# GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (IMPACT ASSESSMENT DIVISION) (COAL MINING SECTOR)

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SUMMARY RECORD OF 51<sup>st</sup> MEETING OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006, HELD ON DECEMBER 5, 2019.

The 51<sup>st</sup> meeting of the Expert Appraisal Committee (EAC) for Coal mining projects was held on 5<sup>th</sup> December, 2019 in the Ministry of Environment, Forest and Climate Change at Indus Meeting Hall, Jal Wing, Ground Floor, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi to consider the proposals relating to coal mining sector. The following members were present:

1.	Dr. Navin Chandra	-	Chairman
2.	Shri G.P. Kundargi	-	Member
3.	Dr. J.K. Pandey	-	Member
4.	Shri N. S. Mondal	-	Member
5.	Ms. Manjari Srivastava	-	Member
6.	Dr. R.B. Lal,	-	Member Secretary
	Scientist 'E', MoEFCC		
MoEl	-&CC		
7.	Shri Munna Kumar Shah,	-	MoEFCC
	Scientist 'D'		

# **Confirmation of minutes**

There being no comments from any of the members of the Committee, minutes of the 50<sup>th</sup> meeting of the EAC held during 15<sup>th</sup> November, 2019 were confirmed in the presence of the members who had been present in the 51<sup>st</sup> meeting of EAC.

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. 51.1

Suliyari Coal Mining Project of 5.0 MTPA of M/s Andhra Pradesh Mineral Development Corporation Limited in mine lease area of 1298 ha located in Singrauli Coalfields, Tehsil Sarai, District Singrauli (Madhya Pradesh) – Consideration of Environmental Clearance – reg.

[Proposal No. IA/MP/CMIN/73904/2018; F.No. J-11015/35/2018-IA.II(M)]

- **50.1.1** The proposal is for environmental clearance for Suliyari Coal Mining Project of 5.0 MTPA capacity of M/s Andhra Pradesh Mineral Development Corporation Limited in mine lease area of 1298 ha located in village(s) Aamdand, Amraikhoh, Bajaudi, Belwar, Dongari, Dhirauli, Jhalari, Majhaulipath and Seerswah, Tehsil Sarai, District Singrauli (Madhya Pradesh).
- 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 No. 64 I/5 and is bounded by the geographical coordinates ranging from latitudes 23°55'30.23"N to 23°58'17.12"N and longitudes 82°18'46.09"E to 82°20'51.08"E.
- (ii) Coal linkage of the project is proposed for sale of coal to be used by end use plants (viz. Thermal Power plants).
- (iii) Joint venture cartel Not Applicable
- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation: employment to 1157 persons will be provided from the project.
- (vi) The project is reported to be beneficial in terms of the following: (a) Employment generation (b) Revenue generation to the Govt. (c) Meet the rising demand of coal for power generation (d) Peripheral development, CSR and CER activities
- (vii) Total mining lease area as per block allotment is 1298 ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the Ministry of Coal on 08.07.2019.
- (viii) The land usage pattern of the project is as follows:

# **Pre-mining land use details**

(Area in Ha)

S. No.	Land Use	Within ML Area	Outside ML Area	Total
1	Agricultural Land	251.860	-	251.860
2	Forest Land	259.239	-	259.239
3	Wasteland	396.720	-	396.720
4	Grazing Land	0.000	-	0.000
5	Surface Water Bodies	46.060	-	46.060
6	Settlements	51.990	-	51.990
7	Others (Barren Tenancy Land)	292.131	-	292.131
	Old Excavation Area (East	_	_	_
	Quarry)	_	-	_
	Old Excavation Area (West	-	-	-

Staff Colony (proposed) Green Belt Balance Area	<u>-</u> -	5.000	5.000 - -
Balance Area		-	- - 1421.50

**Post Mining** 

	Post Minning					
S.				Land use	(ha)	
No.	Land use	Plantat	Water	Public	Undisturbe	Total
140.		ion	Body	Use	d	iotai
1	External OB Dump	-	-	-	-	0
2	Top Soil Dump	-	-	-	-	0
3	Excavation	-	-	-	-	
	Void	13.778	160.070	-	-	173.848
	Backfilled area	638.20 9	107.979	251.860	-	998.048
4	Roads	-	-	23.069	-	23.069
5	Built-up Area	-	-	0.697	-	0.697
6	Green Belt	-	-	-	ı	0.000
7	Undisturbed Area	52.643	-	-		102.338
8	Safety Zone / Rationalization Area	-	-	-	-	78.864
9	Diversion / Below River / Nala / Canal	-	23.474	-	-	23.474
10	Water Body	-	-	-	-	268.049
11	Staff Colony	-	-	-	-	
	Total Area	704.63	291.523	301.84 7	0	1298

- (ix) Total geological reserve reported in the mine lease area is 142.36 MT with 113.08 MT mineable reserve. Out of total mineable reserve of 113.08 MT, 107.43 MT are available for extraction. Percent of extraction is 95%.
- (x) 13 seams with thickness ranging from 0.5m 5.82 m are workable. Grade of coal is G7, stripping ratio 7.29 m<sup>3</sup> per tonne of coal, while gradient is 1 to 5°.
- (xi) Method of mining operations envisages by Open cast (Surface miner for coal extraction) method
- (xii) Life of mine is 22 years.
- (xiii) The project has 1 (temporary) external OB dump in an area of 59.56 ha with 74 m height and 146.59  $\rm Mm^3$  of OB. The only external OB Dump shall be re-handled and backfilled during 6<sup>th</sup> to 11<sup>th</sup> year of mining. The OB from the current mining operations

shall be backfilled from 4<sup>th</sup> year onwards. 1 internal OB (backfilled area) in an area of 998.015 ha with 783.28 Mm<sup>3</sup> of OB is envisaged in the project.

- (xiv) Total quarry area is 1171.896 ha out of which backfilling will be done in 998.015 ha while final mine void will be created in an area of 173.881 ha with a depth of 170 m. Backfilled quarry area of (638.209 ha) and upper benches of mine void (13.778 ha) shall be reclaimed with plantation. Final mine void (160.070 ha) and lower benches of backfilled area (107.979 ha) will be converted to water body.
- (xv) Transportation of coal has been proposed by road in mine pit head, from surface to siding by road and from siding by rail.
- (xvi) Reclamation Plan in an area of 704.630 ha, comprising of 638.209 ha of backfilled area (internal dump). In addition to this, an area of 52.643 ha, included in the safety zone/rationalization area, has also been proposed for green belt development.
- (xvii) 259.239 ha of forest land has been reported to be involved in the project. Application for diversion of forest for non-forestry purposes has been applied vide proposal no. FP/MP/MIN/28619/2017 dated 21.08.2017. Approval under the Forest (Conservation) Act, 1980 for diversion of 259.239 ha of forest land for non-forestry purposes is under process. Stage I FC proposal has been recommended by DFO, Singrauli to CCF, Rewa on 20.11.2019.
- (xviii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xix) The ground water level has been reported to be varying between 9.76 m to 13.60 m during pre-monsoon and between 6.51 m to 9.41 m during post-monsoon. Total water requirement for the project is 3780 KLD (Avg.) & 4695 KLD (peak).
- (xx) Application for obtaining the approval of the Central Ground Water Authority for dewater mine water for industrial usage has been submitted on 26<sup>th</sup> April, 2019.
- (xxi) Public hearing for the project of 5 MTPA capacity in an area of 1298 ha was conducted on 30.08.2019 at Playground of Govt. High School, Majhaulipath (core zone). Major issues raised in the public hearing include (1) Land Acquisition and R&R (2) Employment to locals (3) Plantation, Green belt development. (4) Compensatory Afforestation (5) Cons. of bio-diversity (6) Wildlife conservation (7) Air Pollution. Appropriate action to address the issues raised in the Public Hearing is proposed to be taken up.
- (xxii) Hurdul nalla is flowing inside the boundary of lease. The nallah will be diverted in consultation with the Water Resource Department of the State Government.
- (xxiii) No court cases, violation cases are pending against the project of the PP.
- (xxiv) The project involves 1386 project affected families. R&R of the PAPs will be done as per LARR 2013.

(xxv) Total cost of the project is Rs. 85427 lakhs. Cost of production is Rs. 1650/- per tonne, CSR cost is Rs. 5 per tonne, R&R cost is Rs 150 crores (approx.). Environment Management Cost is Rs. 1.65 crores (capital) and 1.0 crore (recurring).

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

The proposal is for environmental clearance for Suliyari Coal Mining Project of 5.0 MTPA capacity of M/s Andhra Pradesh Mineral Development Corporation Limited in mine lease area of 1298 ha located in village(s) Aamdand, Amraikhoh, Bajaudi, Belwar, Dongari, Dhirauli, Jhalari, Majhaulipath and Seerswah, Tehsil Sarai, District Singrauli (Madhya Pradesh).

ToR for the proposal was granted by Ministry on 3<sup>rd</sup> July, 2018.

Public hearing for the project of 5 MTPA capacity in an area of 1298 ha was conducted on 30.08.2019 at Playground of Govt. High School, Majhaulipath (core zone).

Project involves forest land of 259.239 ha for diversion for non-forestry activity. Stage-1 FC for the forest land has not yet been granted by the Ministry.

Baseline data collection was conducted during summer season i.e. April-May-June, 2018.

Mine Plan including Mine Closure Plan for production capacity of 5 MTPA in an area of 1298 ha has been approved by Ministry of Coal dated 8<sup>th</sup> July, 2019.

Form#2 on PArivesh shows various incomplete details which is required to be filled up by Project proponent.

Wildlife conservation plan has been approved by Chief Wildlife Warden cum PCCF (WL), MP vide letter daed 6538 dated  $16^{th}$  September, 2019

- The EAC, after deliberation observed that there are various deficiencies in the proposal and the project is immature for submission and various statutory approvals are still pending. Also, PP has not submitted complete Form#2 on the Ministry website for appraisal. The EAC, during deliberations noted that the project details mentioned in the EIA report were not consistent with that presented during the meeting. The EAC, after detailed deliberations **decided to return the proposal in its present form**, and have asked for clarification/inputs, in respect of the following:-
  - (i) Form#2 on Parivesh should be filled with all details and correct information.
  - (ii) Stage-I FC for forest land of 259.239 ha for diversion of non-forestry activity shall be submitted.
  - (iii) Permission for diversion of Hurdul Nallah including other natural drains shall be submitted from concerned statutory authorities before undertaking diversion activity.

- (iv) Mining Lease or Letter of Intent for the project area shall be submitted by PP from concerned state government authorities.
- (v) Clarification and confirmation from District Forest Officer that no presence of Tiger/or any wildlife corridor were found in the said area of coal mine/forest area considering Sanjay National Park.
- (vi) Permission for diversion of road and power transmission line shall be submitted.
- (vii) EIA report shall include correct figures on details of Project displaced families or Project displaced person. Break up of R&R and CSR shall also be included.
- (viii) Impact and Mitigation measures of transportation of coal by road from coal mine to desired destination (linked railway siding or linked Power Plant) shall be included in EIA Report.
- (ix) Compliance of issues raised during Public Hearing shall be submitted with certain timeline and allocation.
- (x) Status of construction of railway siding and traffic impact assessment study for road transportation of coal
- (xi) Social Impact Assessment Study for the proposed displacement of Tribals/SC/ST.
- (xii) Impact of mine drainage and diversion of nallah based on quality and quantity (inflow of river) on Gopad river and further on Son river shall be studied in detail.
- (xiii) Details of hazardous waste generation (if any) during mining operations and further handling/disposal shall be provided in details.
- (xiv) Impact on villages due to mining activity present in core zone (not proposed to be displaced) shall be provided.
- (xv) The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1<sup>st</sup> May, 2018.

The proposal was accordingly **returned** in its present form.

# Agenda No. 51.2

Cluster XVII including Kalyaneshwari OCP (Normative Capacity 4 MTPA, Peak Capacity 5.2 MTPA) and Kalyaneshwari Washery Project (3.62 MTPA) in ML area of 1844.09 ha of M/s Bharat Coking Coal Limited, located at District Barddhaman, (West Bengal) – Consideration of Environmental Clearance

# [IA/WB/CMIN/20226/2013, J-11015/373/2013-IA-II(M)]

- **51.2.1** The proposal of environmental clearance of Cluster XVII including Kalyaneshwari OCP (Normative Capacity 4 MTPA, Peak Capacity 5.2 MTPA) and Kalyaneshwari Washery Project (3.62 MTPA) in ML area of 1844.09 ha of M/s Bharat Coking Coal Limited located at District Barddhaman, (West Bengal), is being considered at EAC violation committee. However, PP has submitted the proposal in EAC Coal Sector with additional document.
- **51.2.2** The Committee noted that the instant proposal is already under consideration of **Violation category.** EAC after deliberations suggested that currently the proposal is not required to be considered by this EAC and PP was asked to submit the details to violation committee for further appraisal.

The Committee therefore **returned the proposal in present form** as it is.

# Agenda No.51.3

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

**51.3.1** The proposal is for Environment Clearance for Conversion of Adasa UG to OC involving expansion in capacity from 0.50 MTPA to 1.50 (Normative) &1.85 MTPA (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).

Earlier, the proposal was considered in 49th EAC meeting held on 22<sup>nd</sup> October, 2019 wherein the Committee deferred the proposal on following points:-

- 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 Chandrabhaga 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 Noncompliance of observation
- Action points with timeline and allocated funds for issues raised in public hearing

Proposed plantation shall be of native/local species

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

S. No.	Observations	Comments/Compliance
1	Specific response of specific ToR shall be provided	Point by response submitted by PP which are as below:-
	provided	(i) Request for grant of permission has already been submitted to Central Design Organization (CDO), Nasik vide our letter no. WCL/SNR/Adasa/19/206 dated 05/05/2019. Accordingly, CDO, Nashik has assigned this work to Suptd. Engineer (Irrigation), Nashik for early execution of the same. It is further submitted that to start the mine, there is no requirement of diversion of this seasonal nallah in the immediate future. It is, therefore, committed that nullah diversion will be carried out after taking due permission from concerned State Govt. Authorities and all the recommendations/suggestions shall be duly complied with during implementation. Budgetary Provision: There is a provision of Rs. 10.71 crores for this purpose kept in approved Mining Plan/Project Report. Timeline – FY 2021-22.
		(ii) It is submitted that as per the approved Mining Plan, the proposed quarry has been planned to be divided into two quarries viz. Q-1 & Q-2 so that maximum backfilling can be done during the operational life of the mine. The total OB works out to be 147.36 Mm3. Out of which, 77.08 Mm3 is to be excavated from Q-1 & 69.28 Mm3 to be excavated from Q-2. As indicated in the approved Mining Plan, Q-1 will be worked first. out of total OB excavation of 147.36 Mm3, 78.85% of OB is dumped into the quarry void and only 21.15% is accommodated externally in embankment. embankment is permanent safety feature which has to be maintained. Therefore, the balance 29.54 Mm3 of OB dumped externally will have to be re-handled after the end of mining operations during the three years of closure period. maximum OB is proposed to be accommodated in the decoaled void, keeping bare minimum OB as external dump necessary only to run the mine. This minimum external OB dump can be rehandled to fill up the void during closure period so

that there is no permanent external OB Dump except for the flood protection embankment. actions have been proposed in the EIA/EMP to take care of the situations wherein the values are likely to remain within permissible limits. (iv) Two villages (Kotodi & Erangaon) present in core zone (Quarry Area) are required to be rehabilitated and resettled outside the mine lease area. Provision for Rehabilitation and Resettlement of villages has been made as per Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013. Total provision of Rs.94.33 crore has been made in approved Project Report 2 1. Distance of mine boundary from Chandrabhagha Distance of mine Nadi - 170 m boundary/quarry/OB Dump from Chandrabagha Nadi 2. Distance of quarry from Chandrabhagha Nadi - 260 3. Distance of OB dump(embankment) from Chandrabhagha Nadi - 200 m 3 Permission for dumping Construction of protective embankment is mandatory of OB for construction requirement to protect mine from danger of surface of embankment inundation as per the requirement of Coal Mines against Chandrabhaga Regulation No. 149 (CMR-2017). The embankment proposed construction is taken up only after receipt of permission river and diversion of season of Director General of Mine Safety (DGMS) regarding nallah. working of the mine under CMR, 1957. A copy of DGMS permission in respect of working of mechanized opencast mining (Bhatadi OC) is enclosed for reference wherein the conditions to be adhered to in respect of dumping of OB, drilling, blasting etc have been incorporated. Similar permission from DGMS for working the proposed Adasa UG to OC will be taken and conditions will be followed during actual working regarding width and other protective measures etc. Permission of diversion a request in this regard has been taken up for study of of Nallah, 132 K V the nallah diversion (as per PR) vide letter no 206 line dated 05.05.2019 addressed to Supdt. Engineer (ED), power and Central Design Organisation. Nashik (Copy enclosed). Patansaongi-Adasa Accordingly, CDO, Nashik has assigned this work to Village Road from authorized Suptd. Engineer (Irrigation), Nashik for early execution statutory body. of the same. 132 kV power line is passing through property of Adasa

		block which is proposed to be diverted along eastern side quarry boundary. Capital provision of Rs 4.13 crore has been made for 3.5 km diverted length of 132 kV power line in approved Project Report.
		As per the actual latest survey report, the 132 KV power line was found outside from the proposed quarry boundary, Hence there is no need for diversion of the said power line in case of the present mine operation.
5	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.	a seasonal nalla is passing through coal bearing area, which is required to be diverted to release coal. Provision of Rs 10.71 crore has been made for diversion of seasonal nalla passing through Adasa block along dipside quarry boundary of proposed Adasa UG to OC. An embankment 6m above HFL with top width of 20m along proposed route of diversion of nalla has been proposed.  As far as diversion of the seasonal nallah is concerned, a request in this regard has been taken up for study of the nallah diversion (as per PR) vide letter no 206 dated 05.05.2019 addressed to Supdt. Engineer (ED), Central Design Organisation. Nashik (Copy enclosed). Accordingly, CDO, Nashik has assigned this work to Suptd. Engineer (Irrigation), Nashik for early execution of the same.
6	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	Adasa UG mine is closed since April 2019.
7	Action points with timeline and allocated funds for issues raised in public hearing	Submitted in details in presentation to EAC
8	Proposed plantation shall be of native/local species	Green belt of adequate width would be raised by planting native species around the mine lease area on both sides of haul road, near material handling plant, on external overburden dumps and backfilled quarry along undisturbed area. About 50.0 ha of plantation will be carried out in undisturbed area as green belt. Total 361.03 ha out of total 564.41 Ha (64%) area will be planted till the end of mine life.

