

**MINUTES OF THE 62nd EAC (THERMAL & COAL MINING PROJECTS) MEETING
HELD ON 23 – 24 August, 2016.**

A. The 62nd meeting of the Expert Appraisal Committee (EAC) for Thermal & Coal mining projects was held on **23 – 24 August, 2016** in the Ministry to consider the proposals relating to coal mining sector. The list of participants and the project proponents are at Annexure-I & II respectively.

B. Confirmation of minutes:

The Committee confirmed minutes of the 61st EAC meeting held on 28-29 July, 2016.

C. The following proposals were considered.

Agenda 62.1

Expansion of Tapin South OCP from 0.06 MTPA to 2.00 MTPA (Normative)/2.50 MTPA Peak with increase in ML area from 134.56 ha to 178.06 ha in Phase-I and up to 277.15 ha in Phase-II of M/s Central Coalfields Limited located in District Ramgarh (Jharkhand) - For consideration of EC

62.1.1 The proposal is for grant of Environmental Clearance to expansion of Tapin South Open Cast Coal Mine project from 0.06 MTPA to 2.00 MTPA (Normative)/2.50 MTPA (Peak) with increase in mine lease from 134.56 ha to 178.06 ha in Phase-I and up to 277.15 ha in Phase-II of M/s Central Coalfields Limited located in District Ramgarh (Jharkhand).

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

- (i) The project for Tapin South Expansion OCP from 0.06 MTPA to 2 MTPA (Normative)/2.50 MTPA (peak) was accorded TOR vide letter No.J-11015/155/2013-IA.II(M) dated 20th May, 2014 which was further modified vide letters dated 29th May, 2015 and 1st September, 2015.
- (ii) Project Report of Tapin South Expansion OCP was approved by CCL Board in August, 2012 with project area of 277.15 ha. The mining operations are to be expanded in two phases. During phase-I, all mining and allied activities shall be limited to 178.06 ha of non-forest land/released and utilized forest land. In 2nd phase, mining will continue over remaining project area; the total project area of both phases is 277.15 ha including forest land as well as non-forest land.
- (iii) The present proposal is limited to EC for first phase only (as per prescribed ToR).
- (iv) Latitude and longitude of the project site are 23° 49' 27" to 23° 50' 00" N and 85° 28' 17" to 85° 29' 27" E respectively.
- (v) Joint Venture: No Joint Venture
- (vi) Coal Linkage: Basket linkage, Kedla Washery and other miscellaneous consumers.
- (vii) Employment generated/to be generated: 112 already given. 70 to be given.
- (viii) Benefits of the project: Improvements in Physical Infrastructure; Improvements in Social Infrastructure; Increase in Employment Potential; Contribution to the Exchequer; Meet energy and steel sector requirement; Productive utilization of existing manpower of project
- (ix) Land usage of the project will be as follows:

Land use details:

Sl. No.	Particular	Land required (Phase I)		
		Forest Land (Ha)	Non-Forest Land (Ha)	Total Land (Ha)
1	Quarry	0.0	89.78	89.78
2	Industrial area	0.0	6.75	6.75
3	Haul road	0.0	1.9	1.9
4	External OB Dump	0.0	42.30	42.30
6	Green Belt	0.0	18.64	18.64
7	Safety zone	0.0	18.69	18.69
Total		0.0	178.06	178.06

Pre-Mining:

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

Post- Mining:

Particulars	Area (Ha)	
Quarry/Void	47.93	Mining will continue in Phase II
Internal Dump/Backfilled Area	41.85 Ha	
Industrial area	6.75	Will be used further
Haul road	1.9	
External OB Dump	42.30	Grassland
Green Belt	18.64	Plantation
Safety zone	18.69	Plantation
Total	178.06	

(x) Total geological reserve is 73.37 MT. The mineable reserve 8.67 MT, extractable reserve is 8.67 MT. The per cent of extraction would be 100 %.

(xi) The coal grade is W-IV The stripping ratio is 2.97 Cum/tonne. The average Gradient is 3- 10 deg. There will be 10 seams (VIII C, VIII A, VIII ,VII A, VII ,VI,VA, IV/V Combined and II) with thickness ranging.

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

(xii) Total estimated water requirement is 1412m³/day (Potable:366 m³/day; Industrial :1046 m³/day) . The level of ground water ranges from 3.77 m to 9.67 m.

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

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

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

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

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

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

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

(xx) Cost: Total capital cost of the project is Rs. 331.98 Crores. CSR Cost As per CSR policy & Companies Act, 2013. R&R Cost Rs. 600 lakhs. Environmental Management Cost Rs. 761.95 Lakhs.

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

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

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

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

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

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

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

establish 10+2 school under CSR in the area so that village children don't have to outside for getting education etc.

62.1.3 The Committee, after detailed deliberations (in the 62nd meeting on 23 -24 August, 2016) observed the following:

(i) The ToR for the project was issued vide letter dated 20th May, 2014 with validity for a period of two years. As such, the said ToR is no more valid now, and the proposal for grant of EC cannot be considered by the EAC without a valid ToR. The PP was advised to approach the MoEFCC in this regard.

(ii) With a view to save the PP's time for consideration of their proposal in case the MoEFCC extends the ToR validity, the EAC pointed out that there are discrepancies in the documents submitted vis-à-vis the ToR issued for the project and lack of clarity, in respect of the following:-

- (a) Present production capacity (0.06 or 0.6 MTPA)
- (b) Existing Mine Lease area
- (c) Data in respect of air and water quality management
- (d) Over burden management
- (e) Coal transport
- (f) Usage of unclear Terminology in the documentation
- (g) PP should plan for railway sidings in mines and washery, rail connectivity is coming up shortly, to stop long distance coal transport being done from all units of the area and improvement in air pollution.
- (h) The project proponent would also need to submit the compliance of the conditions stipulated in the Consent to Operate issued for the project by the SPCB.

