 sectors, including Coal Mining Sector, have been standardized. Conditions standardized for Coal Mining Sector *inter-alia* include following condition for final mine void:

'The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.'

- The proposal was kept on hold citing the recommendation of EAC and standardised EC conditions were on different footings and needed to be relooked by the Committee.
- In view of above, proposal was taken up to EAC meeting after approval of the competent Authority for further deliberations.

49.13.3 *The Committee, after deliberation, observed that earlier recommendation of EAC may be replaced with standardised EC conditions regarding conditions for final mine void. Therefore, the condition may be changed as below:-*

The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.'

The EAC recommended the proposal for amendment in the environmental clearance granted dated 10th November, 2017. All other terms and conditions stipulated in the EC dated 23rd January, 2018, shall remain unchanged.

Generic ToR for coal washery

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

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

GENERIC TOR FOR AN OPENCAST COALMINE PROJECT for EC

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

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

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

- (xii) Break-up of lease/project area as per mining plan should be provided.
- (xiii) Impact of changes in the land use due to the project if the land is predominantly agricultural land/forestland/grazing land, should be provided.
- (xiv) One-season (other than monsoon) primary baseline data on environmental quality - air (PM₁₀, PM_{2.5}, SO_x, NO_x and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.
- (xv) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.
- (xvi) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.
- (xvii) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
- (xviii) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.

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

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

S.N.	Land use Category	Present (1 st Year)	5 th Year	10 th Year	20 th Year	24 th Year (end of mine life)*
1.	Backfilled Area(Reclaimed with plantation)					
2.	Excavated Area (not					

	reclaimed)/void					
3.	External OB dump Reclaimed with plantation)					
4.	Reclaimed Top soil dump					
5.	Green Built Area					
6.	Undisturbed area (brought under plantation)					
7.	Roads (avenue plantation)					
8.	Area around buildings and Infrastructure					
	TOTAL					

* As a representative example

Table 2 : Stage Wise Cumulative Plantation

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

* As a representative example

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

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

S.N.	Land use during Mining	Land Use (ha)				
		Plantation	Water	Public	Undisturbed	TOTAL

			Body	Use		
1.	External OB Dump					
2.	Top soil Dump					
3.	Excavation					
4.	Roads					
5.	Built up area					
6.	Green Belt					
7.	Undisturbed Area					
	TOTAL					

(xxxii) Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be done.

(xxxiii) Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.

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

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

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

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

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

(xxxix) Corporate Environment Responsibility:

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

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

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

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

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

GENERIC TORs FOR AN UNDERGROUND COALMINE PROJECT

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

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

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

Area under Surface Rights

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

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

water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.

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

progressive and final mine closure plan.

- (xxvi) Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
- (xxvii) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
- (xxviii) Corporate Environment Responsibility:
 - a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
- (xxix) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.
- (xxx) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
- (xxxi) Status of any litigations/ court cases filed/pending on the project should be provided.
- (xxxii) Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
- (xxxiii) Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

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

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

GENERIC TORs FOR AN OPENCAST-CUM-UNDERGROUND COALMINE PROJECT

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

ANNEXURE-5

PARTICIPANTS IN 49th EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 22nd October, 2019. ON COAL SECTOR PROJECTS.

Sl. No.	List of Participants Expert Appraisal Committee (Coal Mining)		Signature
1.	Dr. Navin Chandra	Chairman	
2.	Dr. N. P. Shukla	Member	
3.	Dr. Jai Krishna Pandey	Member	
4.	Dr. Sharachchandra Lele	Member	
5.	Dr. G.P.Kundargi	Member	
6.	Sh. N.S. Mondal	Member	
7.	Dr. R.K.Giri	Member	
8.	Dr. Manjari Srivastava	Member	
9.	Dr S.K.Paliwal	Member	
10.	Dr. S.K.Gupta	Member	
11.	Shri N. Mohan Karnat	Member	
12.	Sh. S.D.Vora	Member	
13.	Shri S. K. Pallerla	Member Secretary	

11/9/2019

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

Subject: Re: MoM of 49th EAC held on 22nd October, 2019

To: Munna Kumar Shah <munna.shah@gov.in>

Cc: "R. B. Lal" <rb.lal@nic.in>, Sharath Kumar <sharath.kr@gov.in>

Date: 11/08/19 12:34 PM

From: navin chandra <navinchandrarml@yahoo.com>

Reply-To: navin chandra <navinchandrarml@yahoo.com>

08/11/2019

Dear Dr. Shah,

I have gone through the MoM of 49th EAC meeting held on 22nd October, 2019. The Minutes are in order and ready for up-loading on the Web Site of the Ministry of Environment, Forest and Climate Change.

Regards,
yours truly,

(NAVIN CHANDRA)

Dr. Navin Chandra,
Vice Chancellor, IES University, Bhopal
Chairman, Coal Mining & Thermal Power,
MoEF&CC, GOI, New Delhi.
Ex-Director General MPCST, Bhopal,
(Retd.) Director (Actg.), CSIR-AMPRI, Bhopal
Member, RC, CSIR-AMPRI, Bhopal.
Phone (Res) 91-755-2454600