# **51.3.4** During deliberations on the proposal, the EAC took note, as below:

- The proposal is for Environment Clearance for Conversion of Adasa UG to OC involving expansion in capacity from 0.50 MTPA to 1.50 (Normative) &1.85 MTPA (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 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 51<sup>st</sup> 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.
- Diversion of nallah bearing coal is involved in the project and is proposed to be diverted after approval from statutory bodies only in the year 2021-22.
- Public Hearing was conducted on 6<sup>th</sup> April, 2019 and PP submitted the compliance with fund and timeframe for addressing the issues raised. The Committee deliberated the issues.
- Additional mitigation measure to control air pollution is proposed and further stringent compliance of control measures is required.
- Mining Plan has been approved by M/s Western Coalfields Limited Board on 18<sup>th</sup> November, 2015 and communicated vide latter dated 24<sup>th</sup> November, 2015.
- The EAC, constituted under the provision of the EIA Notification, 2006 and comprising
  of Experts Members/domain experts in various fields, have examined the proposal
  submitted by the Project Proponent in desired form along with EIA/EMP report
  prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of
  the Project Proponent.
- The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report and public hearing process. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
- The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

- 51.3.5 The Committee, after deliberations, **recommended** grant of environment clearance to 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 by M/s Western Coalfields Limited located in village Adasa District Nagpur (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:-
  - (i). The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 1.5 MTPA (Normative) / 1.85 MTPA (Peak) prior to commencement of the increased production.
  - (ii). PP shall start the mining operation only after necessary statutory clearances/approvals from the State Govt. of Maharashtra and other Departments with regard to Wildlife (if any).
  - (iii). Transportation of coal from Coal Handling Plant shall be 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 loading and unloading points, etc. 2-3 tier of native tree with broad leaves of plantation shall be carried out all along the road transportation route.
  - (vi). The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 1.5 MTPA (Normative) / 1.85 MTPA (Peak).
  - (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). Permission for diversion of road and power line from authorised statutory body
  - (xi). 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. No shrubs/bushes shall be planted and only trees of native species shall be planted
  - (xii). 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.
  - (xiii). The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1<sup>st</sup> May, 2018.
  - (xiv). Compliance of all the non-compliances and partially complied conditions by Regional Office of MoEFCC, Nagpur for the project of EC dated 15th July, 2009. The PP shall take all the mitigation measures and the Action taken report shall be submit the Regional Office of the MoEFCC.

- (xv). Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (xvi). Permission of road diversion Patansaongi-Adasa Village Road from authorized statutory body.
- (xvii). Dumping of OB for construction of embankment against Chandrabhaga river should not pollute the river. Regular monitoring water quality of river shall be conducted.
- (xviii). Distance of mine boundary from Chandrabhagha Nadi and distance of OB dump(embankment) from Chandrabhagha Nadi shall not be less than 150 m. The PP shall take all the mitigation measures to protect the water bodies and the compliance report shall be submit the Regional Office of the MoEFCC.
  - (xix). The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
  - (xx). Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- (xxi). Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xxii). Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (xxiii). The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the

- noise levels well within the prescribed limits for day light/night hours.
- (xxiv). The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

# Agenda No.51.4

Proposal for Gare Palma Sector-II Coal Mine at Tamnar Tehsil, Raigarh District, Chhattisgarh by M/s Maharashtra State Power Generation Company Limited – For Environmental Clearance

# [IA/CG/CMIN/52019/2016, J-11015/72/2016-IA.II(M)

- **51.4.1** The proposal is for EC for Gare Palma Sector II Coal Mine Project of Open Cast 22.0 MTPA + Under Ground-1.6 MTPA capacity in mine lease area of 2583.48 ha of M/s Maharashtra State Power Generation Company Ltd (MSPGCL) located in village-Tihli Rampur, Kunjemura, Gare, Saraitola, Murogaon, Radopali, Pata, Chitwahi, Dholnara, JhinkaBahal, Dolesara, Bhalumura, Sarasmal and Libra, Tehsil-Gharghoda, District-Raigarh, Chhattisgarh.
- **51.4.2** 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 NoF44L7 F44L8 F44L11 F44L12 and is bounded by the geographical coordinates ranging from latitude 22°06'24.215" N to 22°10'49.891" N and longitudes 83°26'15.433" E to 83°31'12.632" E.
- (ii) Coal linkage of the project is proposed for captive use for various thermal power plants of Mahagenco namely Chandrapur Thermal Power Station Unit 8 & Unit 9 (1000 MW), Koradi Thermal Power Station Unit 8, Unit 9and Unit 10 (1980 MW), Parli Thermal Power Station Unit 8 (250 MW).
- (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 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation, direct employment to 3400 persons will be provided from the project.
- (vi) The project is reported to be beneficial in terms of-Coal from this project will be used in power generation in Maharashtra, which will help in reducing gap in demand and production of electricity in the State, based on the requirement of the people of the project area, the development activities will be taken up. The basic requirement

of the community will be strengthened by extending health care, educational facilities, providing drinking water to the villages affected, building/strengthening of existing roads in the area etc.

(vii) Total mining lease area as per block allotment is 2583.48 ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the Ministry of Coal on 12.08. 2016.

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

# Pre-mining land use details

(Area in Ha)

S.No.	LANDUSE	Within ML	Outside ML	TOTAL
		Area(ha)	Area(ha)	
1.	Agricultural	2077.618	NIL	2077.618
	land			
2.	Forest land	214.869	NIL	214.869
3.	Wasteland	NIL NIL I		NIL
4.	Grazing land	NIL	NIL	NIL
5.	Surface water	56.167	NIL	56.167
	bodies			
6.	Settlements	90.328	NIL	90.328
7.	Others (non-	144.505	NIL	144.505
	agriculture &			
	Govt. land)			
	Total	2583.487	NIL	2583.487

# **Post Mining**

# Post Opencast Mining land use (upto 32<sup>nd</sup> year)

SI No.	Description	Bund		Public Use	Company Use		Plantation/ Agriculture incl. Green Belt	Total
1	Backfill (Excavation)	-	-	-	-	-	2440.55	2440.55
2	Void/ water body	-	-	-	-	-	-	0.00
3	Surface Dump	-	-	-	-	-	-	0.00
4	Bund	5.2	-	-	-	-	-	5.20
5	Green Belt	-	-	-	-	-	36.07	36.07

SI No.	Description	Bund		Public Use	Company Use		Plantation/ Agriculture incl. Green Belt	Total
6	TS Dump	-	-	-	-	-	-	0.00
7	Settling pond	-	5	-	-	-	-	5.00
8	Road diversion	-	-	30.3	-	-	-	30.30
9	Facilities retained	-	-	-	-	50.94	-	50.94
10	Under Kelo river	-	-	-	-	15.42	-	15.42
11	Undisturbed (others)	-	-	-	-	-	-	0.00
	Total	5.2	5	30.3	-	66.36	2476.62	2583.48

<sup>\*</sup>All values in ha

- (ix) Total geological reserve reported in the mine lease area is 1059.29 MT with 781.78 MT mineable reserve. Out of total mineable reserve of 781.78 MT,655.15 MT are available for extraction. Percent of extraction is 83.8%.
- (x) I Bottom seam to X Bottom seams (in 18 Horizons) with thickness ranging from 0.5m 8.39 m are workable. Grade of coal is G1 G16 (Both OC and UG), stripping ratio 4.99 Cum/t, while gradient is 1 in 20.
- (xi) Method of mining operations envisages by there are two mining methods viz. Opencast (OC) and Underground (UG) method.
- (xii) Life of mine is total 77 years (Life of OC mine 29 years and UG mine 66 years starting from 12<sup>th</sup> year onwards).
- (xiii) The project has one external OB dumps in an area of 450 ha with 90 m height and 221.17Mm³ of OB. External OB Dumps shall be re-handled and backfilled in 29<sup>th</sup> to 32<sup>nd</sup> year. The OB from the current mining operations shall be backfilled from 6<sup>th</sup>year onwards. Two internal OB in an area of2440.55 ha with 2761.12.Mm³ of OB is envisaged in the project.
- (xiv) Total quarry area is 2440.55ha out of which backfilling will be done in 2440.55 ha while final mine void will be created in an area of 0 ha with a depth of 0 m. Backfilled quarry area of 2440.55 ha shall be reclaimed with plantation. Final mine void will be converted-No final void, only 5 ha of settling pond will be converted in to water body.

- (xv) Transportation of coal has been proposed by dumpers in mine pit head, from surface to siding by dumpers and at sidings by appropriate loading system.
- (xvi) Reclamation Plan in an area of 2476.62ha, comprising of 0 ha of external dump, 2440.55 ha of internal dump and 36.07 ha of green belt. In addition to this, an area of 0 ha, included in the safety zone/rationalization area, has also been proposed for green belt development.
- (xvii) 214.869 ha of forest land has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 214.869 ha of forest land: Application for obtaining Forest Clearance has been submitted vide letter dated 26.07.2016, Proposal no. FP/CG/MIN/20495/2016. Forest clearance under process at State level.
- (xviii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xix) The ground water level has been reported to be varying between 4.67 to 12.34 m during pre-monsoon. Total water requirement for the project is 2785KLD.
- (xx) Application for obtaining the approval of the Central Ground Water Authority for 2785 KLD has been submitted on 05<sup>th</sup> December 2017.
- (xxi) Public hearing for the project of 23.60 MTPA capacity in an area of 2583.48 ha was conducted on 27thSeptember, 2019at Village-Dolesara, District-Raigarh, Chhattisgarh. Major issues raised in the public hearing include health, education, employment, compensation to land losers, drinking water etc. Appropriate action to address the issues raised in the Public Hearing have already been taken/proposed in EIA/EMP.
- (xxii) Keloi River/nalla is flowing north to south through the south eastern part of the boundary of lease. Kelo will remain untouched and hence no river/nalla diversion involved.
- (xxiii) One court case filed vide writ petition no. 92 of 2019 by Mr. Chinmay Mohapatra is pending in Hon'ble High Court of Bilaspur.
- (xxiv) The project involves 2245 project affected families. R&R of the PAPs will be done as per LARR 2013.
- (xxv) Total cost of the project is Rs 764200 lakhs. Cost of production is Rs.930 per tonne., CSR cost is 2% of the average net profit of the company made during three immediately preceding financial years shall be spent on CSR activities, R&R cost is Rs. 2435 crores. Environment Management Cost is Rs. 1484.53 crores has been allocated under EMP budget in which 1027.66 crores for Progressive Closure and 456.87 Crores for Final Closure of Mine.

#### **51.4.3** The EAC during deliberations noted the following:-

The proposal is for EC for Gare Palma Sector II Coal Mine Projectof Open Cast 22.0 MTPA + Under Ground-1.6 MTPA capacity in mine lease area of 2583.48 ha of M/s Maharashtra State Power Generation Company Ltd (MSPGCL) located in village-Tihli Rampur, Kunjemura, Gare, Saraitola, Murogaon, Radopali, Pata, Chitwahi, Dholnara, Jhinka Bahal, Dolesara, Bhalumura, Sarasmal and Libra, Tehsil-Gharghoda, District-Raigarh(Chhattisgarh).

ToR for the proposal was granted by the Ministry on 8<sup>th</sup> August, 2016. Extension of validity of ToR was granted on 5<sup>th</sup> August, 2019 for a period of one year.

Initially Public Hearing was scheduled on 16<sup>th</sup> March, 2018, then on 26<sup>th</sup> May, 2019 and on 26<sup>th</sup> August, 2019. Public Hearing was conducted on 27<sup>th</sup> September, 2019.

Baseline data was collected during post monsoon season i.e. during October to December, 2016.

Project involves forest land of 214.869 ha for diversion of non-forestry activity. Stage-1 FC for the said forest land has not yet granted.

National Commission of Scheduled Tribes (NCST) vide letter dated 4<sup>th</sup> April, 2018 deferred the Public Hearing subject to compliance/completion of certain studies. Report of Indian Council of Medical Research (ICMR) health assessment and project of health of people living in Tamnar Block is yet to competed.

Wild life conservation Plan is yet to be approved from concerned statutory authority.

**51.1.4** The EAC after deliberation observed that the project proponent in a haste of submission before validity of baseline data, submitted incomplete and incorrect Form#2 on the Ministry website for appraisal (PARIVESH). The EAC, during deliberations noted that the project details mentioned in the EIA report were not consistent with that presented during the meeting. EAC advised to the PP/Consultant that the EIA Report shall be made appropriately with the provisions of the EIA Notification, 2006 and various OM/Circulars issued by the Ministry from time to time. The EAC, after detailed deliberations **decided to return the proposal in its present form**, and has asked for clarification/inputs, in respect of the following:-

- (i) The EIA report to be revised as per the terms of reference granted for the project, and shall conform to Appendix III of the EIA Notification, 2006.
- (ii) Stage-I FC for forest land of 214.869 ha for diversion of non-forestry activity shall be submitted.
- (iii) Form#2 on Parivesh should be filled with all details and correct information.
- (iv) Copy of Agreement for supply of power shall be uploaded on Form#2
- (v) Approval of Wild Life conservation from concerned statutory authorities.
- (vi) One month of baseline data as the given data is almost 3 years old and validity of baseline data is about to expire as per Ministry's OM shall be collected.
- (vii) Hydrological Study and impact of mining activity on hydrology shall be submitted from the expert agency
- (viii) Permission for extraction of groundwater from CGWA shall be obtained

- (ix) Permission for usage for surface water i.e. from kelo river (as proposed for intial 3 years) for mining operation/domestic purposed shall be obtained from concerned statutory authority
- (x) Carrying capacity of the area shall be carried considering the presence of the other coal mines and mitigation measures shall be proposed accordingly.
- (xi) Mining Lease or Letter of Intent for the project area shall be submitted by PP from concerned state government authorities.
- (xii) Compliance of issues raised during Public Hearing shall be submitted with certain timeline and allocation.
- (xiii) Social Impact Assessment Study for the proposed displacement of Tribals/SC/ST.
- (xiv) Impact of mine drainage and diversion of nallah based on quality and quantity (inflow of river).
- (xv) Details of hazardous waste generation (if any) during mining operations and further handling/disposal shall be provided in details.
- (xvi) Impact on villages due to mining activity present in core zone (not proposed to be displaced) shall be provided.
- (xvii) The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1<sup>st</sup> May, 2018.
- (xviii) Clarification from DFO/PCCF whether there is any presence of Elephant Corridor or movement of elephants in the region.
- (xix) Impact of mine drainage on kelo river shall be submitted in detail.
- (xx) Detailed Traffic impact assessment/ study for road transportation of coal to linked Railway Siding / Power Plant shall be conducted.

The proposal **was therefore returned in present form as it is**, for completing full details on Form#2 and other observations as given above.