62.1.4 *Consideration of the proposal was deferred till a decision is taken by the MoEFCC on validity of the ToR.*

Agenda 62.2

Expansion of Dipka Opencast Coal mine Project from 31 MTPA to 35 MTPA of M/s South Eastern Coalfields Limited in ML area of 1999.41 ha located in District Korba (Chhattisgarh) - For consideration of TOR

62.2.1 The proposal is for grant of Terms of Reference for expansion of Dipka Opencast Coal Mine project from 31 MTPA to 35 MTPA of M/s South Eastern Coalfields Limited in ML area of 1999.41 ha located in District Korba (Chhattisgarh).

62.2.2 *The proposal was not considered as the EAC was informed that vide their letter dated today (i.e. 23rd August 2016) addressed to the Member Secretary, the PP had withdrawn their proposal as they had at the last moment observed certain shortcomings in the documents submitted to the EAC Members. The PP was also asked, when next approaching the EAC, to respond to the points raised by the ERC, a copy which was made available to the PP.*

Agenda 62.3

Expansion of Gevra Opencast Coal Mine project from 41 MTPA to 50 MTPA of M/s South Eastern Coalfields Limited in a total ML area of 4184.486 ha located in District Korba (Chhattisgarh) - For consideration of TOR

62.3.1 The proposal is for grant of Terms of Reference for expansion of Gevra Opencast Coal Mine project from 41 MTPA to 50 MTPA of M/s South Eastern Coalfields Limited in a total ML area of 4184.486 ha located in District Korba (Chhattisgarh).

62.3.2 *The proposal was not considered as the EAC was informed that vide their letter dated today (i.e. 23rd August 2016) addressed to the Member Secretary, the PP had withdrawn their proposal as they had at the last moment observed certain shortcomings in the documents submitted to the EAC Members. The PP was also asked, when next approaching the EAC, to respond to the points raised by the ERC, a copy which was made available to the PP.*

Agenda 62.4

Expansion of Naheriya Underground coal mine project from 0.36 MTPA to 0.54 MTPA of M/s Western Coalfields Limited within the existing ML area of 300 ha located in tehsil Parasia, District Chhindwara (Madhya Pradesh) - For Further Consideration of EC

62.4.1 The proposal is for expansion of Naheriya Underground coal mine project from 0.36 MTPA to 0.54 MTPA of M/s Western Coalfields Limited within the existing ML area of 300 ha located in tehsil Parasia, District Chhindwara (Madhya Pradesh) under Clause 7(ii) of the EIA Notification, 2006.

62.4.2 The proposal was earlier considered in 53rd EAC meeting held on 17-18 March, 2016. During the meeting, the observations of the Committee were as under:-

Quote “(i) The project proponent has mentioned that they have approval of a scheme from the competent authority. The PP stated that the two documents i.e. scheme and mine plan are same. The other issues are related to mine water discharge with low pH which is ranging between 2.13 and 4.04 on many occasions which is a clear indication of non-compliance of discharge standards. This is also a violation of the EC condition (Sl. ix of the compliance report submitted by the Regional Office). The other issue € relates to air quality in respect of PM 10 which is much above the ambient air quality standards – it is as high as 241 ug/m³ as against standard of 100 ug/m³. The value in village Naheria indicated is 211mg/m³ which is also high. In view of above, the project proponent is required to take measures immediately to neutralize the mine discharge water by establishing appropriate functional treatment system as well as control emissions which are causing higher values in ambient air.

(ii) There is a serious issue regarding subsidence and the consultants for the same have indicated specific measures to be taken for safeguard near the village and under the river and streams. It was further noted that the study on subsidence which has been put up in the report is for 0.36 MTPA production and specific studies have been made for 13th and 36th years of operation. Now with the proposed increase in production and reduction of life of mine to 15 years because of change in rate of production there may be further changes in the subsidence pattern.

The PP was advised to get the same re-studied along with the recommendations from the consultant.

(iii) The coal transport from the mine is taking place by road to a siding 40 km away. On enquiry about new railway line near the mine, the project proponent informed that they are opening up new mines (Jamunia and Dhankasa) nearby and there is already one mine (Urdhan expansion) operating in the vicinity and they have planned for a new railway line in this area. The committee advised for expeditious action for construction of the line within 5 years.

(iv) For the present however, in view of the acidic nature of mine water, the committee does not recommend continuation of even the existing operations till such time as a functional mine water treatment system is installed. Measures/studies as noted above for air quality improvement and subsidence also need to be completed.” Unquote.

62.4.3 In the above background, a presentation was made by the project proponent on 5th May, 2016 in the Ministry. In response to the observations of EAC, the details submitted by the project proponent and/or as informed during the, presentation were as under: -

(i) Ambient Air quality in Naheriya Village: Naheriya Village is located about 610 meters in WEST direction from the Naheriya U/G mine. The predominant wind direction is from NORTH WEST. Coal transportation road is about 100 meters SOUTH w.r.t habitation. As such there is no impact of mining and allied activities on the ambient air quality of Naheriya village. The impact is due to local domestic & transport activities.

(ii) Acidic nature of mine discharge: Acidic nature of mine water is a recent phenomenon and is intermittent in nature. Presently entire mine water coming out of the mine, after sedimentation and lime dozing (whenever required) is used inside the mine premises for dust suppression (both in UG and on surface), plantation etc.. The discharge outside is NIL. Additionally treatment plant with lime bed and Typha plants is under construction - to be made operational by 30th May, 2016.