## Agenda No.50.5

Tubed Coal Mines Project M.L area 460 ha, production capacity 6 MTPA of Damodar Valley Corporation in mine lease area of 460 ha near villages Tubed, Mangra, Dihi, Ambajharan, Dhobiajharam, Nawari, Tehsil Latehar, District Latehar (Jharkhand) – Consideration of Environment Clearance

# [IA/JH/CMIN/65302/2017, IA-J-11015/54/2017-IA-II(M)]

- **50.5.1** The proposal is for Environmental Clearance for Tubed Coal Mine Project of 6 MTPA capacity of M/s Damodar Valley Corporation located in mine lease area of 460 Ha in village Tubed, Dhobiajharan, Ambajharan, Dihi, Newari and Mangra, Tehsil Latehar, District Latehar (Jharkhand).
- **50.5.2** 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 No F45/A9 and is bounded by the geographical coordinates ranging from 23°48′20″ to 23°50′09″ N and longitudes 84°34′09″and 84°35′45″ E.
  - (ii) Coal linkage of the project is proposed for MTPS Unit # 7&8 and CTPS Unit #8

- (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 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation, employment to 1200 persons will be provided from the project.
- (vi) The project is reported to be beneficial in terms of Socio-economic development of the local population.
- (vii) Total mining lease area as per block allotment is 460 ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MoC, GoIon 12.10.2009 for Mine Plan and 10.08.2011 for Progressive Mine Closure Plan.
- (viii) The land usage pattern of the project is as follows:

# **Pre-mining land use details**

(Area in Ha)

			(2.22	ca iii iia)
S. No.	Land Use	Within ML Area	Outside ML Area	Total
1	Agricultural Land	230	-	230
2	Forest Land	162.4	-	162.4
3	Wasteland	39	-	39
4	Grazing Land	-	-	-
5	Surface Water Bodies	22	-	22
6	Settlements	1	-	1
7	Others (Specify)	-	-	-
	Old Excavation Area (East	_	_	_
	Quarry)			
	Old Excavation Area (West	_	_	_
	Quarry)			
	Old OB Dumps	-	-	-
	Roads & Mine Infrastructure	5.6	-	5.6
	R & R Colony	1	ı	-
	Staff Colony	-	-	_
	Green Belt	-	-	-
	Balance Area	-	-	-
	Total Project Area =	460	Nil	460

# **Post Mining**

S.		Land use (ha)						
No.	Land use	Plantation	Water Body	Public Use/	Undisturbe d	Total		
1	External OB Dump	63	-	-	-	63		
2	Top Soil Dump	-	-		-	-		
3	Excavation	330	12	8	-	350		

4	Roads	3	-	4	-	7
5	Built-up Area	7	-	3	-	10
6	Green Belt	-	-	-	-	-
7	Undisturbed	_	_	_	_	_
/	Area	_	_	-	_	_
	Safety Zone /					
8	Rationalization	16	-	-	-	16
	Area					
	Diversion /					
9	Below River /	4	10	-	-	14
	Nala / Canal					
10	Water Body	-	-	-	-	-
11	Staff Colony	-	-	-	-	-
	Total Area =	423	22	15	-	460

- (ix) Total geological reserve reported in the mine lease area is 189.82 MT with 170.83 MT mineable reserve. Out of total mineable reserve of 170.83 MT, 139 MT are available for extraction. Percent of extraction is 81.3.%.
- (x) 12 seams with thickness ranging from 0.10 m to 15 m are workable. Grade of coal is mostly F Grade, stripping ratio 2.15, while gradient is 3° to 15°.
- (xi) Method of mining operations envisages by Open Cast (Shovel Dumper & Surface Miner) method.
- (xii) Life of mine is 30 years.
- (xiii) The project has 1 external OB dumps in an area of 63 ha with 90 m height and 55 Mm<sup>3</sup> of OB. Existing OB Dumps shall be re-handled and backfilled in 12th, 13th and 14th year. The OB from the current mining operations shall be backfilled from 1st year onwards. 2 internal OB in an area of 350 ha with 215.Mm<sup>3</sup> of OB is envisaged in the project.
- (xiv) Total quarry area is 350 ha out of which backfilling will be done in 350 ha while final mine void will be created in an area of 4 Ha with a depth of 30 to 40 m. Backfilled quarry area of 330 ha shall be reclaimed with plantation. Final mine void will be converted Water Body
- (xv) Transportation of coal has been proposed by Dumpers in mine pit head, from surface to siding by Road and at sidings by Rail. Dedicated railway siding is proposed for evacuation of coal. As an interim measure coal will be transported to nearby Railway Siding by Road till the commissioning of the siding.
- (xvi) Reclamation Plan in an area of 460.ha, comprising of 63 ha of external dump, 350 ha of internal dump and 8.7 ha of green belt. In addition to this, an area of 6.7 ha, included in the safety zone/rationalization area, has also been proposed for green belt development.

- (xvii) 162.394 ha of forest land has been reported to be involved in the project. Stage I Approval under the Forest (Conservation) Act, 1980 for diversion of 162.394 ha of forest land for non-forestry purposes has been obtained vide MoEF&CC letter No. F No 8-23/2019-FC dated13.11.2019
- (xviii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xix) The ground water level has been reported to be varying between 12m to 15 m during pre-monsoon and between 10m to 12 m during post-monsoon. Total water requirement for the project is 750 KLD.
- (xx) Approval of the Central Ground Water Authority for 810m³/Day has been obtained on 05.09.2019 vide NOC No. CGWA/NOC/MIN/ORIG/2019/5876
- (xxi) Public hearing for the project of 6 MTPA capacity in an area of 460 ha was conducted on 10.01.2019 at Latehar. Major issues raised in the public hearing include Land Compensation, R&R, Socio-economic Development and Environment protection. Appropriate action to address the issues raised in the Public Hearing have already been taken/proposed to be taken are as under:
  - a. Land Compensation will be payble as per LA Act, 2013
  - b. R&R will be done as per schedule II of the LA Act, 2013
  - c. R&R Colony will be constructed as per schedule III off the LA Act, 2013
  - d. Suitable person will be given employment in unskilled category.
- (xxii) SukriRiver/nalla is flowing through boundary of lease. The nallah will be diverted in consultation with the Water Resource Department of the State Government. In principle approval is accorded by the WRD Government of Jharkhand.
- (xxiii) No court cases, violation cases are pending against the project of the PP.
- (xxiv) The project involves 418 project affected families. R&R of the PAPs will be done as per LA Act 2013.
- (xxv) Total cost of the project is Rs. 130000 lakhs. Cost of production is Rs. 700 /- per tonne., CSR cost is Rs. 6.75per tonne, R&R cost is Rs. 78.18 crores. Environment ManagementCost is Rs. 42.8 crores.

#### **51.5.3** During deliberations on the proposal, the EAC took note as follows:

- The proposal is for Environmental Clearance for Tubed Coal Mine Project of 6 MTPA capacity of M/s Damodar Valley Corporation located in mine lease area of 460 Ha in village Tubed, Dhobiajharan, Ambajharan, Dihi, Newari and Mangra, Tehsil Latehar, District Latehar (Jharkhand).
- Tubed Coal Block (460 ha.) of Auranga Coal Field is allotted in favour of "Damodar Valley Corporation" incorporated in India under the Damodar Valley Corporation Act, 1948, by Government of India, Ministry of Coal, Office of the Nominated

Authority constituted under section 6 of the Coal Mines (Special Provision) Act, 2015, Allotment Order no. 103/04/2016/NA on dated 07.10.2016 under clause (c) of sub-rule (2) of rule 7 and sub-rule (1) of rule 13. DVC is deemed lessee as per section 11 of CBA act.

- Mining Plan and Mine Closure Plan for Tubed Coal Mine have been approved by Ministry of Coal vide letter No. 13016/19/2009-CA-I dated 12.10.2009 and vide Letter No. 34011-03-2011-CPAM on dated 10.08.2011 respectively. Same has been transferred along with Allotment Order on dated 07.10.2016 in the name of Damodar Valley Corporation
- ToR for the proposal was granted by this Ministry vide letter dated 16<sup>th</sup> March, 2018.
- Public hearing for the project of 6 MTPA capacity in an area of 460 ha was conducted on 10<sup>th</sup> January, 2019 at Latehar Stadium Near Boys High School, Jharkhand.
- Project involves forest land wherein PP has been granted Stage-1 FC for diversion of 162.394 ha of forest land (including 54.365 ha Protected forest land and 108.029 ha of Jungle Jhadi land) on 13<sup>th</sup> November, 2019.
- Primary baseline data on environmental quality air (PM10, PM2.5, SOx, NOx. and heavy metals was carried out in summer season 2018 (March 2018 to May 2018).
- The Sukri river enters the block from South side, then runs along South north in western part of the block. After traversing half of the block it turns westward & leaves the block. All these water courses would be diverted along tine boundatyj of the block. As water flow from upland beyond the lease area will be all diverted to sukri river, diversion or river diversion would not affected any down stream.
- The diversion plan has been accepted 'In principal' by Office of the Chief Engineer Design, Master Planning & Hydrology (Water Resource Department), Jal Bhawan, Ranchi vide letter no. SE/canal/304/plan/2019/1045 on dated 13.11.2019.
- NOC for ground water abstraction has been issued by Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, Central Ground water Authority vide NOC no. CGWA/NOC/MIN/ORIG/2019/5876 valid from 14.08.2019 to 13/08/2021.
- The public hearing of M/s Damodar Valley Corporation for "Tubed coal mine" project in village Tubed, Mangra, Dihi, Ambiajharan, Nawari District Latehar, Jharkhand with production capacity of 6.0 TPY was held on 10.01.2019 at Latehar Stadium (Near Boys High School), Jharkhand under the Chairmanship of Additional collector Mr. Nalson Ayan Bagey and Regional Officer, Jharkhand State pollution Control Board.
- The Environment Clearance of this project is to be given by MoEF&CC. In this regard an advertisement for conducting Public Hearing was published in national

news paper Pioneer and Indian Express in English and also In local Newspaper Hindustan Prabhat Khabar (Palamu version) the on 08.12.2018.

- A Wildlife Conservation Plan along with the appropriate budgetary provision prepared by prior allottee was approved by Chief Wildlife Conservator of Forest Officer, Jharkhand Ranchi Authority. The same has been transferred to M/s Damodar Valley Corporation vide letter no. 911 on dated 23.05.2018.
- The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
- The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report and public hearing process. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).
- **51.5.4** The Committee, after deliberations, **recommended** grant of environment clearance to Tubed Coal Mine Project of 6 MTPA capacity of M/s Damodar Valley Corporation, located in mine lease area of 460 Ha in village Tubed, Dhobiajharan, Ambajharan, Dihi, Newari and Mangra, Tehsil Latehar, District Latehar (Jharkhand), 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:-
  - (i). The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 4 MTPA prior to commencement of the increased production.
  - (ii). Transportation of coal from Coal Handling Plant shall be through covered trucks.
  - (iii). To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.
  - (iv). 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. 2-3 tier of native tree with broad leaves of plantation shall be carried out all along the road transportation till Ritchughuta Railway Station (as proposed).

- (v). The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 4 MTPA. All the stipulated in the NOC vide no. CGWA/NOC/MIN/ORIG/2019/5876 valid from 14.08.2019 to 13/08/2021 shall be complied.
- (vi). Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (vii). Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (viii). To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.
- (ix). 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. No shrubs/bushes shall be planted and only trees of native species shall be planted
- (x). 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.
- (xi). The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1<sup>st</sup> May, 2018.
- (xii). Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (xiii). Distance of 100 meters shall be maintained from the bank of Surkhi river (both side) during mining operation till the permission for diversion of river is obtained from concerned statutory authority.
- (xiv). All the recommendation of approved Wild Life Conservation Plan shall be complied
- (xv). No transportation of coal shall be carried by road after commission of proposed railway siding near the coal mine i.e. after 36 months from the date of issue of EC.
- (xvi). The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and

Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

- (xvii). Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- (xviii). Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xix). Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (xx). The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- (xxi). The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

# Agenda No.50.6

Barsingsar Opencast Lignite Mining Project (revised) of M/s Neyveli Lignite Corporation Limited – For Amendment in Environmental Clearance

The Committee noted that the earlier EC was granted under the provisions of the EIA Notification, 1994 and PP has not submitted the application for revalidation of earlier EC as per the Ministry's Notification dated 6<sup>th</sup> April 2018.

The PP has informed to the Committee that they are not aware of this notification, hence could not be applied for revalidation. The PP requested Committee to consider the case for revalidation of the earlier EC.

The Committee, after detailed deliberation, is of the view that the Committee cannot consider the proposal at this time as the application was not submitted within the 6 months after the Ministry's Notification dated 6<sup>th</sup> April 2018 and advised the PP to submit this proposal once the revalidation is completed. Thereafter, after detailed deliberation, the Committee **returned the proposal in present form**.

# Agenda No.51.7

Jalagam Vengal Rao Opencast Mine -II Expansion of 4 MTPA (Normative)/5 MTPA (peak) of M/s The Singareni Collieries Company Ltd in ML area 1409.81 ha located in village Kommepalli, District Khammam (Andhra Pradesh) - For Environmental Clearance Amendment

# [IA/TG/CMIN/84096/2007; F.No.J-11015/268/2007-IA.II(M)]

# **51.7.1** During deliberations, the EAC noted the following

The proposal is for amendment in environmental clearance dated 28<sup>th</sup> March, 2010 granted by the Ministry in favour of M/s The Singareni Collieries Company Ltd (SCCL) to Jalagam Vengalrao Opencast-II Project of 5 MTPA capacity in mine lease area of 1409.81 ha located in village Kommepalli, Mandal Sathupalli, District Khammam (Telangana).

One of the specific conditions stipulated in the EC at para 2(A) (viii) quotes - 'No coal transportation shall be undertaken by road.'

Earlier the proposal was considered by EAC in its meeting held on 22<sup>nd</sup> August, 2019 and observed that the condition stipulated in the EC dated 28<sup>th</sup> March, 2010 prohibiting coal transportation by road, still stands in view of no approval for amendment in the said EC by the competent authority. The project has been in operation since 1st September, 2017 and coal transportation still continuing by road, the Committee observed the same to be a serious non-compliance of the EC conditions.

In view of the above, the proposal was not taken forward and the EAC desired that the Ministry may take appropriate action for the said non-compliance as per the extant norms/guidelines.

It was noted that currently the action for non-compliance of EC condition is being processed in Ministry's IA Division- Monitoring Cell.

**51.7.2** The EAC after deliberation observed that as the proposal involves **non-compliance of EC conditions** and being processed by Ministry's Monitoring Cell, there was no point considering the proposal again. EAC desired that PP shall not apply such proposals and **returned the proposal** as it is.

# Agenda No.51.8

Jagannath Washery of 10 MTPA of M/s Mahanadi Coalfields Ltd in an area of 29.94 ha located in village Hensmul, District Talcher (Odisha) - Amendment in Environmental Clearance w.r.t. Change in Technology

# [IA/OR/CMIN/28013/2015, F No.J-11015/203/2015-IA-II(M)]

**51.8.1** The proposal is for amendment in environmental clearance dated 31st August, 2016, in favour of M/s Mahanadi Coalfields Limited, to the Coal Washery of 10 MTPA in an area of 29.94 ha in village Hensmul, District Talcher (Odisha).

The said EC was subsequently amended on 15th February, 2017, mainly in respect of specific conditions relating to raw coal transportation and development of green belt.

# **51.8.2** The EAC during deliberation noted the following:

Earlier the proposal was considered by the sector EAC in its meeting held on 27<sup>th</sup> May, 2019, and 22<sup>nd</sup> August, 2019 wherein the Committee insisted for comparative picture of the washing technologies finalized now and that envisaged earlier, and their impact on different environmental parameters. That would also include washery rejects generation, its utilization, mine water utilization, etc. The Committee further desired for appraisal of the proposal accordingly even for ascertaining the requirement of fresh EIA studies and the EMP.

Also, 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' and preferred not to take the proposal forward for the present, but to seek advice of the Ministry for appropriate course of action in such cases. The Committee also opined that in case, such proposals are to be considered on merits, environmental conditions and other stringent measures would have to be looked into comprehensively in complete perspective and in consultation with CPCB.

In view of the above observations the project proponent replied on 06.11.19 "The above observation was based on the Hon'ble NGT order dated 10th July, 2019. Subsequently Hon'ble NGT has issued order dated 19th August 2019. In compliance of the above order MoEF&CC has vide their OM dt: 31-10-19, finalized a mechanism for environmental management of critically and severely polluted areas for granting EC.

Jagannath Washery is located in Talcher Coalfields which is located in the Angul Talcher (Orissa) Industrial area/ Cluster. As per the CEPI Score monitored during 2018, the list of which is part of the Hon'ble NGT order dated 10th July, 2019, the CEPI score of Angul

Talcher (Orissa) Industrial area/ Cluster is 46.43. Thus, it does not fall in Critically Polluted Area (CPA) or Severely Polluted Area (SPA).

The PP informed that they have floated a revised expression of Interest for washery rejects on 17-10-2019 and received interest for 16.002 MTPA against a total proposed generation of about 2.0 MTPA

It observed that with the change in technology, there will be increase in water consumption and generation of washery rejects.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for amendments in Environmental Clearance (EC).

- **51.8.3** The EAC after deliberation, **recommended** the proposal for grant of amendment in environmental clearance dated 31st August, 2016 considering the score of CEPI in NGT order dated 10<sup>th</sup> July, 2019. Also, Ministry has formulated a mechanism to add additional conditions for the area coming under CPAs/SPAs. Further, EAC desires to add specific conditions as below:
  - a. Washery shall use 100% mine water for operations and shall have Zero Liquid Discharge.
  - b. Utilisation of rejects shall be only in the proposed power plants/FBC.
  - c. Shall also follow proposed washery rejects guidelines to be formulated by Ministry of Coal.
  - d. Project proponent to plant 50,000 nos. of native trees with broad leaves along the periphery of the washery to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.
  - e. Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the activities.
  - f. The project proponent shall take all precautionary measures during operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

# Agenda No.51.9

Expansion of Kusmunda Opencast Coal Mine Project from 40 MTPA to 50 MTPA in an area of 1655.825 ha (Phase I) of M/s South Eastern Coalfields Ltd, located in District Korba(Chhattisgarh) - For Environmental Clearance

# [IA/CG/CMIN/95257/2016 F.No J-11015/176/2014-IA.II(M)]

- **51.9.1** The proposal is for amendment in Environmental Clearance capacity from 40 MTPA to 50 MTPA (Normative) and 62.5 MTPA (Peak) in respect of Kusmunda Opencast Coal Mine in mining lease area of 1655.825 ha of M/s South Eastern Coalfields Limited in District Korba (Chhattisgarh).
- **51.9.2**The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported as under:-
- (i) Earlier, the Environmental Clearance of Kusmunda Opencast Coal Mine was accorded vide MoEF&CC letter no. J-11015/176/2014-IA.II (M) dated 03.02.2016 for expansion from 18.75 MTPA to 26 MTPA and in leasehold area of 1449.864 ha under the provisions of the EIA Notification, 2006 with public hearing. Public hearing was held on11.02.2015.
- (ii) To verify the status of compliance of EC conditions for Kusmunda opencast expansion project 26 MTPA, the Regional Office of MoEF&CC, Nagpur has carried out the site inspection on 22<sup>nd</sup> April, 2017. The compliance and monitoring reports forwarded to this Ministry vide their letter F. No. EC-310/RON/2017-NGP/1921 dated 13<sup>th</sup> June, 2017.
- (iii) The project was accorded Environmental Clearance vide letter no. J-11015/176/2014-IA.II (M) dated 03.07.2018 for expansion from 26 MTPA to 36 MTPA after taking various control measures as per EC conditions.
- (iv) To verify the status of compliance of EC conditions for Kusmunda opencast expansion project 36 MTPA, the Regional Office of MoEF&CC, Nagpur has carried out the site inspection on 30<sup>th</sup> November, 2018. The compliance and monitoring reports forwarded to this Ministry vide their letter F. No. EC-939/RON/2018-NGP/4676 dated 11<sup>th</sup> December, 2018.
- (v) The project was accorded Environmental Clearance vide letter no. J-11015/176/2014-IA.II (M) dated 22.01.2019 for expansion from 36 MTPA to 40 MTPA.
- (vi) The project was accorded ToR vide letter dated 01.12.2014.
- (vii) Stage-1 Forest Clearance have been obtained for entire forest land of Phase-I, 205.966 ha involved in the mining lease area of 1655.825 ha (Phase I).
- (viii) Mining plan for 50 MTPA (Normative) and 62.5 MTPA (Peak) was approved by Minutes of 51th EAC (Coal Mining Sector) held on December 5, 2019

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- CIL Board in its  $300^{th}$  meeting held on  $13^{th}$  August, 2013. Mine closure plan is an integral part of mining plan.
- (ix) The latitude and longitude of the project site are  $22^{0}$  15' 18" to  $22^{0}$  21' 30" N and  $82^{0}$  38' 39" to  $82^{0}$  42' 08" E respectively.
- (x) Joint Venture: No
- (xi) Coal Linkage: Various thermal power plants including Chhattisgarh State Power Generation Company Limited.
- (xii) Employment generated / to be generated: Already employed 2054 persons and to be employed: 4130 persons.
- (xiii) Benefits of the project: Project will considerably improve the socio-economic status of the adjoining areas. This will result in benefits such as improvements in physical infrastructure; improvements in social infrastructure, increase in employment potential, contribution to the exchequer, meet energy requirement and post-mining enhancement of green cover.
- (xiv) The land use pattern of the project will be as follows:

# Pre-Mining: (in ha)

Phase - I (ha)				
Agricultural / Tenancy Land	1045.597			
Revenue Forest Land	205.961			
Govt. / Other Land				
A) Water Body	31.042			
B) Grazing Land	373.225			
C) Waste Land	00.000			
Sub Total of Govt. Land	404.267			
Total Land	1655.825			

## Core area:

S. N.	Purpose	Area (ha)
1.	Area to be excavated	788.874
2.	Storage for top soil	3.000
3.	Over Burden / Dumps	325.000
4.	Mineral Storage	0.000
5.	Infrastructure (Workshop, Administrative Building)	284.634
6.	Roads	7.517
7.	Green Belt	10.000
8.	Effluent Treatment Plant	01.000
9.	Rehabilitation site (outside mine)	69.000
10.	Colony (outside mine)	39.000
11.	Safety Zone	82.800
12.	Future Mining	45.000

- (xv) Total geological reserve is 1105 MT. The mineable reserve 821.726 MT and extractable reserve is 821.726 MT (as on 1.4.2019) with 100% extraction.
- (xvi) The life of mine is 18 Years from 01.04.2019.
- (xvii) The grade of the coal is G-11 and the stripping ratio is 1.34 cum/tonne. The average gradient varies from  $4^0$  to  $10^0$  having 03 seams with thickness ranging from 2.86 m to 60.83 m.
- (xviii) Total estimated water requirement of the project is 16,447 KL/day. The level of ground water ranges from 1.59 m to 11.98 m in post-monsoon and 2.88 m to 14.60m in pre-monsoon season.
- (xix) The method of mining would be opencast.
- (xx) There are 13 external OB dumps in an area of 325 ha with quantity of 20.80 Mcum and height of 90 m above the ground level, and 1 internal dump with quantity of 1321.70 Mcum in an area of 1245 ha.
- (xxi) The final mine void would be in 355 ha with depth of 40 m, which is proposed to be converted into water body.
- (xxii) External OB dump area and backfilled quarry area shall be reclaimed with plantation.
- (xxiii) The transportation of coal from face to crusher is by trucks, from surface to siding by tippers and from siding to consumer by belt conveyor & rail.
- (xxiv) Rehabilitation and resettlement is involved in the project. There are 8200 PAFs.
- (xxv) Total capital cost of the project is Rs. 7612.33 Crores.
- (xxvi) The CSR cost: According to new CSR Policy, the fund for the CSR should be allocated, based on 2% of the average net profit of the Company for the three immediate preceding financial years or Rs 2 per tonne of coal production of previous year, whichever is higher.
- (xxvii) R&R Cost Rs 508.28 Crores and Environmental Management Cost Rs 575.33 Crores.
- (xxviii) Hasdeo River is the eastern boundary of lease. The Ahiran River and its tributary Laxman Nallah are bounded to the lease area on the North and North-West respectively and finally drained into Hasdeo River.
- (xxix) The ground water clearance has been obtained for the project on 16<sup>th</sup> February, 2017.
- (xxx) There are no national parks, wildlife sanctuary, biosphere reserves in the 10 km buffer zone of the study area.
- (xxxi) Total forest area involved is 205.961 Ha. Based on recommendation of the Forest Advisory Committee (FAC), the Ministry vide letter dated 26<sup>th</sup> April, 2018 has granted post-facto in-principle approval for diversion of 402.966 Ha of Forest land (includes 205.961 Ha of Kusmunda OCP and 197.005 Ha of Laxman OCP) subject to certain conditions.
- (xxxii) Afforestation plan shall be implemented covering an area of 1570 ha at the end of the mining. Density of tree plantation shall be 2500 trees/ ha of plants.
- (xxxiii) There are court cases / violation pending with the project proponent as per the following details:-

SN	Case No	Parties	Brief	Present
				Status

1	128/2012 in the court of Judicial Magistrate, class-1,	CECB, Korba Vs SECL Kusmunda Project	A case was filed u/s 44/47 of Water Act; u/s 21/22,37,39 of Air Act; u/s 15,16 of EP Act,1986 against over production of	and none was
2	Appeal No.7/2016 in Central Zonal Bench, NGT, Bhopal	Laxmi Chauhan Vs Union of India & 02 others	coal in 2008-09  An appeal has been made by Shri Laxmi Chauhan against EC granted to Kusmunda OCP (26.00 MTY) vide no.J-11015/176/2014-IA-II(M) dated 03/02/2016	Hearing was fixed on
3	Appeal No. 233/2018 in Principal Bench, NGT, New Delhi	Laxmi Chauhan Vs Union of India & 02 others	An appeal has been made by Shri Laxmi Chauhan against EC granted to Kusmunda OCP (36.000 MTPA) vide no. J-11015/176/2014-IA-II (M) dated 03/07/2018.	The matter is listed on 13/11/2019.

# 51.9.2 During discussions, the EAC first took note of the chronology of events as under:-

- (a) The proposal was originally submitted for grant of environmental clearance to the expansion of Kusmunda Opencast Coal Mining project from 15 MTPA (normative)/18.75 MTPA (peak) to 50 MTPA (normative)/62.50 MTPA (peak) by M/s South Eastern Coalfields Ltd in mine lease area of 3510.348 ha in District Korba (Chhattisgarh). Public hearing for the project was conducted by the SPCB on 11th February, 2015.
- (b) Mining Plan for the proposed expansion was earlier approved by the Board of M/s Coal India Ltd in its 300th meeting held on 28th October, 2013. Mine Closure Plan is an integral part of the Mining Plan.
- (c) The EAC in its meeting held on 7-8 January, 2016 recommended the project for grant of environmental clearance for a production level of 26 MTPA (peak), subject to compliance of certain specific conditions and adopting mitigating measures. As per the recommendations, the project for expansion from 18.75 to 26 MTPA (peak) in mine lease area of 1449.864 ha, was granted EC by the Ministry on 3rd February, 2016.
- (d) The proposal for further expansion of the project from 26 to 50 MTPA (normative)/62.50 MTPA (peak) was considered by the EAC in its meeting held on 27th February, 2018. During the meeting, the Committee took note of the observations of Ministry's Regional Office, contained in their monitoring report dated 13th June, 2017 (site visit on 22nd April, 2017), which mainly included the following:-

- Existing measures to check fugitive emissions while spilling, transportation, CHP area, appeared to be insufficient.
- Development of green belt is in nascent stage. The green belt of adequate width needs to be developed around the mine lease area, CHP, overburden dump sites, etc.
- Management of garland and catch drains was observed to be in poor state.
- No action undertaken for restoration and stabilization of overburden.
- Roads within the mine lease area observed to be laden with coal dust having poor drainage system.
- No ETP for treatment of CHP waste water. Only siltation pond provided for settling and recycling of effluent from the CHP.
- (e) Taking cognizance of compliance status of the conditions stipulated in the EC dated 3rd February, 2016 and the additional control measures adopted by the project proponent, the sectoral EAC in its meeting held on 27th February, 2018, recommended the project for grant of EC to its expansion from 26 to 36 MTPA in an area of 1655.825 ha for a period of one year i.e. up to 31st March, 2019, subject to compliance of additional terms and conditions as under:-
  - (i) The project proponent shall obtain prior clearances for regularization and/or diversion of the forest land of 205.961 ha from the concerned regulatory authority to enable its use for non-forestry purpose.
  - (ii) The project proponent shall collect and analyze one season baseline data for environmental parameters, preferably during April-June, 2018, and submit for consideration of the EAC before 31st December, 2018.
  - (iii) The project proponent shall also submit the details regarding action taken on different observations of the Regional Office before 31st December, 2018, for the Committee to examine adequacy and efficacy of pollution control measures and its impact on ambient air quality and to make recommendations for continuance of the project thereafter.
- (f) Based on above recommendations of the EAC and subsequent approval of the competent authority, the project for expansion from 26 to 36 MTPA in an area of 1655.825 ha, was granted environmental clearance by the Ministry on 3rd July, 2018 for a period up to 31st March, 2019, subject to compliance of certain terms and conditions.
- (g) The proposal for further expansion of the project from 36 to 50 MTPA (normative)/62.50 MTPA (peak) was considered by the EAC in its meeting held on 26th October, 2018. The proposal was again considered by the EAC in its meeting held on 14th December, 2018.
- (h) The project for expansion from 36 to 40 MTPA in an area of 1655.825 ha, was granted environmental clearance by the Ministry on 22<sup>nd</sup> January, 2019 for a period of one year, subject to compliance of additional conditions as below:-
  - The sub-committee of the EAC shall make a site visit to assess adequacy and efficacy of pollution control measures and its impact on ambient air quality.

- Third party monitoring (by NEERI/CIMFR/IIT) for air quality shall be carried out at identified locations, both ambient and the process area, to arrive at the impact of the proposed expansions in phases (26-36 MTPA and then up to 40 MTPA). The monitoring results along with the recommendations shall be presented before the EAC to assess the efficacy and adequacy of pollution control measures.
- An undertaking duly endorsed by NEERI/CIMFR/ISM, shall be submitted regarding mitigating measures and the infrastructure available for the proposed coal production capacity of 40 MTPA.
- Coal production shall be consistent with that given in the approved Mining Plan.
- (i) The proposal for further expansion of the project from 40 to 50 MTPA (normative)/62.50 MTPA (peak) was considered by the EAC in its 46<sup>th</sup> meeting held on 25<sup>th</sup> June, 2019.

# 51.4.3 During deliberations on the present proposal, the EAC noted the following:-

- The present proposal is for environmental clearance to further expansion of Kusmunda Opencast Coal Mining project from 40 MTPA to 50 MTPA (normative)/62.5 MTPA (peak) by M/s South Eastern Coalfields Ltd in mine lease area of 1655.825 ha in District Korba (Chhattisgarh).
- Total project area of 1655.825 ha includes forest land of 205.961 ha. The same has since been regularized under the Forest (Conservation) Act, 1980 by the Ministry vide letter dated 26<sup>th</sup> April, 2018, for diversion to non-forestry purposes.
- Consent to Operate under the Water Act, 1974 and the Air Act, 1981, for the last environmental clearance dated 22<sup>nd</sup> January, 2019 has been issued by the State Pollution Control Board vide their letter dated 7th March, 2019.
- The proposal for further expansion of the project from 40 to 50 MTPA (normative)/62.50 MTPA (peak) was considered by the EAC in its 51<sup>st</sup> meeting held on 5<sup>th</sup> December, 2019.
- The conditions stipulated in the environmental clearance dated 22<sup>nd</sup> January 2019 have been complied. The sub-committee visited and submitted the report to the EAC assessing adequacy and efficacy of pollution control measures and its impact on ambient air quality and other environmental parameters to consider the proposal. Also, third party monitoring and the undertaking in this regard has been submitted by the PP.
- Sub-committee of the EAC visited Kusmunda OCP to assess adequacy and efficacy of pollution control measures and its impact on ambient air quality on 10-11<sup>th</sup> September, 2019.
- Work has been awarded to Department of Mining Engineering for carrying out monitoring for air quality at identified locations, both ambient and the process area, to arrive at the impact of the proposed expansions in phases (26-36 MTPA and then up to 40 MTPA) for post monsoon. The institute will also endorse the mitigating

measures and the infrastructure available for the proposed coal production capacity of 40 MTPA after scrutiny. Monitoring work of the same has been started from 14.09.2019. An Interim report from IIT Kharagpur for air quality monitoring between 14<sup>th</sup> September, 2019 to 30<sup>th</sup> October, 2019 has been obtained and submitted to MoEF&CC on 19.11.2019.

- Application for Stage-I FC for 43.942 ha of Revenue Forest land which is included in Phase- II of 3510.348 Ha (Including Phase-I) has been submitted on PARIVESH portal vide proposal number FP/CG/MIN/41604/2019 on 18.10.2019.
- Kusmunda OCP is catering to most of the critical and super critical thermal power plants including State Power Generation Corporation Ltd, CSPGCL (West), NTPC Korba, NTPC Seepat, Adani Power, BALCO, LANCO, Bhilai TPS, etc. In view of shortage of coal in the country to meet the requirements of TPPs, there is a pressing demand for environmental clearance to the proposed expansion of the project beyond 40 MTPA

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for amendments and extension in Environmental Clearance (EC).