62.4.4 The Committee, after detailed deliberations (in the 62nd meeting on 23 -24 August, 2016) noted the following:

(i) In the light of its earlier observations in March 2016 as given in para 62.4.2 above, the EAC took up for examination the background document circulated in advance for this meeting by the project proponent to the members of the EAC. It was seen that the background document had no link to any of the concerns raised by the EAC in its meeting in March, and the said document did not clarify any of the EAC's points.

(ii) The project proponent, during this meeting, had circulated a presentation which stated that it was a presentation “made before Joint Secretary, MoEF&CC on 5th May, 2016.” It was seen from this presentation that of the various issues raised by the EAC, the project proponent had dealt with the following three issues in the presentation i.e. low pH level on pages 6-16, environmental monitoring data with reference to air quality on pages 17-19, and subsidence on pages 20-23 of the presentation.

(iii) The EAC noted with regret that in this presentation on the above three issues, except in the matter of mine water treatment system, the project proponent had re-submitted to the Ministry its

submission and conclusions made earlier to the EAC in March, which the EAC had not found satisfactory or adequate. The EAC was further constrained to note that nowhere in the presentation had any impression been conveyed to the Ministry that the EAC had desired additional information and nowhere had it been mentioned to the Ministry that the additional data sought by the EAC was being looked into by the project proponent. Worse, as has been brought out in para 62.4.2 (iv) above, the EAC pointed out that it had in its March meeting recommended immediate stoppage of existing operations but the project proponent had not stopped the operations. In response, the PP stated that they had taken steps to install the water treatment system, which had become functional since 01st June 2016. On enquiry as to why the operations had not been stopped till the system became functional, the project proponent stated that since no instructions/communications had been issued by MoEF&CC, hence operations were not stopped. It was pointed out to the project proponent that stoppage of operation was made known to the project proponent during the March meeting itself, and in addition was available on the website of the Ministry in the form of the minutes of the EAC uploaded on Ministry's website on 28.03.2016. It was pointed out to the project proponent that considering the nature of the recommendations made by the EAC for immediate stoppage of operations, it was highly incorrect for the project proponent to be taking this stand.

(iv) In the presentation circulated during the meeting, in addition to other observations as mentioned above, it was seen that the project proponent had arrived at certain conclusions on the three issues of pH level, air ambient quality and subsidence. However, no technical supporting data was made available even in this presentation, which only contained conclusions. When asked on what basis the project proponent had reached the conclusions as reflected in the presentation on these three issues, the project proponent showed their internal back up slides. Even in these back up slides, the EAC noted that the PP failed to provide satisfactory answers on (a) the volume of water treated, (b) dosage of lime, (c) the disposal of waste residues, (d) use of treated water, (e) the enhancement of pH from 6.9 to neutral pH (± 7.2) and (f) other details such as quality of water before and after treatment. The air quality data presented were also not adequately explained in terms of clarifications sought earlier. Similarly, no additional information was provided on subsidence particularly on the predictions using models.

(v) From the above, it is clear that the project proponent had not come prepared with the data sought by the EAC in its meeting in March, 2016. The EAC, therefore, clarified to the project proponent that the following data should be submitted to it before the proposal is next taken up by the EAC :- Water of mine needs to be drained out / pumped out rather than intake before start of mine working. Treatment technology for increasing the pH of water (i.e. making it neutral from acidic nature) needs to be clearly brought out defining water flows (indicating number of streams), lime treatment doses, removal of lime sludge, including water characteristic before and after water treatment etc. Hydrology part also needs to be clearly written using correct English as well. Form I entries under environment sensitivity part (item no.12) need to be spelt out. It was also pointed out to the PP to examine the need for extra streams to take the load when the proposed single stream is under cleaning/ stopped for repair etc. Details of the subsidence studies are also required to be submitted to the EAC.

62.4.5 *In view of the above observations, the proposal was deferred.*

Agenda 62.5

Mugoli Nirguda Extension Deep OC Mine Project of M/s Western Coalfields Limited located in district Changrapur (Maharashtra) - For modification in TOR

62.5.1 The proposal is for modification in Terms of Reference granted to Mugoli Nirguda Extension Deep OC Mine Project of M/s Western Coalfields Limited located in District Changrapur (Maharashtra).

62.5.2 The Committee in the 62nd meeting on 23-24 August, 2016 having perused the background document circulated in advance by the PP, noted that there was no clarity in the proposal, and it had not been brought out in which of the ToRs the PP was seeking modifications, and why it was seeking modifications. The PP thereafter informed the Committee that it would re-apply to MoEFCC for grant of fresh ToRs.

The proposal was accordingly not discussed further.

Agenda 62.6

Flexibility in production capacity from Underground and Opencast Mine of Gare-Palma IV/4 upto (0.6 MTPA each keeping overall limit upto 1.0 MTPA in an ML area of 701.512 ha) of M/s Hindalco Industries Limited located in, District Raigarh (Chhattisgarh)- (EC transferred on 16.04.2015) – For Amendment in EC

62.6.1 The project proponent, vide letter No.HIL/GP-IV-4/AVP(M)/2016/193 dated 19th August, 2016 has regretted for not attending.

Thus, the project was not considered, and deferred.

Agenda 62.7

Jagannath Re-organization Opencast Project from 6.0 MTPA to 7.5 MTPA of M/s Mahanadi Coalfields Limited in a total area of 578.426 ha located in District Angul (Odisha) - For consideration of TOR

62.7.1 The proposal is for grant of Terms of Reference to Jagannath Re-organization Opencast Project from 6.0 MTPA to 7.5 MTPA of M/s Mahanadi Coalfields Limited in a total area of 578.426 ha located in District Angul (Odisha).

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

- (i) The project was earlier accorded EC vide letter No. J-11015/177/2005-IA-II (M) dated 29th September, 2005 for 6.0 MTPA capacity in a total mine lease area of 430.736 ha.
- (ii) The latitude and longitude of the project site are 20^o 58' 42" to 20^o 56' 14" N and 85^o 07' 10" to 85^o 9' 55" E respectively.
- (iii) Joint Venture: no Joint Venture
- (iv) Coal Linkage: NTPC Talcher Thermal Power Plant, other Power Plants & Basket Linkage.

- (v) Employment generated/to be generated: 534 (existing project) 185 (expansion project) - direct employment opportunity. Beside above indirect employments will also be generated.
- (vi) Benefits of the project: The proposed Reorganization project will result in following benefits – (a) Improvement in Physical Infrastructure (b) Improvement in Social Infrastructure (c) Increase in employment potential (d) Contribution to the Exchequer (both State and Central Govt.) (e) Post mining enhancement of Green Cover (f) Improvement of Electrical Power Generation and consequently rise in electric power consumption thereby improvement in overall economic growth of the country.
- (vii) The land usage of the project will be as follows:

Pre-mining:

Sl. No.	Particulars	Existing (in ha)			Additional (in ha)			Grand Total (ha)
		Forest	Non-forest (Govt. & tenancy)	Total (ha)	Forest	Non-forest (Govt. & tenancy)	Total (ha)	
A	Break-up of mining lease area:							
1	Quarry excavation	80.206	273.310	353.516	2.53	120.68	123.21	476.726
2	External Dumps (In old Jagannath OCM only)	0.000	36.470	36.470	0.000	0.000	0.000	36.470
3	Infrastructure like workshop, store, CHP & land between infrastructure (In old Jagannath OCM)	0.000	40.750	40.750	0.000	0.000	0.000	40.750
	Sub-total (A) (Mining lease area)	80.206	350.530	430.736	2.53	120.680	123.21	553.946
B	Break-up of area out side mining lease area (in ha):							
1	Land for rehabilitation colony	0.000	11.270	11.270	0.000	13.210	13.210	24.480
	Sub-total (B)	0.000	11.270	11.270	0.000	13.210	13.210	24.480
	Grand Total (A+B)	80.206	361.800	442.006	2.53	133.890	136.42	578.426

Core area :

Sl. No	Land use during Mining	Land use (ha)				
		Plantation	Water Body	Public Use/Agriculture	Undisturbed	Total
.						

				e			
1	External OB Dump *	--	--	36.470	--	36.470	
2	Top Soil Dump	will be spread concurrently in the backfilled area					
3	Excavation	82.736	227.40 1	166.589	--	476.726	
4	Built up area	8.15	--	--	32.60	40.750	
	Total	90.886	227.40 1	203.059	32.60	553.946	

* External dump will be re-handled during post closure and converted into public use/agricultural land

(viii) Total geological reserve is 97.03 MT. The mineable reserve 79.09 MT, extractable reserve is 79.09 MT. The per cent of extraction would be 80.76%.

(ix) The coal grade is G12. The stripping ratio is 1.05 Cum/tonne. The average Gradient is 3⁰ to 50.

(x) Total estimated water requirement is 2946.50 m³/day. The level of ground water ranges from 0.80 m to 13.27 m.

(xi) The method of mining would be Opencast Mining by Shovel – Dumper/Ripper-dozer in OB/parting; surface miner, pay loader & tipper in coal.

(xii) There is 2 external OB dump with Quantity of 5.51 Mm³ in an area of 36.470 ha with height of 30 meter above the surface level and 2 internal dump with Quantity of 158.43 Mbcm in an area of 249.325 ha.

(xiii) The final mine void would be in 227.401 ha with depth varying Minimum 48 m to Maximum 165 m. and the Total quarry area is 476.726 ha. Backfilled quarry area of 82.736 Ha shall be reclaimed with plantation. A void of 227.401 ha with depth varying Minimum 48 m to Maximum 165 m which is proposed to be converted into a water body.

(xiv) The life of mine is 11 Years.

(xv) Transportation: Coal transportation in pit surface miner through tippers; Surface to Siding by belt conveyor ; loading at siding by Pay loader.

(xvi) The project would involve R & R with 230 No. of families are likely to be affected.

(xvii) Cost: Total capital cost of the project is Rs. 409.08 Crores. CSR Cost Fund for CSR will be allocated based on 2% of the average net profit of the company for the three immediate preceding financial years or Rs. 2.00 per tonne of coal production of the previous year whichever is higher. R&R Cost 919.20 Lakh. Environmental Management Cost shall be provided in EIA/ EMP.

(xviii) There are four water bodies namely Bangaru jhor flows at a distance of about 100 m (North); Brahmani river flows at a distance of about 7.5 km (East); Nandira jhor flows at a distance of about 6.0 km (South); Singhara jhor flows at a distance of about 6.5 km (North-West).

(xix) Ground water clearance is not applicable, as the area is not falling under critical area as per CGWA,

(xx) MCL Board's approval obtained on 26.05.2014 for production capacity of 6 MTPA (normative)/7.5 MTPA (peak). Mine Plan for the proposed expansion is under process. Mine closure plan is an integral part of mining plan.

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

(xxii) Total forest area involved 82.736 ha. Forest clearance for 82.736 ha (58.096 ha & 24.64

ha) have been obtained on 9th November, 2005 and 7th February, 2014 respectively.

(xxiii) Total afforestation plan shall be implemented at the end of mining. Green Belt over an area of 8.15 ha. Density of tree plantation 2500 trees/ ha of plants.

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

62.7.3 The Committee, after detailed deliberations (in the 62nd meeting on 23rd -24th August, 2016) noted the following:

(i) To avoid confusion and other complications, title of the proposal needs to be corrected consistent with the existing EC dated 29th September, 2005 for 6 MTPA in mine lease.