**51.4.4** EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc. The EAC has deliberated the compliance status of earlier EC conditions submitted by the RO, MoEFCC and accordingly, the EAC **recommended** for extension for 30 years or life of mine whichever is earlier and amendment for EC dated 22nd January, 2019 for Expansion of Kusmunda Opencast Coal Mine Project from 40 MTPA to 50 MTPA (Normative)/ 62.5 (Peak) in an area of 1655.825 ha (Phase I) of M/s South Eastern Coalfields Ltd, located in District Korba (Chhattisgarh) with all terms and conditions remaining the same in EC dated 3rd July, 2018. Further EAC desired to add specific conditions as follows:-

- No mining activity shall be conducted in 43.942 ha of forest land till Project proponents obtain Forest Clearance.
- Compliance of recommendation of EAC sub-committee dated 10-11th September, 2019.
- Mitigation measures to be proposed by IIT Kharagpur after air quality monitoring shall be strictly complied.
- Project proponent to plant 100,000 nos. of native trees with broad leaves along the villages and transportation route to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer
- The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 1.5 MTPA (Normative) / 1.85 MTPA (Peak) prior to commencement of the increased production.

- The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 50 MTPA (Normative) / 62.5 MTPA (Peak).
- 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. No shrubs/bushes shall be planted and only trees of native species shall be planted
- The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1<sup>st</sup> May, 2018.
- Compliance of all the non-compliances and partially complied conditions by Regional Office of MoEFCC, Nagpur for the project of EC dated 2<sup>2nd</sup> January, 2019. The PP shall take all the mitigation measures and the Action taken report shall be submit the Regional Office of the MoEFCC.
- The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the

floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.

• The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

# Agenda No.51.10

Expansion of Kulda OCP Coal Mining Project 10 MTPA to 14 MTPA in existing ML area of 634.205 ha of M/s Mahanadi Coalfields Limited Tehsil Himgir, District Sundargarh (Odisha)- Consideration of Amendment/Extension in Environmental Clearance.

# [IA/OR/CMIN/127633/2019; F.No J-11015/10/1995-IA.II(M)]

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

The proposal is for continuation of environmental clearance dated 28<sup>th</sup> March, 2019 to the expansion of Kulda Opencast Coal Mining project from 10 MTPA to 14 MTPA of M/s Mahanadi Coalfields Limited in an area of 694.205 ha (mine lease area of 634.205 ha) located in Tehsil: Himgir, District Sundergarh (Odisha).

The project was granted environmental clearance for Kulda Opencast Coal Mining project for expansion from 10 MTPA to 14 MTPA by the Ministry vide EC letter dated 22th March, 2018 & further extended vide EC letter dt:28-03-2019 for another period of one year, subject to compliance of certain terms and conditions, inter-alia including the following:

i) The EAC shall review compliance of the actions taken on observations of the Regional Office before December, 2019, and make its recommendations for continuance of the project thereafter. Also, based on the monitoring results, the Committee shall examine adequacy and efficacy of the pollution control measures and its impact on ambient air quality.

The Ministry's Regional Office at Bhubaneswar has conducted site inspection of the project site on 01<sup>st</sup> November, 2019 to monitor the status of compliance of conditions stipulated in the environmental clearance dated 28<sup>th</sup> March, 2019, and submitted report vide their letter dated 2<sup>nd</sup> Dec 2019. The project proponent has submitted action plan dt: 05-12-19 addressing concerns/observations of the RO. The Committee deliberated the Action Plan.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has

been suppressed in the report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended the Proposal.

**51.10.2** EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc. The EAC, after detailed deliberations duly considering observations of the Ministry's Regional Office in their letter dated 1<sup>st</sup> November, 2019, **recommended** for continuance of the environmental clearance dated 28<sup>th</sup> March, 2018 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.

- EAC asked project proponent to plant 50,000 nos. of native trees with broad leaves along the villages and transportation route to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.
- EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.
- The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.

- Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

# Agenda No 51.11

Expansion of Neyveli Mine-II Opencast Project (5321.99 ha to 71393.975 ha and 10.5 MTPA to 15 MTPA) by of M/s Neyveli Lignite Corporation Limited in village Neyveli, Tehsil Vridhachalan, District Cuddalore (Tamil Nadu) – For Amendment in Environmental Clearance

# [IA/TN/CMIN/127580/2019, J-11015/30/2001-IA-II(M

The Committee noted that the earlier EC was granted under the provisions of the EIA Notification, 1994 and PP has not submitted the application for revalidation of earlier EC as per the Ministry's Notification dated  $6^{th}$  April 2018.

The PP has informed to the Committee that they are not aware of this notification, hence could not be applied for revalidation. The PP requested Committee to consider the case for revalidation of the earlier EC.

The Committee, after detailed deliberation, is of the view that the Committee cannot consider the proposal at this time as the application was not submitted within the 6 months after the Ministry's Notification dated 6<sup>th</sup> April 2018 and advised the PP to submit the proposal once the revalidation is completed. Thereafter, after detailed deliberation, the Committee **returned the proposal in present form**.

# Agenda No 51.12

Barsingsar Opencast Lignite Mining Project (revised) of M/s Neyveli Lignite Corporation Limited – For Amendment in Environmental Clearance

[IA/RJ/CMIN/126390/2019] F.No. J-11015/23/1997-IA.II(M)

The Committee noted that the earlier EC was granted under the provisions of the EIA Notification, 1994 and PP has not submitted the application for revalidation of earlier EC as per the Ministry's Notification dated 6<sup>th</sup> April 2018.

The PP has informed to the Committee that they are not aware of this notification, hence could not be applied for revalidation. The PP requested Committee to consider the case for revalidation of the earlier EC.

The Committee, after detailed deliberation, is of the view that the Committee cannot consider the proposal at this time as the application was not submitted within the 6 months after the Ministry's Notification dated 6<sup>th</sup> April 2018 and advised the PP to submit the proposal once the revalidation is completed. Thereafter, after detailed deliberation, the Committee **returned the proposal in present form**. **The Committee also noted that this is duplicate proposal.** 

# **Agenda No 51.13**

Kalyan Khani Opencast Project of 2 MTPA an ML area 945.21 ha. of M/s The Singareni Collieries Company Limited, located in, District Adilabad, (Telangana) – For EC Amendment

# [IA/TG/CMIN/122003/2019; F.No. J-11015/21/2009-IA.II(M)]

**51.13.1** The proposal is for amendment in environmental clearance dated 19<sup>th</sup> March, 2015 granted by Ministry to Kalyan Khani Opencast Project of 2 MTPA of M/s The Singareni Collieries Company Limited in an ML area 945.21 ha located in District Adilabad (Telangana)

# **51.13.2** The EAC, during deliberations noted the following:-

Amendment has been sought by project proponent for extending the validity of specific conditions no (iv) to transport the coal by road mode up to CHP for further 3 years i.e. upto 19<sup>th</sup> March, 2023.

EC dated 19<sup>th</sup> March, 2015 had stipulated EC specific conditions No. (iv) as stated below "Mechanically covered truck shall be used for transportation of coal within 5 years. Conveyor belt should be installed in the 5<sup>th</sup> Year.

The project proponent submitted that mining operations could be started in May, 2017 due to delay in acquisition of land due to introduction of new "The Right to Fair Compensation and Transparency in Land Acquisation, Rehabilitation and Resettlement Act, 2013".

Construction of railway siding is at nascent stage whererin only tender has been placed for earth work & minor bridges and awarding is under finalisation.

Traffic Impact Assessment Study has been conducted by the PP for road transportation.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended the Proposal.

**51.13.3** The EAC, after deliberations observed that PP is not serious about compliance of given EC conditions as the status of construction is at very early stage. Earlier EC conditions gave enough time of 5 years for construction of railway siding and from submission of PP, it can be concluded that PP will take another 5 years. EAC desired that PP shall expedite the work in collaboration with Railways as early as possible. EAC **recommended** the amendment in environmental clearance for further period of 2 years only i.e. upto 19th March, 2022 with all terms and conditions therein remaining the same and further extension will not be given, if PP fails to comply the said condition.

The EAC has also recommended the following conditions:

- EAC desired that the MOC/State Govt. of Telengana may direct SCCL to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.
- Also, all the mitigation measures proposed during appraisal shall be implemented with additional conditions of planting 50,000 nos of fruit bearing trees (broad leaves) along the transportation route and around the nearby villages to reduce the air pollution.

# Agenda No 51.14

Madhuband NLW Coal Washery of 5 MTPA of M/s Bharat Coking Coal Limited in an area 23 ha located in District Dhanbad (Jharkhand) – Consideration of Extension of Environmental Clearance

# [IA/CG/CMIN/122124/2019; F.No. J-11015/70/2016-IA.II(M)]

**51.14.1** The proposal is for extension of validity of EC for Madhuband NLW Coal Washery of 5 MTPA of M/s Bharat Coking Coal Limited in an area 23 ha located in District Dhanbad (Jharkhand)

**51.14.2** During deliberations, the EAC noted the following

The proposal is for extension of validity of environmental clearance dated 25<sup>th</sup> January, 2012 granted by the Ministry to the project for Madhuband NLW Coal Washery of 5 MTPA of M/s Bharat Coking Coal Limited in an area 23 ha located in District Dhanbad (Jharkhand).

Currently washery is in construction phase and completion/commissioning of washery shall take another 3 years.

As per ministry's notification dated 29<sup>th</sup> April, 2015 regarding validity of environmental clearance and its extension, it states as below:-

- (i) The "Validity of Environmental Clearance" is meant the period from which a prior environmental clearance is granted by the regulatory authority, or may be presumed by the applicant to have been granted under sub paragraph (iv) of paragraph 7 above, to the start of production operations by the project or activity, or completion of all construction operations in case of construction projects (item 8 of the Schedule), to which the application for prior environmental clearance refers. The prior environmental clearance granted for a project or activity shall be valid for a period of ten years in the case of River Valley projects (item 1(c) of the Schedule), project life as estimated by Expert Appraisal Committee or State Level Expert Appraisal Committee or District Level Expert Appraisal Committee subject to a maximum of thirty years for mining projects and seven years in the case of all other projects and activities.
- (ii) In the case of Area Development projects and Townships [item 8(b)], the validity period shall be limited only to such activities as may be the responsibility of the applicant as a developer:

Provided further that the regulatory authority may also consult the Expert Appraisal Committee or State Level Expert Appraisal Committee or District Level Expert Appraisal Committee, as the case may be, for grant of such extension.

- (iii) Where the application for extension under sub-paragraph (ii) has been filed-
- (a) within one month after the validity period of EC, such cases shall be referred to concerned Expert Appraisal Committee (EAC) or State Level Expert Appraisal Committee (SEAC) or District Level Expert Appraisal Committee and based on their recommendations, the delay shall be condoned at the level of the Joint Secretary in the Ministry of Environment, Forest and Climate Change or Member Secretary, SEIAA, as the case may be;
- (b) more than one month after the validity period of EC but less than three months after such validity period, then, based on the recommendations of the EAC or the SEAC or the DEAC, the delay shall be condoned with the approval of the Minister in charge of Environment, Forest and Climate Change or Chairman, as the case may be:

PP submitted that the proposal for extension of validity of environmental clearance was submitted by project proponent on 24<sup>th</sup> April, 2019 i.e. within the 90 days of the validity period of EC letter dated 25<sup>th</sup> January, 2012. The proposal number assigned was IA/JH/CMIN/103241/2009. As new look PARIVESH portal validity extension

link was not not available, it was uploaded as normal proposal. However as shown on portal, the proposal was returned on  $11^{\text{th}}$  May, 2019 with direction to submit through appropriate link on the portal. Action was taken after knowing status from portal, for rectification of proposal, telephonic communication made with NIC officials followed by emails. After rectification of issues by NIC, the proposal was uploaded on  $11^{\text{th}}$  November, 2019 as proposal number IA/JH/CMIN/124506/2019.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended the Proposal.

**51.14.3** The EAC, after deliberations on the proposal, **recommended** for extension of validity of the environmental clearance for a period of 3 years i.e. up to 25<sup>th</sup> January, 2022, with all terms and conditions stipulated therein remaining unchanged.

Also, EAC asked project proponent to plant 50,000 nos. of native trees with broad leaves along the villages and transportation route to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.

#### Agenda No 51.15

Expansion of Lakhanpur Opencast (Phase II) Coal Mine Project from 18.75 MTPA to 21 MTPA in an area of 2452 ha of M/s Mahanadi Coalfields Ltd located in District Jharsuguda (Odisha) – Consideration of continuation/extension of Environmental Clearance

# [IA/OR/CMIN/124169/2019] F.No. J-11015/391/2012-IA.II(M)

- **51.15.1** The proposal is for continuation of environment clearance dated 13th February, 2019 granted by the Ministry to the expansion of Lakhanpur Opencast (Phase-II) Coal Mining Project from 18.75 to 21 MTPA in an area of 2452 ha (mine lease area of 2240 ha) of M/s Mahanadi Coalfields Limited located in tehsil Lakhanpur, District Jharsuguda (Odisha).
- **51.15.2** The project was granted environmental clearance by the Ministry vide EC letter dated 28-02-2018 for one year & further extended vide EC letter dt: 13<sup>th</sup> February, 2019 for a period of one year, subject to compliance of certain terms and conditions, inter-alia including the following: -

i) The EAC shall review compliance of the actions taken on observations of the Regional Office before December, 2019, and make its recommendations for continuance of the project thereafter. Also, based on the monitoring results, the Committee shall examine adequacy and efficacy of the pollution control measures and its impact on ambient air quality.

The Regional Office, Bhubaneswar has conducted site inspection of the area on 30th October, 2019 to monitor the status of compliance of conditions stipulated in the environment clearance dated 28th February, 2018, and submitted report vide their letter dated 14<sup>th</sup> November 2019. The same was found to be satisfactory. The project proponent has submitted action plan vide letter 25<sup>th</sup> November 2019 & 05th December 2019, addressing concerns/observations of the RO.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended the Proposal.

- **51.15.2** The EAC, after detailed deliberations duly considering observations of the Ministry's Regional Office in their letter dated 14<sup>th</sup> November, 2019, **recommended** for continuance of the environmental clearance dated 28<sup>th</sup> February, 2018 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.
  - EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.
  - Also, EAC asked project proponent to plant 50,000 nos. of native trees with broad leaves along the villages and transportation route to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.
  - The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the

2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

- Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

# **Agenda No 51.16**

Lakhanpur Opencast (Phase II) Coal Mine Project from 10 MTPA to 15 MTPA in an ML area 2452 ha. of M/s Mahanadi Coalfields Ltd, located in, District Jharsuguda, (Odisha) – For EC Extension

# [IA/OR/CMIN/87711/2018, J-11015/638/2007-IA.II(M)]

The proposal is repeat of earlier proposal which was **inadvertently submitted** by PP. The Committee recommended that the proposal may be **returned** as it is from Parivesh Portal.

#### Agenda No 51.17

Kente Extension Opencast Coal Mine & Integrated Washery Project 9 MTPA (Normative)/ 11 MTPA (Peak) in an ML area 1760 ha of M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited. Located in Tehsil Ambikapur, District Surguja (Chhattisgarh) – Consideration of Terms of Reference

# [IA/CG/CMIN/102781/2019] F.No. J-11015/48/2019-IA.II(M)

- **51.17.1** The proposal is for ToR for Kente Extension Opencast Coal Mine & Integrated Washery Project 9 MTPA (Normative)/ 11 MTPA (Peak) in an ML area 1760 ha of M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited. Located in Tehsil Ambikapur, District Surguja, (Chhattisgarh).
- **51.17.2**. 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 No-F44K13 and is bounded by the geographical coordinates ranging Latitude 22°47′00.802″N to 22°49′58.536″ N, Longitude 82°49′21.991″E to 82°52′48.833″ E.
  - (ii) Coal linkage of the project is proposed for captive use for two Thermal Power Plants of Rajasthan Rajya Vidyut Utpadan Nigam Limitednamely Suratgarh Supercritical TPP (1320 MW), Unit- 7 & 8, District-Shriganganagar, Rajasthan&Chhabra TPP Unit -5 & 6 (1320 MW), District- Baran, Rajasthan
  - (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 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
  - (v) Employment generation, direct employment to 919 persons will be provided from the project.
  - (vi) The project is reported to be beneficial in terms of Coal from this project will be used in power generation in Rajasthan, which help in reducing gap in demand

and production of electricity in the state, based on the requirement of the people of the project area, the development activities will be taken up. The basic requirement of the community will be strengthened by extending health care, educational facilities, providing drinking water to the villages affected, building/strengthening of existing roads in the area etc. Project will generate direct and in-direct employment in the area.

(vii)Total mining lease area as per block allotment is 1760 ha. Mine Plan & Mine Closure Plan has been submitted to Ministry of Coal and is under review for approval.