(ii) To minimize coal transportation through road and thus to take care of dust suppression, silos are scheduled for completion in the following manner:-

- Silos I & II at Bharatpur by August, 2016 & October, 2016 respectively,.
- Two Silos at Lingraj by December, 2016
- For Ananta and Lakhanpur mines, silos are reported to be under construction.

(iii) MCL Board's approval obtained on 26th May, 2014 (at Annex IV of the background document circulated to the EAC Members) is for production capacity of 6 MTPA (normative)/ 7.5 MTPA (peak). Mine Plan for the proposed expansion is under process. However, on perusal of the background document circulated to the EAC Members, at pg 11 of the prefeasibility report, the coal and OB production have been shown for the rest of the life of ten years as 7.5 MTPA every year, which is actually the peak production as per the approval.

(iv) During discussions, it was revealed that approval of competent authority for expansion of production capacity from 6 MTPA annually to 7.5 MTPA annually was not available, and accordingly the proposal could not be examined in detail. The project proponent was advised that the proposal will be taken up for detailed examination only after approval of the Board/competent authority is taken for 7.5 MTPA as normative production.

62.7.4 *The proposal, was, therefore deferred.*

Agenda 62.8

Expansion of Krishnashila OCP coal mining project from 5 MTPA to 6.25 MTPA of M/s Northern Coalfields Limited in an area of 851.78 ha in Tehsil Dudhi, District Sonbhadra (Uttar Pradesh) - For further consideration of EC

62.8.1 The proposal is for grant of Environmental clearance for expansion of Krishnashila OCP coal mining project from 5 MTPA to 6.25 MTPA of M/s Northern Coalfields Limited in an area of 851.78 ha in Tehsil Dudhi, District Sonbhadra (Uttar Pradesh).

62.8.2 The proposal was earlier considered in 53rd EAC meeting held in March, 2016, 55th meeting held in 11-13 May, 2016 and 61st meeting held on 28-29 July, 2016. During the meeting held in July, 2016, the observations of the Committee were as under:-

(i) The proposal for grant of EC has been submitted without the ToR/scoping clearance for the proposed expansion.

(ii) The earlier public hearing for the project was conducted in October, 2012 for its capacity of 5 MTPA. The present proposal for expansion is for consideration under para 7(ii) of the EIA Notification, 2006, based on the different OMs regarding capacity expansion issued by the MoEFCC. It has been requested to consider the expansion proposal without fresh public hearing. When asked why the initial request for ToR had not been made, PP submitted that the OMs did not specify any such procedure to be followed, and that this practice had also been followed in the past.

(iii) It was pointed out to the PP that the various OMs on which reliance has been placed for directly submitting EIA documents is not correct. None of the OMs anywhere indicate that the first stage request for ToR can be avoided. For expansion etc proposals under para 7 (ii) of the Notification, it is for the EAC to decide on the nature of "due diligence" required in each case. Furthermore, even if the OMs contained an indication that the ToR stage, or any other procedural requirement can be bypassed, it needed to be borne in mind that OMs cannot override Gazette Notifications.

(iv) However, in this case, in view of the small increase proposed in the capacity, the Committee agreed for no fresh public hearing to consider the proposal for expansion. Nevertheless, the PP should issue public notices in the leading local newspapers, Gram Panchayats, website of PP etc. about the proposed expansion, along with the intimation that the public can send its comments if any to the PP and also to the MoEF&CC within 15 days/one month respectively after publication of the public notice.

(v) The compliance report dated 10th June, 2016 from the Regional Office at Lucknow indicates non/partial compliance in respect of number of conditions stipulated in the EC issued for the project.

(vi) The NCL Board has approved the Mining Plan for enhanced coal production at 6.25 MTPA (intended capacity) from the Krishnashila OCP in its meeting held on 18th May, 2013. The approval date reflected in the minutes of the EAC meeting held on 11-13 May, 2013 (agenda 55.1) stands corrected to that extent.

(vii) The complaint case filed by the RO, UPPCB in the court of CJM Sonebhadra (UP) for earlier violation of EC conditions (EC dated 2nd February, 2005 for 4 MTPA) is still sub-judice. It was informed that the said violation refers to the period during which the EC for 4 MTPA was in force. However, the same was settled with the grant of EC for 5 MTPA in August, 2014.

(viii) Out of the total area of 851.78 ha, forest area involved is 720.89 ha. The project proponent has obtained stage-I FC for the entire forest area.

(ix) The construction of CHP, which is already delayed from December, 2014, needs to be expedited. The project proponent informed that date of completion will be March, 2017. The committee advised for expediting the same to eliminate coal transport of 2.7 MTPA by road to Binal siding and wagon loading through pay loaders, causing air pollution.

(x) At the mine closure, all the external OB dumps needs to be re-handled into the mine void, for the final void not to be more than 35 ha of 30-40 m depth.

(xi) The compliance report received from the RO contains inadequacies in respect of observations reported as not-complied or partially complied with. Also, the project proponent has not given any clarifications and detailed action plan along with the firm time lines against those observations. The EAC desired that the project proponent should furnish clarifications and action plan with a request to the RO to furnish their views/observations to the Ministry expeditiously (maximum within three weeks).

(xii) Certain observations have been made by the RO in respect of expenditure on CSR activities. It was, however, informed by the project proponent that they have spent more than what has been shown by RO. They were asked to send a communication in this regard to MoEF&CC.

62.8.3 The Committee, in the 62nd meeting on 23 -24 August, 2016 noted the following:-

(i) The PP had not circulated any background note/document, as is required to be circulated to the members of the EAC prior to the meeting.