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

# Pre-mining land use details

S.N.	LANDUSE	Within ML	Outside ML	TOTAL
		Area(ha)	Area(ha)	
1.	Agricultural land			
2.	Wasteland			
3.	Grazingland	4.23	Nil	4.23
4.	Settlements			
5.	Surface water			
6.	Forestland	1742.60	Nil	1742.60
7.	Others	13.167	Nil	13.167
	(Government	15.107	IVII	15.107
	TOTAL	1760.00	Nil	1760.00

# **Post Mining**

S.N.		During	End of					
	Туре	Mining (ha)	Life (ha)	Plantati on	Water Body	Public use	Grass/ greenbe	TOTAL
1.	Excavation Area		1240.73	1240.73			-14	1240.73
2.	Backfilled Area	1647.5						
3.	Excavated Void	4	406.80		406.80			406.80
4.	Top Soil Dump*							
5.	External Dump	48.07	48.07	32.47			15.60	48.07
6.	Safety Zone	12.66	12.66	12.66				12.66
7.	Road diversion	4.930	4.93			4.93		4.93
8.	Settling Ponds	2.26	2.26		2.26			2.26
9.	Road & Infrastructure	5.24	5.24	5.24				5.24
10.	CHP & Washery	9.32	9.32	9.32				9.32
11.	Coal Evacuation Route &	6.76	6.76	6.76				6.76
12.	Rationalization Area	23.23	23.23	23.23				23.23
	TOTAL	1760.0	1760.00	1330.41	409.06	4.93	15.6	1760.00

- (ix) Total geological reserve reported in the mine lease area is 369.22 MT with 333.709 MT mineable reserve. Out of total mineable reserve of 333.709 MT, 271.60 MT are available for extraction. Percent of extraction is 73.56 %.
- (x) Three seams with thickness ranging from 1.36 m to 7.63 m (mean thickness) are workable. Grade of coal is G11 to G16, stripping ratio 4.44 m3/T, while gradient is  $2^{\circ}$  to  $5^{\circ}$ .
- (xi) Method of mining operations envisages by opencast method of mining with Shovel-Dumper combination for overburden and Surface Miner & Shovel-Dumper combination for coal is envisaged. Drilling and blasting is required where extraction of coal is done through Shovel and Dumper combination.
- (xii) Life of mine is 33 years.
- (xiii) The project has one external OB dumps in an area of 48.07 ha with 60 m height and 27.67Mm3 of OB. The OB from the current mining operations shall be backfilled from 3<sup>rd</sup>year onwards. Two internal OB in an area of 1240.73 ha with 1179.15 Mm³ of OB is envisaged in the project.
- (xiv) Total quarry area is 1647.54 ha out of which backfilling will be done in 1240.73 ha while final mine void will be created in an area of 406.80 ha with a depth of 30 m. Backfilled quarry area of 1240.73 ha shall be reclaimed with plantation. Final mine void will be converted 406.80 ha.
- (xv) Transportation of coal has been proposed by 60T Tippers from coal face to Loading Point at pit bottomin mine pit head, from surface to siding by conveyor and at sidings by railway to linked power plant.
- (xvi) Reclamation Plan in an area of 1310.12ha, comprising of 48.07ha (32.47 ha plantation & 15.60 ha greenbelt) of external dump, 1240.73ha of internal dump and 21.32ha (infrastructure area, washery etc.) of green belt. In addition to this, an area of 35.89 ha, included in the safety zone/rationalization area, has also been proposed for green belt development.
- (xvii) 1742.60 ha of forest land has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 1742.60 ha of forest land for non-forestry purposes. <u>Application for diversion of forest land submitted vide proposal dated 16.11.2019 File No. FP/MIN/39833/2019 and under process at Nodal Officer level.</u>
- (xviii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xix) The ground water level has been reported to be varying between 5.50 m to 14.00 m during pre-monsoon and between 1.24 m to 9.34 m during post-monsoon. Total water requirement for the project is 4213 KLD.
- (xx) Application for obtaining the approval of the Central Ground Water Authority is pending. Hydrogeology study completed.
- (xxi) There are number of seasonal local nala confluence into Bagbahar Nala at the southern boundary of coal block. No Nalla diversion is involved in the project
- (xxii) The project involves 18 project affected families. R&R of the PAPs will be done as per R&R Act.
- (xxiii) Total cost of the project is Rs. 234400 lakhs.

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

The proposal is for ToR for Kente Extension Opencast Coal Mine & Integrated Washery Project 9 MTPA (Normative)/ 11 MTPA (Peak) in an ML area 1760 ha of M/s Rajasthan

Rajya Vidyut Utpadan Nigam Limited. Located in Tehsil Ambikapur, District Surguja, (Chhattisgarh).

Mine Plan & Mine Closure Plan has been submitted to Ministry of Coal and is under review for approval.

1742.60 ha of forest land has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 1742.60 ha of forest land for non-forestry purposes. Application for diversion of forest land submitted vide proposal dated 16.11.2019 File No. FP/MIN/39833/2019 and under process at Nodal Officer level.

51.19.4 The Committee, after deliberations, **recommended** for grant of terms of references to Kente Extension Opencast Coal Mine & Integrated Washery Project 9 MTPA (Normative)/ 11 MTPA (Peak) in an ML area 1760 ha of M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited. Located in Tehsil Ambikapur, District Surguja (Chhattisgarh) for preparation of EIA/EMP reports along with public consultation, subject to the orders of Hon'ble Supreme Court in Civil Appeal No.4395/2014 in the matter of Rajasthan Rajya Vidyut Utpadan Nigam Limited Vs Sudiep Shrivastava and other matters pending in Hon'ble Supreme Court or Hon'ble High Court of Chhattisgarh, and the specific conditions as below and as defined in the Standard ToR notified by this Ministry for such projects/activities under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto.

- Carrying capacity of the whole area shall be conducted by project proponent and requirement of opening of new coal mine vis-à-vis demand shall be justified and the TOR of carrying capacity may be forwarded to the EAC/Ministry for comments, if any.
- Study of Ecosystem services shall be conducted by PP
- Project proponent shall provide comprehensive plan for utilization of coal washery rejects as it is understood that same PP has other mines and washeries in the area.
- Confirmation from DFO that no elephant/wildlife corridor is present in the said area.
- Project proponent will explore for creating of pond of same area of water body in the buffer zone (10 km) area.
- Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA), if applicable.
- Total fresh water requirement shall not exceed 4312 KLD, shall be made through mine water. No surface water shall be used.
- Study shall be carried for sustenance of water supply to cater to projected demand of the proposed washery from the abandoned mine(s) throughout planned life of the washery.
- Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted.
- Ash content below 34% should be maintained in washed coal to be transported beyond 500 km for use in thermal power plants.
- The washing technology so chosen should conform to 'Zero Liquid Discharge'.
- Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- For proper baseline air quality assessment, adequate monitoring stations in the

- downwind areas based on wind rose pattern of the area, shall be set up for collection of air quality data and air quality modeling.
- Disposal of washery rejects shall be in accordance with the extant policy and guidelines, and environment friendly.
- Thick green belt of adequate width to be provided around the washery to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.
- Comprehensive plan for utilization of washery rejects and mode of transportation considering three mines and its washery being in operations in that area of same proponent.

# Agenda No 50.18

Manoharpur and Dipside Manoharpur Coal Mine Project (Expansion of Manoharpur Coal Mine) 16 MTPA an ML area 1848.379 ha. of M/s Odisha Coal and Power Limited, located in, Tehsil Hemgir, District Sundargarh (Orissa) - For Terms of Reference

# [IA/OR/CMIN/88081/2018] F.No. J-11015/139/2008-IA.II(M)

**50.18.1** The proposal is for grant of Terms of Reference of Manoharpur and Dipside Manoharpur Coal Mine Project (Expansion of Manoharpur Coal Mine) 16 MTPA an ML area 1848.379 ha. of M/s Odisha Coal and Power Limited, located in, Tehsil Hemgir, District Sundargarh (Orissa).

# **51.18.2** The details of the proposal as submitted by project proponent are given below:-

- (i) Manoharpur Coal block has already received an environment clearance from MOEF&CC vide letter no. J-11015/139.2008-IA.II (M) dated 21.02.2014 for project area of 977.875 ha and capacity 8 MTPA. Dip-side Manoharpur is contiguous to Manoharpur Coal Block, hence, it is planned to extract the coal from Manoharpur Coal Block at the first instance and the Peak Rated Capacity of 16 MTPA can be achieved from this block per se.
- (ii) The Mining Plan has been accordingly prepared integrating both the blocks, which has been approved by the Ministry of Coal on 26.09.2019. Based on the approved Mining Plan (Rev-III), this proposal is being prepared with expansion of the Manoharpur Coal Mine Project of 8 MTPA over an area 977.875 ha to 16 MTPA over an area of 1848.379 ha.
- (iii) The mining lease area is 1781.591 ha. The area required outside the lease area is 66.78 ha. Thus, the total project area is 1848.379 ha. The production from the mine will be by open cast mining method for a rated capacity of 16 MTPA having mechanization and adopting new technology. The life of mine shall be 44 years. The coal will be transported by rail to the End Use Project (OPGC) having capacity of 4x660 MW. In case the additional capacity i.e. 2x660 MW does not come up due to any reason whatsoever, 8 MTPA coal becomes excess and can be utilized under the provisions of Allotment Agreement (Clause-8).

- (iv) Presently project area has agricultural land of 531.127 ha (502.81 in ML area & 28.317 outside ML area), Homestead land (18.47ha), water body (29.989 ha), Forest 618.644 ha (609.205 ha in ML area & 9.439 ha outside ML area), Barren Land 582.928 ha (553.896 ha inside the ML area & 29.032 outside ML area) & Grazing Land 67.221ha.
- (v) Proposed land use at end of life of mine shall comprise of Excavation Area (1234.44 ha), Top Soil Dump (10.84 ha), External Dump (269.51 ha), Green Belt (50 ha), Water body/Diversion of Nalla/River/Canal/Garland drain (20.690 ha), other use (66.788 ha), Infrastructure & embankment (172.016 ha) and Balance area in Safety / Rationalization Zone, Undisturbed / MR for UG.
- (vi) There is no national park/ sanctuary located within 15 km. Various protected forests and reserved forest are located in 15 km radius of the project. Some of them are as follows: Hunderakhol R.F. (Within ML), Kanhupahad RF (RF near Kathafali) (Within ML), Satparlia R.F. (0.07 km, E), Kalamegha R.F. (0.2 km, E), Balijori R.F. (Adjoining NE), Jhatikhol R.F. (2.1 km, N), R.F. Near Durubaga (0.52 km, NNW), Giripahar R.F. (1.7 km, S), Makurachata R.F. (3.2 km, SE), (5.8 km, S) Chhengapaharh R.F. (1.5 km, S) Punjipaharh R.F. (6.3 km, NNE) Garjanjor R.F. (0.27 km, NW) Lalma R.F. (6.0 km, N) Korbahal P.F (10.0 km, WNW) Kanthidungri P.F. (1.8 km, SW).
- (vii) Various rivers and nallas are present in the 15 km radius study area. Some of them are: Garia Nala (within ML), Brahmani Nala, Lilari Nalla, Ichha Nadi and Basundhara Nalla. Nearest city is Sundargarh at 30 km NE. The site falls in Seismic zone-II.
- (viii) The proposed project will have a manpower of 205 by OCPL and about 500 through Mine Operator. Water requirement for the project is estimated as 3780 KLD. Which will be sourced from Hirakud reservoir & ground water. NoC for abstraction of 720 Cum/day of ground water has been obtained from CGWA. Further, approval of drawal of 5.55 cusec water from Hirakud Reservoir has also been obtained. Mine discharge water will be collected in a sump pit located in the mine floor from where it will be pumped out and diverted to mine discharge treatment plant consisting of oil and grease trap and sedimentation pond(s) with chemical dozing arrangement to arrest suspended solids and oil and grease. Oil and grease will get generated in the workshop where effluent will be skimmed and separated by oil water skimmer and will be sold to recycling authorized vendor.
- (ix) As per the approved Mining Plan, the maximum connected power load is planned for 45 MW, to be brought through transmission line from Remja substation initially and later from Darlipalli substation of NTPC.
- (x) Total cost of the proposed project will be Rs. 2143 crores.
- (xi) The rejects generated during coal minning will be utilised as per the condition of the Allotment Agreement. The over burden and soil cover will be removed before mining the coal and sent to dumping area as well as backfilled. Soil and overburden is non-toxic in nature, hence, water contamination due to mining is not anticipated. The top soil shall be used simultaneously for topping up over the dumps which will subsequently help in plantation in green belt, avenues, colonies and other areas.

# **51.18.3** The EAF during deliberation noted the following:-

The proposal is for grant to Terms of Reference of Manoharpur and Dipside Manoharpur Coal Mine Project (Expansion of Manoharpur Coal Mine) 16 MTPA an ML area 1848.379 ha. of M/s Odisha Coal and Power Limited, located in, Tehsil Hemgir, District Sundargarh, (Orissa).

Project involves forest land of 618.644 ha (609.205 ha in ML area & 9.439 ha outside ML area) for diversion for non-forestry activity. No application has been applied by project proponent.

**51.18.4** The EAC, after deliberations observed that as per information provided by PP, that current proposal of **expansion will be coming after 10 years**. Committee opined that proposal is very premature. Also PP has not applied for stage-1 Forest clearance. The proposal was **deferred** on above lines.

# Agenda No 51.19

Capacity enhancement of coal washery from 0.96 MTPA to 5.0 MTPA an ML area 0.96 ha. of M/s Bhatia Energy and Minerals Private Limited, located in, at Village- Chhote Dumarpali, Tehsil- Kharsia, District- Raigarh, State (Chhattisgarh) - Consideration of ToR

[IA/CG/CMIN/121489/2019] F.No. J-11015/71/2019-IA.II(M)

- **51.19.1** The proposal is for ToR for proposed Capacity enhancement of coal washery from 0.96 MTPA to 5.0 MTPA with an extension of land use from 8.10 ha to 14.5 ha within existing plant premises of M/s. Bhatia Energy & Minerals Private Limited, unit Rajan Coal Washery located in Village- Chhote Dumarpali, Tehsil- Kharsia, District-Raigarh (Chhattisgarh).
- **51.19.2** 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 No64 N/4, N/8, 64 O/1, 64 O/5 and is bounded by the geographical coordinates ranging from 22°00′9.59″ to 22°00′26.53″ N and longitudes 83°09′36.63″ to 83°10′0.46″E.
- (ii) Coal linkage of the project is proposed for coal washery use for various nearby thermal power plants as per demand
- (iii) Existing: Raw coal is sourced from Raigarh area (Chhal mine/Bauroud Mine SECL).
- (iv) Proposed: Raw coal will be sourced from Raigarh & Korba mines of SECL and neighbouring mines of MCL.
- (v) Joint venture cartel has been formed: Not applicable

- (vi) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- (vii) The project does not falls in Critically Polluted Area (CPA) vide OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance
- (viii) Employment generation, 240 in construction phased and 270 in operational phase will be provided from the project.
- (ix) The project is reported to be beneficial in terms of Social-economic benefits.
- (x) Social Benefits: The project will improve the socio-economic status of the society in the region by generating direct and indirect employment opportunities. The project will contribute additional revenue to the State & Central exchequers in the form of taxes, cess, etc.
  - Economical Benefits: The washing of coal envisages lower content of ash which reduces the handling and logistic cost to power plants and helps them achieve optimum Plant Load Factor (PLF). It also helps in reducing air pollution due to lower ash content.
- (xi) Earlier, the environmental clearance to the project was obtained under EIA Notification, 2006 vide Ministry's letter No140/SEIAA-CG/EC/Coal Wash/RGH/225/10 Raipur, dated: 28/08/2012 for 0.96 MTPA in mine lease area of 8.10 ha out of 14.5 ha.
- (xii) Environmental Clearance for operating 0.96 MTPA capacity issued by State Level Environmental Impact Assessment Authority, Raipur, Chhattisagarh vide letter no: 140/SEIAA-CG/EC/Coal Wash/RGH/225/10 Raipur, dated: 28/08/2012.
- (xiii) The Land use breakup of existing and proposed 8.10/14.50 ha of project land is as given below:

Units in ha

Sr.	Description	Existing	Proposed	Total
No.		0.96 MTPA	4.04	5.00
			MTPA	MTPA
1	Land for washery	2.00	4.40	6.40
2	Land for reject disposal area	1.05	0.70	1.75
3	Land for greenbelt	2.67	0.30	2.97
	development			
4	Land for coal storage yard and	1.10	1.00	2.10
	truck tripling system yard			
5	Land for raw water reservoir	0.40	0.00	0.40
6	Land for fabrication /	0.50	0.00	0.50
	construction yard etc			
7	Others	0.38	0.00	0.38
	Total		14.50	

<sup>\*\*</sup> Note: The land is already in possession of M/s. BEMPL. No additional land is required to be acquired for the expansion

- (xiv) Coal processing by Heavy media bath and heavy media cyclone technologies.
- (xv) Raw coal will be sourced from Korba and Raigarh coal fields of SECL and Lakhanpur and Basundhara coal fields of MCL. All these coal fields are within 100 km from the project site. Transportation of raw coal from mines to washery site will be through road/rail (Chhal – 15 km, Baroud mine – 50 km and Jampali- 55 km of Raigarh coal fields, Gevra-85 km, Dipka-91 km, Kusmunda-86 km). Raw

- coal from Lakhanpur and Basundhara coal fields to washery site will be through rail & road. Washed coal will be transported through our private railway siding at about 0.70 km from site near Robertson station.
- (xvi) No forest land involved in project site. Hence not applicable.
- (xvii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xviii) No national parks, wildlife sanctuaries and eco-sensitive zones within 15 km radius.
- (xix) Existing plant water requirement: 250 KLD. Proposed plant water requirement: 960 KLD. Total requirement after expansion: 1200 KLD
- (xx) The water requirement of 960 KLD for proposed expansion and existing capacity will be met from the Dantar Nala tributary of Mand river.
- (xxi) Application for obtaining the approval of the Central Ground Water Authority for has been submitted on 29<sup>th</sup> December, 2017.
- (xxii) Water allocation for the existing unit of 0.96 MTPA obtained from State Water Resource department vide letter no: 575/F 4-209/S-2/31/OJF/12 dated: 12.02.2019
- (xxiii) Consent to operate renewed by CECB, Raipur vide letter no: 6055/TS/CECB/2018 dated 02/11/2018 and valid till 30/06/2020.
- (xxiv) Dantaar Nalah is at a distance of 0.7 km from plant boundary
- (xxv) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to ....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 to the specific local conditions during the day of sampling.
- (xxvi) No court cases, violation cases are pending against the project of the PP.
- (xxvii) No litigations involved in the operating unit with respect to environment concerns
- (xxviii) No additional land acquisition involved. Capacity enhancement of coal washery from 0.96 MTPA to 5.0 MTPA with an extension of land use from 8.10 ha to 14.5 ha within existing plant premises at Village- Chhote Dumarpali, Tehsil-Kharsia, District- Raigarh, State-Chhattisgarh
- (xxix) The cost of existing plant is about Rs.40 crores. The estimated cost of the proposed project is about Rs.70 Crores. Total cost after expansion will be about Rs. 110 crores. No R&R involved.
- (xxx) Consent to operate renewed by CECB, Raipur vide letter no: 6055/TS/CECB/2018 dated 02/11/2018 and valid till 30/06/2020.