(ii) During the earlier EAC meeting (as noted in para 62.8.2 (iv) above), the project proponent was required to issue public notices in the leading local newspapers, Gram Panchayats, website of PP etc. about the proposed expansion, along with the intimation that the public can send its comments if any, to the project proponent and also to the MoEF&CC within 15 days/one month respectively after publication of the public notice. On enquiry, the PP informed that the public notice was issued on 12th August, 2016. Therefore, the time of 15 days/one month for the public to respond was not yet over. Therefore, at this stage the EAC considered the proposal to be premature for examination.

62.8.4 *In view of the above observations, the proposal was deferred.*

Agenda 62.9

Barjora (North) Block Coal Mining Project in District Bankura (West Bengal) - Transfer of EC from M/s DVC EMTA Coal Mines Ltd to M/s West Bengal Power Development Corporation Limited

62.9.1 The proposal is for transfer of EC of Barjora (North) Block Coal Mining Project in District Bankura (West Bengal) from M/s DVC EMTA Coal Mines Ltd to M/s West Bengal Power Development Corporation Limited.

62.9.2 The proposal had earlier been listed for discussion in the 61st meeting of the EAC held on 28-29 July 2016, but it had not been possible to take it up for discussion as no background documents had been circulated as required in advance of the EAC meeting.

62.9.3 It was seen from the background document circulated for this 62nd meeting on 23rd – 24th August 2016 that the PP had set out in detail the history of the case and the various correspondences in support of his request for transfer of EC, on the same terms and conditions, from the previous allottee M/s DVC EMTA Coal Mines Ltd, to the PP. The EAC noted that at sl 10 of the “summary”, the PP had drawn the EAC’s attention to the MoEFCC Notification of 23rd March

2015 which inter alia states as follows:- “ Where an allocation of coal block is cancelled in any legal proceeding; or by the Government in accordance with law, the environmental clearance granted in respect of such coal block may be transferred, subject to the same validity period as was initially granted, to any legal person to whom such block is subsequently allocated, and in such case, obtaining of “no objection” from either the holder of environment clearance or from the regulatory authority concerned shall not be necessary and no reference shall be made to the Expert Appraisal Committee or the State Level Expert Appraisal Committee concerned ” (underline emphasis added). A copy of the Notification had been given at Annex 7 of the background document.

62.9.4 On EAC’s enquiry, the Member Secretary of the EAC confirmed that the said Notification was still in force. *The EAC therefore pointed out that in the light of the said Notification, it was not empowered to take up consideration of the proposal, and referred the matter back to the MoEFCC for appropriate action.*

Agenda 62.10

Review of EC conditions granted dated 12th June, 2012 for operating Coal Block Gare IV/2 & IV/3 by M/s South Eastern Coalfields Limited - in compliance of the direction of NGT (CZ) at Bhopal in OA No.319/2014 (CZ)

62.10.1 The EAC pointed out that no documents had been circulated to the members for this agenda item. The Member Secretary informed that the item had been included in the agenda for this meeting of the EAC, in the light of the orders of NGT (CZ) at Bhopal in OA No.319/2014 in the matter of ‘Sri Dukalu Ram & others Vs Union of India & others’.

62.10.2 The Member Secretary further informed about the proposal as under: -

(i) The ministry had earlier issued Environmental Clearance (EC) for Gare IV/2 & IV/3 Open Cast and Under Ground coal mines in favour of M/s Jindal Power Ltd. Vide letter No.J-11015/288/2007-IA-II(M) dated 12.06.2012 for a capacity of 6.25 MTPA and 0.75 MTPA respectively.

(ii) Subsequent to cancellation of coal blocks in pursuance of the orders of Hon’ble Supreme Court, Ministry of Coal vide Order No. F.No. 13016 /2/2015-CA-3 dated 30.03.2015 appointed M/s Coal India Ltd as custodian in respect of these mines.

(iii) The Chairman, Coal India Ltd. vide letter No.CIL/CH/Custodian/27/1609 dated 31.03.2015 directed one of its subsidiaries namely M/s SECL to work as custodian on behalf of CIL and do the needful for operating the mines.

(iv) M/s SECL requested for modification in EC conditions which was earlier considered by the EAC and granted vide letter No.J-11015/288/2007-IA-II(M) dated 16th April, 2015. Accordingly, Consent to Operate under the Water Act, 1974 and the Air Act, 1981 were renewed by CECB, Raipur.

(v) M/s Jindal Powers Ltd had filed a WP (C) No.3001 of 2015 before Hon’ble High Court of Delhi challenging the decision of Ministry of Coal for not declaring their company as the successful bidder during the e-auction held in February, 2015. Hon’ble High Court has heard the arguments

in the matter and the judgment has been reserved in the matter on 17th September, 2015, and is still awaited.

(vi) It was further informed that Hon'ble Tribunal vide order dated 3rd February, 2016 has observed as under :-

“The MoEF also, in our opinion, needs to review the entire issue and refer the matter to EAC particularly when the Hon'ble High Court of Delhi has concluded the hearing and the judgement has been reserved in the Writ Petition filed by Respondent No. 4 in the matter of M/s Jindal Power Ltd. V/s Union of India & Ors. wherein the cancellation of the coal block allocation is subjudice. Since the matter has come up before us not against the original EC but in the matter pertaining to enhancing the capacity and it is alleged that even while granting the original EC, the siting guidelines were not given due consideration in respect of inhabited areas of villages Kosampalli and Sarasmal which as per the Applicant and also some of the material placed before us are reportedly in close proximity varying from 80-160 meters. It has also been stated before us during the hearing that there is no surety that even after the above measures are adopted for dealing with the raging fires and their detention and extinguishing, they may not reoccur. In that view of the matter, at any given point of time either for re-allocation or in terms of the directions issued by the Hon'ble High Court to any of the parties including the Petitioner before the Hon'ble High Court (Respondent No.4 herein) the issue which have arisen post the grant of EC and enhancement capacity need to be reviewed at the level of EAC and additional measures by way of precautionary principles as may be suggested by the expert bodies like ISM, CIMFR and CMPDI and / or any other expert body which the EAC may consider appropriate may be taken. We would accordingly direct that a copy of this order may be sent to the MoEF for necessary action in this behalf.”

(vii) The Hon'ble Tribunal in the further Orders dated 5th April, 2016 and 1st August, 2016 has asked for the status in this regard. This Division (IA-II Division in the Ministry) was informed by the panel counsel about the matter OA No.319/2014 pending before NGT (CZ) at Bhopal only in the last days of July, 2016 (after last EAC coal sector meeting held in July, 2016).

(viii) After the proposal having been listed in the agenda for the present meeting, M/s Jindal Power Ltd vide their letter No.JPL/Environment/2016 dated 12th August, 2016 to the MoEFCC has stated that 'Any decision by EAC (coal mining) and MoEF&CC in the matter may have direct implication on JPL (being the preferred bidder for the said coal blocks in the recent e-auction) in the event the Hon'ble Delhi High Court accepts the plea of JPL in the aforesaid W.P. (C) No.3001 of 2015.' They have requested that the representatives of JPL be invited to be present during the deliberations on the subject in the EAC (Coal Mining) meeting scheduled in August, 2016.

(ix) The present custodian of the coal blocks M/s SECL have also submitted their submission vis-à-vis fulfillment of the orders of Hon'ble Tribunal in this matter.

62.10.3 The Committee in the 62nd meeting on 23 -24 August, 2016 noted the following:

(i) That the matter has been placed before the EAC for its consideration.

(ii) In view of the directions of the NGT, the EAC suggested to prepare and circulate to the EAC a detailed background note in the matter, in the light of the fact that in addition to the NGT case, there was also a High Court case, and also keeping in view the fact stated in para 62.10.2

(viii) above that M/s JPL had formally written to the MoEF&CC regarding the impact on them of any decision taken by the EAC, and desiring to be heard by the EAC..

(iii) The EAC also desired that the detailed background note should include in addition to any other information considered relevant), the submission made by various authorities, public respondents etc. before the NGT, the directions of the NGT as obtained in their various judgments (including copies of the NGT judgments), details of the earlier ECs issued to M/s Jindal Power Limited and to the SECL, so as to enable the EAC to deal with the matter as desired by the NGT.

(iv) To expedite consideration of the case by the EAC in view of the directions of the NGT contained in their judgment reproduced above in para 62.10.2 (vi), the EAC desired that the response of ISM, CIMFR and CMPDI should be sought simultaneously. In addition, to save time, in the light of the NGT order to consult such other expert bodies as may be considered appropriate. The EAC is of the opinion that the scientist from the concerned Regional Office to visit the site for an on the spot assessment of the ground reality and submit report urgently to the Ministry which may also be placed before the EAC.

(v) The EAC was also of the view that it would be more appropriate for it to interact if required with the concerned parties (such as JPL, SECL etc), only after studying the desired information as mentioned above. The proposal was accordingly deferred.

Agenda 62.11

Dugda NLW Coal Washery of 2.5 MTPA of M/s Bharat Coking Coal Ltd in an ML area of 21 ha located in District Bokaro (Jharkhand) - For review of the EC conditions

62.11.1 The EAC noted that the above proposal was already recommended in its meeting held on 23-24 June, 2016. And as such, desired to consider the matter under the last Agenda 62.13 'Discussion on any other item'

Agenda 62.12

Kakatiya Khani Opencast 2 (KTK OC-2) Coal Mining project for production capacity of 1.25 MTPA (Normative) and 1.50 MTPA (Peak) in an ML area of 668.23 Ha; of M/s The Singareni Collieries Company Limited in District Warangal (Telangana) - For further consideration of EC

62.12.1 The proposal is for grant of EC to Kakatiya Khani Opencast 2 (KTK OC-2) Coal Mining project for production capacity of 1.25 MTPA (Normative)/1.50 MTPA (Peak) in ML area of 668.23 ha of M/s The Singareni Collieries Company Limited in District Warangal (Telangana)

62.12.2 The proposal was earlier considered by the EAC in its 51st EAC meeting held on 5th February, 2016. During the meeting, the observations of the Committee were as under:-

'It was noticed from the presentation by the PP that the mining plan had been submitted for approval to the Ministry of Coal almost six months back i.e. on 17th August, 2015. However, the approval was yet to be received. Accordingly, consideration of the proposal was deferred till such time as the Mine Plan approval is received. In addition, one NGO ERC had sent an e-mail on 4th

February, 2016 raising certain issues in connection with the project. The project proponent was requested to also address these issues when the case was next brought before the EAC.'

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

(i) The Ministry of Coal vide Letter No.13016/9/2007-CA II dated 26th July, 2016 has approved the Mine Plan and Mine Closure Plan for Kakatatiya Khani Open Cast – 2. The same has since been submitted by project proponent to the Ministry on 9th August, 2016.

(ii) The project proponent has replied to the issues raised by the NGO in respect of Cumulative Impact Assessment, Impact on Health, Impact on Livelihood, Impact on Biodiversity, Impact on Water sources, Non Compliance of Conditions of Mining in the KTK OC-I project, Non Restoration of Mined out Areas etc.

(iii) They are in the process of acquiring area up to 500 m from mine boundary.