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

- The proposal is for ToR for proposed Capacity enhancement of coal washery from 0.96 MTPA to 5.0 MTPA with an extension of land use from 8.10 ha to 14.5 ha within existing plant premises of M/s. Bhatia Energy & Minerals Private Limited, unit - Rajan Coal Washery located in Village- Chhote Dumarpali, Tehsil- Kharsia, District- Raigarh (Chhattisgarh).
- Environmental Clearance for operating 0.96 MTPA capacity issued by State Level Environmental Impact Assessment Authority, Raipur, Chhattisagarh vide letter no: 140/SEIAA-CG/EC/Coal Wash/RGH/225/10 Raipur, dated: 28/08/2012

• Total requirement after expansion is 1200 KLD. The water requirement of additional 960 KLD for proposed expansion and existing capacity will be met from the Dantar Nala tributary of Mand river.

**51.19.4** The Committee, after deliberations, **recommended** for grant of terms of references to proposed Capacity enhancement of coal washery from 0.96 MTPA to 5.0 MTPA with an extension of land use from 8.10 ha to 14.5 ha within existing plant premises of M/s. Bhatia Energy & Minerals Private Limited, unit - Rajan Coal Washery located in Village- Chhote Dumarpali, Tehsil- Kharsia, District- Raigarh (Chhattisgarh), for preparation of EIA/EMP reports along with public consultation, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable, along with the additional conditions as under:-

- Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA), if applicable.
- Total fresh water requirement shall not exceed 1200 KLD proposed to be met from nallah. No surface or ground water shall be used in coal washery operation.
- Study shall be carried for sustenance of water supply to cater to projected demand of the proposed washery throughout planned life of the washery.
- Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted.
- Ash content below 34% should be maintained in washed coal to be transported beyond 500 km for use in thermal power plants.
- The washing technology so chosen should conform to 'Zero Liquid Discharge'.
- Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- For proper baseline air quality assessment, adequate monitoring stations in the downwind areas based on wind rose pattern of the area, shall be set up for collection of air quality data and air quality modeling.
- Disposal of washery rejects shall be in accordance with the extant policy and guidelines, and environment friendly.
- Thick green belt of adequate width to be provided around the washery to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.
- Traffic Impact Assessment study shall be carried out road transportation (if any).

# Agenda No 51.20

Cluster of Godavarikhani No.1&3 incline and Godavarikhani coal mine (No.2&2A and No.5) (Opencast cum Underground) for 3 MTPA (Normative) / 4 MTPA (Peak) by Opencast and 1.134 MTPA by Underground in an ML area 1927.13 ha of M/s The Singareni Collieries Company Limited located in Mandal Ramagundam District Peddapalli (Telangana) – Consideration of Terms of Reference

[Online No. IA/TG/CMIN/113648/2019; F.No.23-78/2018-IA.III(M)]

- The proposal is for grant of ToR for expansion of Cluster of Godavarikhani No.1&3 incline and Godavarikhani coal mine (No.2&2A and No.5) (Opencast cum Underground) for 3 MTPA (Normative) / 4 MTPA (Peak) by Opencast and 1.134 MTPA by Undergroud in an ML area 1927.13 ha of M/s The Singareni Collieries Company Limited located in Mandal Ramagundam District Peddapalli (Telangana).
- **51.20.2** During deliberations, the EAC noted the following:-

ToR for the cluster of Cluster of Godavarikhani No.1&3 incline and Godavarikhani coal mine (No.2&2A and No.5) (Opencast cum Underground) of 1.734 MTPA of M/s The Singareni Collieries Company Limited located in Mandal Ramagundam District Peddapalli (Telangana) was granted by the Ministry on 26th June, 2019.

The proposal was considered by EAC Violation sector and further recommended for issuance of ToR based on Ministry's Notification dated 14th March, 2017.

PP has not yet been granted environmental clearance for the earlier issued ToR. PP has submitted that Public Hearing was conducted on 28<sup>th</sup> November, 2019 based on ToR dated 26<sup>th</sup> June, 2019. As the proposal involves violation due to excess production, Action from State government is also required to be submitted by PP.

51.21.3 The EAC, after detailed deliberations insisted that as per EIA Notification, project shall have first environmental clearance for the consideration of expansion case. Here, no EC has been granted by the Ministry so further expansion of the proposal cannot be considered. The Committee observed that PP/Consultant has not applied their mind before application. PP shall at least read the provisions of the EIA Notification, 2006 and its amendments thereof. The Committee noted that the Project Proponent/Consultant shall apply his mind before submission of such premature proposal.

The Committee therefore **returned the proposal** in present form.

# **Agenda No 51.21**

Expansion of Khairaha Underground Coal Mining Project from 0.585 MTPA to 0.819 MTPA of M/s South Eastern Coalfields Limited in located in District Shahdol (Madhya Pradesh)-Consideration of Extension of validity of Environmental Clearance

# [IA/MP/CMIN/125206/2019, J-11015/72/2004-IA-II (M)]

**51.21.1** The proposal is of extension of Environmental Clearance validity to the Expansion of Expansion of Khairaha Underground Coal Mining Project from 0.585 MTPA to 0.819 MTPA of M/s South Eastern Coalfields Limited in located in District Shahdol (Madhya Pradesh).

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

The proposal is for continuation of environmental clearance dated 11<sup>th</sup> January, 2019 to the Expansion of Khairaha Underground Coal Mining Project from 0.585 MTPA to 0.819 MTPA of M/s South Eastern Coalfields Limited in located in District Shahdol (Madhya Pradesh).

The project was granted environmental clearance by the Ministry vide letter dated 11<sup>th</sup> January, 2019 subject to compliance of certain terms and conditions, inter-alia including the following:-

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 Ministry's Regional Office at Bhopal has conducted site inspection of the project site on 20<sup>th</sup> September, 2019 to monitor the status of compliance of conditions stipulated in the environmental clearance dated 11<sup>th</sup> January, 2019, and submitted report vide their letter dated 3<sup>rd</sup> October, 2019. The project proponent has submitted action plan to the EAC. The same was, however, yet to be endorsed by the Regional Office.

One Season data has been submitted for the period April to June, 2019 and total no. of Station were nine. Maximum concentration of PM10 at monitoring stations in villages is  $\sim$ 90 ug/m3.

Compliance of specific conditions mentioned in EC was presented to EAC. Further Action taken report shall be submitted to Ministry's Regional Office.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended the Proposal.

**51.21.2** The EAC, after detailed deliberations duly considering observations of the Ministry's Regional Office in their letter dated 20<sup>th</sup> September, 2019, **recommended** for continuance of the environmental clearance dated 11<sup>th</sup> 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.

The Committee also recommended the additional conditions

- EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.
- Also, EAC asked project proponent to plant 50,000 nos. of native trees with broad leaves along the villages and transportation route to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Office.
- The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the

floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.

 The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

# Agenda No 51.22

# Any other Item with the permission of Chairman

Expansion of Rajmahal opencast coal mine project (17.0 MTPA capacity) 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, State (Jharkhand) - For Amendment EC

**51.22.1** The proposal is for expansion of Rajmahal (Expansion) OCP from 17.00 MTPA to 23.80 MTPA for Rajmahal (Expansion) OC Project of 23.80 MTPA capacity in mine lease area of 1978.00 ha of M/s Eastern Coalfields LTD located in village Simra, Tehsil Boarijore, District Godda (Jharkhand) under Clause 7(ii) of EIA Notification, 2006

- 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 No 720/8 and is bounded by the geographical coordinates ranging from  $25^{\circ}\,01'\,16''$  N to  $25^{\circ}\,03'\,21''$  N and longitudes  $87^{\circ}\,18'\,16''$  E and  $87^{\circ}\,24'\,11''$  E.
- ii. Coal linkage of the project is proposed for NTPC Farakka & NTPC Kahalgaon use for power plant.
- iii. No Joint venture cartel has been formed.
- iv. Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13<sup>th</sup> January, 2010 has imposed moratorium on grant of environment clearance.
- v. Employment generation, Departmental Manpower: 2178 (As on 01.04.2019) Contractual workers: 2269 and employment to 532 persons will be provided from the project due to land acquisition.
- vi. The project is reported to be beneficial in terms of economic growth of local population, employment generation both direct and indirect and community development under CSR.
- vii. Earlier, the environment clearance to the project was obtained under EIA Notification, 1994 vide Ministry's letter No J-11015/30/2004 IA.II(M) dated 11.05.2005 for 17.00 MTPA in mine lease area of 1978.00 ha and Revalidation of EC as per EIA Notification, 2006 is recommended in 49th EAC held on 22.10.2019.
- viii. Total mining lease area as per block allotment is 1978.00 ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the Board of Directors of ECL on 24.09.2013.
- ix. The land usage pattern of the project is as follows:

# Pre-mining land use details

(Area in Ha)

Land Use	Within ML Area (Ha)	Outside ML Area (Ha)	Total (Ha)
Agriculture / Cultivable Land	1534.76	143.22	1677.98
Forest Land	107.39		107.39
Waste / Danga Land	73.00	40.05	113.05
Surface Water Bodies / tanks	13.70	-	13.70
Settlements / Village	46.15		46.15
Others(Specify) Govt land	-	19.73	19.73
Total Area	1775.00	203.00	1978.00

# Present-mining land use details

Land	Use C	lasses		Core	Zone	
SI No.	SI. No.	Level-II	Within ML Area (Ha)	Outside ML Area (Ha)	Total Area (Ha)	% of Total
	i	Dense Forest	(па)	(па)	(па)	_
1	ii	Open Forest	_	_		_
-		Forest	_	_	-	_
	i	Scrubs	203.00	_	203.00	10.26
	ii	Social Forestry	46.00	_	46.00	2.33
2	iii	Plantation on OB	6.00	_	6.00	0.30
_	iv	Plantation on Backfill	181.00	_	181.00	9.15
	Total	Plantation including Scrubs	436.00	-	436.00	22.04
	i	Crop land	49.00	-	49.00	2.48
3	ii	Fallow Land	443.00	-	443.00	22.40
	Total	Agriculture Land	492.00	-	492.00	24.87
_	i	Waste Land	73.00	-	73.00	3.69
4	Total	Waste Land	73.00	-	73.00	3.69
	i	Advance Quarry area	22.00	-	22.00	1.11
	ii	Coal Quarry	111.00	-	111.00	5.61
	iii	Barren OB Dump	25.00	-	25.00	1.26
5	iv	Back Fill	449.00	-	449.00	22.70
	V	Coal Dump	2.00	-	2.00	0.10
	vi	Water Filled Quarry	25.00	-	25.00	1.26
	Total	Mining Area	634.00	-	634.00	32.05
	i	Urban Settlements including Mahagama Colony of the Project	77.00	123.00	200.00	10.11
6	ii	Rural Settlements	35.00	-	35.00	1.77
O	iii	Project Infrastructure including Industrial Settlements	20.00	80.00	100.00	5.06
	Total	Settlement Area	132.00	203.00	335.00	16.94
7	i	River/ Ponds	8.00	-	8.00	0.40
′	Total River/ Ponds		8.00	-	8.00	0.40
Tota	l Area		1775.00	203.00	1978.00	100.00

# **Post Mining**

Land Use	Plantation (Ha)	Water Body (Ha)	Public Use (Ha)	Others Undisturbed (Ha)	Total (Ha)
External OB Dump	276.00	-	-	-	276.00
Excavation	1144.00	200.00	-	-	1344.00
Social Forestry / Green Belt	-	-	-	46.00	46.00
Plantation	12.00	-	-	-	12.00
Urban Settlements including	-	-	-	200.00	200.00

Mahagama Colony					
of the Project					
Project					
Infrastructure	33.00			67.00	100.00
including Industrial	33.00	_	_	67.00	100.00
Settlements					
Total	1465.00	200.00	0.00	313.00	1978.00

- x. Total geological reserve reported in the mine lease area is 493.04 (as on 01.04.1992) with 185.50 MT (as on 01.04.2019) mineable reserve. Out of total mineable reserve of 185.50MT, 185.50 MT (as on 01.04.2019) are available for extraction. Percent of extraction is 100%.
- xi. 13 seams with thickness ranging from 1.35 m to 26.53 m are workable. Grade of coal is G13, stripping ratio 2.14 cum/t, while gradient is 2° to 4°.
- xii. Method of mining operations envisages by Opencast method.
- xiii. Balance Life of mine is 9 years.
- xiv. The project has 2 external OB dumps in an area of 276 ha with 60 m height and 113.40 Mm<sup>3</sup> of OB as per approved Mining Plan. Internal OB in an area of 1344.00 ha with 453.25 Mm<sup>3</sup> of OB is envisaged in the project.
- xv. Total quarry area is 1344 ha out of which backfilling will be done in 1144 ha while final mine void will be created in an area of 200 ha with a depth of 20 m (average). Backfilled quarry area of 1144 ha shall be reclaimed with plantation. Final mine void will be converted to lagoon.
- xvi. Transportation of coal has been proposed by colliery dumpers in mine pit head, from surface to siding by Silo Loading System situated at MGR (Merry GO Round) by conveyer belt and at sidings by railway wagons.
- xvii. Reclamation Plan in an area of 1511 ha, comprising of 276 ha of external dump, 1144 ha of internal dump. In addition to this, an area of 358 ha, included in the safety zone/rationalization area, has also been proposed for green belt development.
- xviii. 107.39 ha of forest land has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 107.42 ha of forest land for non-forestry purposes has been obtained vide following MoEF&CC letter No.

Forest Area within	Stage – I FC		Stage – II FC	
the Project Boundary				
in Ha				
17.64	8-303/89-FC	dated	8-303/89-FC	dated
	19.07.1992		26.10.1993	
20.03	8-7/98-FC dated :	15.03.1995	8-7/98-FC dated	10.12.2002
69.75	8-89/2003-FC	dated	8-89/2003-FC	dated
	03.10.2003		27.08.2004	
Total:- 107.42 Ha				

- xix. No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- xx. The ground water level has been reported to be varying between 5.50 m to 9.15 m during pre-monsoon and between 1.70 m to 6.40 m during post-monsoon. Total water requirement for the project is 4250 KLD.

- xxi. An Online Application for "Permission to Dewater Ground Water for Mining Industry" has been submitted vide application number 21-4/282/JH/MIN/2018 dated 27.06.2018 and Application Fee has been paid.
- xxii. Public hearing for the project of 17.00 MTPA capacity in an area of 1978.00 ha was conducted on 26.07.2003 at Rajmahal, District: Godda, Jharkhand & Public Notice for EC Revalidation issued on 03.08.2019. Major issues raised in the public hearing include following issues given in the table. Appropriate action to address the issues raised in the Public Hearing have already been taken/proposed to be taken are as under:

Issues raised by the	Compliance made	Suggestions made	Compliance made till	
public	till date	by the Public	date	
·		Hearing Panel.		
1. Air & Noise	Latest technologies	1. To install ETP	Installed	
pollution caused	have been adopted.	2. To install water	In process	
due to transport of	Coal is transported	meter		
coal and OB & due	through conveyors	3.Ensure	Provided	
to CHP operation in	to and loaded	uninterrupted		
adjacent village of	through silos	power for pollution		
Nimakala	installed at MGR	control devices		
2. Unemployment	Railway Siding	4. To change to	Latest technologies	
owing to	1612 employments	new technologies	like mist sprays, mist	
acquisition of	provided in lieu of	as and when	guns have been	
cultivable land	land, further 592	available.	adopted	
	employments to be			
3. Provision of basic	provided	5. Prepare and	Installed, to be	
amenities to local	Being provided as	submit plan of rain	augmented further	
population	per R&R & CSR	water harvesting.		
	policies of CIL			

- xxiii. Consent to Operate for the existing capacity was obtained from the State PCB wide file no. JSPCB/HO/RNC/CTO-1112442/2017/86 on 30.01.2017 and is valid till 31.12.2021.
- xxiv. The drainage of the area is controlled by a seasonal nallah, namely, Dhullia nallah. However, there is no stream within the project boundary.
- xxv. Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to JSPCB 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 to the specific local conditions during the day of sampling.
- xxvi. No court cases, violation cases are pending against the project of the PP except land related.
- xxvii. The project does not involve violation of the EIA Notification, 2006 and amendment issued thereunder. The coal production from the mine was started from the year 1988 89 onwards. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations. The coal production, realized from the project, from 1993-94 onwards, is as under:

Year	EC sanctioned capacity (MTPA)	Actual production (MT)	Excess production beyond the EC sanctioned capacity
1988 - 89		2.7	-
1989 - 90		1.2	-
1990 - 91		2.5	-
1991 - 92		4.2	-
1992 - 93	10.5	3.9	-
1993 - 94	10.5	4.2	-
1994 - 95	10.5	6.0	-
1995 - 96	10.5	8.5	-
1996 - 97	10.5	10.0	-
1997 - 98	10.5	9.2	-
1998 - 99	10.5	8.4	-
1999 - 00	10.5	8.2	-
2000 - 01	10.5	10.0	-
2001 - 01	10.5	9.3	-
2002 - 03	10.5	8.8	-
2003 - 04	10.5	10.5	-
2004 - 05	10.5	8.7	-
2005 - 06	17.0	11.5	-
2006 - 07	17.0	11.6	-
2007 - 08	17.0	7.1	-
2008 - 09	17.0	10.7	-
2009 - 10	17.0	11.3	-
2010 - 11	17.0	12.9	-
2011 - 12	17.0	11.5	-
2012 - 13	17.0	13.4	-
2013 - 14	17.0	14.3	-
2014 - 15	17.0	15.9	-
2015 - 16	17.0	15.6	-
2016 - 17	17.0	14.4	-
2017 - 18	17.0	14.9	-
2018 -	17.0	17.0	-
19			

xxviii. The total number of PAFs envisaged in the PR was 5931 from 13 villages. Out of these, 2647 PAFs have been rehabilitated and the remaining PAFs will be rehabilitated as the project progresses.

xxix. Total cost of the project is Rs 207835 lakhs. Cost of production is Rs. 967.33/- per tonne., CSR cost is 2% of average net profit of the company for last three financial years forms the annual budget for CSR (Corporate Social Responsibility) / ESC. (Total Expenditure in Rajmahal OCP on CSR during FY 2016-17, FY 2017-18 AND FY2018-19 were Rs. 232.83 Lakhs, Rs. 97.94 Lakhs AND Rs. 362.87 lakhs respectively), The total approved R&R cost was Rs. 1665.00 Lakh (As per approved PR) while expenditure on R&R in the project till July'19 is Rs. 130.0 crores. Environment Management Cost is Rs

- 6.00/te of coal produced is kept for Revenue Expenditure on Environment Management for carrying out environmental control measures.
- xxx. Consent to Operate for the existing capacity was obtained from the State PCB wide file no. JSPCB/HO/RNC/CTO-1112442/2017/86 on 30.01.2017 and is valid till 31.12.2021

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

The proposal is for expansion of Rajmahal (Expansion) OCP from 17.00 MTPA to 23.80 MTPA for Rajmahal (Expansion) OC Project of 23.80 MTPA capacity in mine lease area of 1978.00 ha of M/s Eastern Coalfields LTD located in village Simra, Tehsil Boarijore, District Godda (Jharkhand) under Clause 7(ii) of EIA Notification, 2006

Public hearing for the project of 17.00 MTPA capacity in an area of 1978.00 ha was conducted on 26.07.2003 at Rajmahal, District: Godda, Jharkhand & Public Notice for EC Revalidation issued on 03.08.2019.

107.39 ha of forest land has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 107.42 ha of forest land for non-forestry purposes has been obtained

Environment clearance to the project was obtained under EIA Notification, 1994 vide Ministry's letter No J-11015/30/2004 – IA.II(M) dated 11.05.2005 for 17.00 MTPA in mine lease area of 1978.00 ha and Revalidation of EC as per EIA Notification, 2006 is recommended in 49th EAC held on 22.10.2019. However, approval of competent authority is pending at Ministry.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

**51.22.4** The EAC, therefore, after deliberations at the first instant was not pleased to consider the project as the revalidation of EC dated 11<sup>th</sup> May, 2005 is still under consideration vis-a-vis PP applied for expansion also. Further, Certified compliance status of EC conditions duly by RO, Ranchi requires strict monitoring to further ensure the compliance of EC conditions. EAC desired that the MoC may direct CIL subsidiaries

to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.

The Committee after detailed deliberation and importance of the project, EAC **recommended** for grant of environmental clearance for expansion of Rajmahal (Expansion) OCP from 17.00 MTPA to 23.80 MTPA for Rajmahal (Expansion) OC Project of 23.80 MTPA capacity in mine lease area of 1978.00 ha of M/s Eastern Coalfields LTD located in village Simra, Tehsil Boarijore, District Godda (Jharkhand), 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 and mentioned below:

- (i). The recommendation is subject to approval of revalidation of previous EC dated  $11^{th}$  May, 2005
- (ii). EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.
- (iii). The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 23.80 MTPA prior to commencement of the increased production.
- (iv). Transportation of coal from Coal Handling Plant shall be through covered trucks.
- (v). To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.
- (vi). 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.
- (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). 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.
- (x). 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.
- (xi). The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 21 MTPA.
- (xii). Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.

- (xiii). 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.
- (xiv). The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on  $1^{\rm st}$  May, 2018
- (xv). Compliance of all the non-compliances and partially complied conditions by Regional Office, Ranchi for the project of EC dated 11th May, 2005
- (xvi). Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (xvii). Project proponent to plant 100,000 nos. of native trees with broad leaves along the villages and transportation route to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer
- (xviii). The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xix). Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- (xx). Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xxi). Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".

- (xxii). The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- (xxiii). The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

# Agenda No 51.23

Expansion of Dudhichua Opencast Coal Mining Project from 15.5 to 17.5 MTPA in mine lease area of 1752 ha of M/s Northern Coalfields Limited located at Tehsil Waidhan District Singrauli (MP) and Tehsil Dudhi, District Sonebhadra (UP)

- **51.23.1** The proposal is for environment clearance to the expansion of Dudhichua Opencast Coal Mining Project from 15.5 to 17.5 MTPA in an area of 1752 ha of M/s Northern Coalfields Limited located in Tehsil Waidhan, District Singrauli (Madhya Pradesh) and Tehsil Dudhi, District Sonebhadra (Uttar Pradesh).
- **51.23.2** The EAC, in its meeting held on December 13-14, 2018 considered and recommended the instant proposal for grant of environmental clearance (EC) to the expansion of Dudhichua Opencast Coal Mining Project from 15.5 to 17.5 MTPA in mine lease area of 1752 ha of M/s Northern Coalfields Limited located at Dudhichua, Post Khadia, District Sonebhadra (UP) and Tehsil Waidhan District Singrauli (MP) for a period of one year, under the provisions of the EIA Notification, 2006, exempting the public hearing under provisions contained in para 7(ii) of the EIA notification, 2006 and considering of the parameters mentioned in the Ministry's OM dated 15<sup>th</sup> September, 2017.
- **51.23.3** It was noted that MoM of dated 3<sup>rd</sup> April, 2019 between MoC and MoEF&CC mentions that, EC is generally granted for the life of the project or 30 years whichever is earlier as per EIA Notification, 2006. However, EAC recommends granting EC for one year only for the purpose of the review of the compliance of the EC conditions.

In view of the compliance submitted to Regional Office (RO) twice in every year and subsequent inspection by officers of MoEF&CC, it was requested to take a relook on coming back to EAC for compliance and consider longer duration for EC. Repetitive nature of EC for each expansion of capacity is time & cost ineffective. It was requested for considering mitigation based EC rather than capacity based or in any case range in capacity could be provided.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for amendments in Environmental Clearance (EC).

**51.23.4** The EAC after deliberation and considering the above facts, **recommended** the proposal for 30 years or life of the mine whichever is earlier as per EIA Notification, 2006 and subsequent amendments thereto.

The EAC has also recommended the following specific conditions: -

- The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- The illumination and sound at night at project sites disturb the villages in respect
  of both human and animal population. Consequent sleeping disorders and stress
  may affect the health in the villages located close to mining operations.
  Habitations have a right for darkness and minimal noise levels at night. PPs must

- ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

# **Generic ToR for coal washery**

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

transport of washed coal and rejects should generally be avoided. In case, the TPP is within 10km radius, it should be through conveyer belt. If transport by rail is not feasible because of the topography of the area, the option for transport by road be examined in detail and its impacts along with the mitigation measures should be clearly brought out in EIA/EMP report.

- xii. Details of various facilities proposed to be provided in terms of parking, rest areas, canteen etc. to the personnel involved in mineral transportation, workshop and effluents/pollution load from these activities should be provided.
- xiii. Impacts of CHP, if any, on air and water quality should also be spelt out alongwith Action Plan.
- xiv. O.M.no.J-ll0I3/25/2014-IA.I dated 11<sup>th</sup> August, 2014 to be followed with regard to CSR activities.
- xv. Details of Public Hearing, Notice(s) issued in newspapers, proceedings/minutes of Public Hearing, points raised by the general public and response/commitments made by the proponent along with the Action Plan and budgetary provisions be submitted in tabular form. If the Public Hearing is in the regional language, an authenticated English translation of the same should be provided. Status of any litigations/ court cases filed/pending, if any, against the project should be mentioned in EIA.
- xvi. Analysis of samples indicating the following be submitted:

Characteristics of coal prior to washing (this includes grade of coal, other characteristics of ash, S and heavy levels of metals such as Hg, As, Pb, Cr etc).

Characteristics and quantum of coal after washing.

Characteristics and quantum of coal rejects.

- xvii. Details of management/disposal/use of coal rejects should be provided. The rejects should be used in TPP located close to the washery as far as possible. If TPP is within a reasonable distance (10 km), transportation should be by conveyor belt. If it is far away, the transportation should be by rail as far as possible.
- xviii. Copies of MOU/Agreement with linkages (for stand-alone washery) for the capacity for which EC is being sought should be submitted.
  - xix. Corporate Environment Responsibility:
    - a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
    - b) The Environment Policy must prescribe for operating standard process/procedures to bring into focus any environmental infringements/deviation/violation of the or forest norms/conditions.
    - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
    - d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
  - xx. A detailed action Plan for Corporate Social Responsibility for the project affected people and people living in and around the project area should be provided.
  - xxi. Permission of drawl of water shall be pre-requisite for consideration of EC.

- xxii. Wastewater /effluent should confirm to the effluent standards as prescribed under Environment (Protection) Act, 1986
- xxiii. Details of washed coal, middling and rejects along with the MoU with the endusers should be submitted.

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### GENERIC TOR FOR AN OPENCAST COALMINE PROJECT for EC

- (i) An EIA-EMP Report shall be prepared for..... MTPA rated capacity in an ML/project area of.....ha based on the generic structure specified in Appendix III of the EIA Notification, 2006.
- (ii) An EIA-EMP Report would be prepared for..... MTPA rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for..... MTPA of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season (three months) except monsoon.
- (iii) A toposheet specifying locations of the State, District and Project site should be provided.
- (iv) A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
- (v) Land use map (1: 50,000 scale) based on a recent satellite imagery of the study area may also be provided with explanatory note on the land use.
- (vi) Map showing the core zone delineating the agricultural land (irrigated and unirrigated, 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:

SI.	Landuse	Within	ML	Outside	ML	Total
No.		area (ha)		area (ha)		
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 (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, NO<sub>x</sub> and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil along with one-season met data coinciding with the same season for AAQ collection period should be provided.
- (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 though 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 longterm 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	5 <sup>th</sup>	10 <sup>th</sup>	20 <sup>th</sup>	24 <sup>th</sup> Year
		(1 <sup>st</sup> Year)	Year	Year	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					

<sup>\*</sup>As a representative example

Table 2: Stage Wise Cumulative Plantation

S. No.	YEAR*	Green	External	Backfilled	Others(Undisturbed	TOTAL
		Belt	Dump	Area	Area/etc)	
1.	1 <sup>st</sup> year					
2.	3 <sup>rd</sup> year					
3.	5 <sup>th</sup> year					
4.	10 <sup>th</sup> year					
5.	15 <sup>th</sup> year					
6.	20 <sup>th</sup> year					
7.	25 <sup>th</sup> year					
8.	30 <sup>th</sup> year					
9.	34 <sup>th</sup>					
	year(end					

	of mine					
	life)					
10.	34- 37 <sup>th</sup>					
	34- 37 <sup>th</sup> Year (Post- mining)					
	mining)					

<sup>\*</sup>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	Land Use (ha	)			
	during Mining					
		Plantation	Water	Public Use	Undisturbed	TOTAL
			Body			
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:

- 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 focus into any infringements/deviation/violation of the environmental forest norms/conditions.
- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
- d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
- (xl) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.
- (xli) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
- (xlii) Status of any litigations/ court cases filed/pending on the project should be provided.
- (xliii) Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
- (xliv) Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

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

TOTAL	TOTAL	Date of	Extent of	Balance	Status of
ML/PROJECT	FORESTLAND	FC	forestland	area for	appl for.
AREA (ha)	(ha)			which FC	diversion of
				is yet to	forestland
				be	
				obtained	
		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 unirrigated, 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	Area under	Area	Under	Area	under	Both
	use		Surface	Mining	Rights	(ha)		
			Rights(ha)	(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 though the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- (xii) One-season (other than monsoon) primary baseline data on environmental quality air (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, NO<sub>x</sub> and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil along with one-season met data coinciding with the same season for AAQ collection period should be provided.
- (xiii) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected

on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.

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

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

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

Total	ML	Total	Date of FC	Extent	Balance area	Status	of
/Project	Area	Forest		of	for which FC	appl.	For
(ha)		Land		Forest	is yet to be	diversion	of

(ha)		Land	obtained	forest land
	If more than one provide details of			
	each FC			

## **ANNEXURE-4**

# GENERIC TORS FOR AN OPENCAST-CUM-UNDERGROUND COALMINE PROJECT

- (i) An EIA-EMP Report would be prepared for a combined peak capacity of .....MTPA 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.

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## **ANNEXURE-5**

12/13/2019

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

Subject: Re: Revised draft Minutes of 51t EAC meeting held on December 5, 2019

To: Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in>

Cc: JD Munna Shah <munna.shah@gov.in>

Date: 12/13/19 01:25 PM From: navin chandra <navinchandrarrl@yahoo.com>

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

13/12/2019

Dear Dr. Lal,

The Finalized MoM of the 51st Meeting of EAC coal, held on 01/12/2019, sent by you now are in order. These are approved and ready for uploading on the website of MoEF&CC.

Regards,

yours sincerely,

(NAVIN CHANDRA)

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Dr. Navin Chandra,
Vice Chancellor, IES University, Bhopal
Chairman, EAC, 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

navinchandrarrl@yahoo.com, navinchandraampri@gmail.com

PARTICIPANTS IN 51<sup>st</sup> EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 5<sup>th</sup> December, 2019. ON COAL SECTOR PROJECTS.

SI. No.	List of Participants Expe Committee (Coal Mining)		Signature
1.	Dr. Navin Chandra	lavin Chandra Chairman	
2.	Dr. N. P. Shukla	Member	,
3.	Dr. Jai Krishna Pandey	Member	Kander
4.	Dr. Sharachchandra Lele	Member	
5.	Dr. G.P.Kundargi	Member	Worden's 12/19
6.	Sh. N.S. Mondal	Member	WOV5/12/2019
7.	Dr. R.K.Giri	Member	
8.	Dr. Manjari Srivastava	Member	Miraslav 5.12.19
9.	Dr S.K.Paliwal	Member	
10.	Dr. S.K.Gupta	Member	
11.	Shri N. Mohan Karnat	Member	
12.	Sh. S.D.Vora	Member	2
13.	Dr. R.B. Lal	Member Secretary	