62.12.4 *The Committee, after detailed deliberations (in the 62nd meeting on 23 -24 August, 2016) recommended the project for granting EC subject to compliance of all the generic conditions applicable for coal mining projects along with the following specific conditions:-*

(i) *Continuous monitoring of health particularly related to respiratory diseases to be ensured..*

(ii) *Under CSR (corporate social responsibility), prevention method to be taken for indoor pollution (improved/smokeless chullah).*

(iii) *Flow rate should be maintained and quality of water in the streams should be ensured by project proponent.*

(iv) *There should be controlled blasting.*

(v) *OB bench will be more than 500 m away from any habitation.*

(vi) *PP informed that they will acquire surface land up to 500 m from mine boundary.*

(vii) *At mine closure all external and internal OB dumps above ground level will be filled in the mine void and brought to ground level and made suitable for agriculture.*

Agenda 62.13

Discussion on any other item

62.13.1 The EAC took up the matter for grant of Environmental clearance to Dugda NLW Coal Washery of 2.5 MTPA of M/s Bharat Coking Coal Ltd in an ML area of 21 ha located in District Bokaro (Jharkhand).

62.13.2 It was informed that the proposal was considered in 53rd meeting of EAC held on 17-18 March, 2016 and 58th meeting held on 23-24 June, 2016. During the meeting held in June, 2016, the EAC, after detailed deliberations recommended for grant of EC to the proposed washery, subject to the compliance of all generic conditions applicable for washery as well as fulfilment of other conditions.

62.13.3 The Member Secretary EAC informed that while processing the matter on file it was brought out that in view of large number of industries nearby, the pollution levels is very high

especially the PM₁₀ concentration. Considering the overall facts of the case and high levels of pollution, it was felt that it needs to be examined whether more stringent norms have to be prescribed to ensure that the proposed coal washery will not further aggravate pollution levels. It was desired to take the case to the EAC again for reconsideration, and it had accordingly been included in the agenda.

62.13.4 *The Committee, in the 62nd meeting on 23 -24 August, 2016 pointed out that in terms of para-8 (ii) of the principal EIA Notification dated 14th September, 2006 issued by the MoEF&CC, a procedure had been clearly laid down in case there is a difference of opinion between the EAC and the regulatory authority. The Committee was therefore of the view that a formal reference may be made to it for reconsidering the matter in terms of the procedure contained in para-8 (ii) of the EIA Notification, 2006.*

LIST OF EAC MEMBERS PARTICIPATED IN 62nd EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 23rd - 24th August, 2016 ON COAL SECTOR PROJECTS.

62nd EAC Meeting of Coal Mining Sector
Date: 23/08/2016
Page No.: 23/08/2016

List of Expert Appraisal Committee

S.No.	Name	Design	Sign
1	Sh. Anil Kumar	Chairman	<i>[Signature]</i> 23/8/16
2	Prof. C. R. Babu	Member	C. R. Babu
3	Sh. J. L. Mehta	Member	<i>[Signature]</i> 23/8/16
4	Sh. T. K. Dhar	Member	
5	Sh. N. K. Verma	Member	Member
6	Sh. A. K. Bansal	Member	<i>[Signature]</i> 23/8/16
7	Sh. G. S. Dang	Member	<i>[Signature]</i>
8	Dr. S. D. ATTRI	Member	<i>[Signature]</i> 23/8

62nd EAC Meeting of Coal Mining Sector
Date: 24/08/2016
Page No.: 24/08/2016

List of Expert Appraisal Committee

S.No	Name	Design	Sign
1	Sh. Anil Kumar	Chairman	<i>[Signature]</i> 24/8/16
2	Prof. C. R. Babu	Member	C. R. Babu
3	Sh. J. L. Mehta	Member	<i>[Signature]</i> 24/8/16
4	Sh. T. K. Dhar	Member	
5	Sh. N. K. Verma	Member	Member 24/8/16
6	Sh. A. K. Bansal	Member	<i>[Signature]</i> 24/8/16
7	Sh. G. S. Dang	Member	<i>[Signature]</i>
8	Dr. S. D. Attari	Member	

9

Shri S. K. Shrivastva

Member Secretary

LIST OF PROPONENTS PARTICIPATED IN 62nd EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL & COAL MINING) MEETING HELD ON 23rd – 24th August, 2016 ON COAL SECTOR PROJECTS.

62.1 Tapin South Expansion OCP of M/s Central Coalfields Limited.

1. Shri P Prasad
2. Shri S Chandra
3. Dr. A Sinha
4. Shri J Chakravarty
5. Shri S Singh
6. Shri Pushkar

62.2 Expansion of Dipka Opencast Coal mine Project of M/s South Eastern Coalfields Limited.

1. Shri T D Guin
2. Shri Aishwarya C Shekhar
3. Shri A K Gupta
4. Shri S K Malviya
5. Shri J G Singh
6. Shri A S Bapat
7. Shri A K Tiwary
8. Shri Manoj Kumar
9. Shri U T Kanzarkar

62.3 Gevra OCP project of M/s South Eastern Coalfields Limited.

1. Shri T D Guin
2. Shri Aishwarya C Shekhar
3. Shri A K Gupta
4. Shri S K Malviya
5. Shri J G Singh
6. Shri A S Bapat
7. Shri A K Tiwary
8. Shri Manoj Kumar
9. Shri U T Kanzarkar

62.4 Expansion of Naheriya underground coal mine of M/s Western Coalfields Ltd.

1. Shri Gaurav Kumar
2. Shri U S Shah
3. Shri R M Wanare
4. Shri T N Jha
5. Shri Vijay Krishna Nagda

6. Shri Rakesh Kumar
7. Shri K. Chakraborty

62.5 Expansion of Naheriya underground coal mine of **M/s Western Coalfields Ltd.**

1. Shri Gaurav Kumar
2. Shri U S Shah
3. Shri R M Wanare
4. Shri T N Jha
5. Shri Vijay Krishna Nagda
6. Shri Rakesh Kumar
7. Shri K. Chakraborty

62.6 Flexibility in production capacity of Gare-Palma IV/4 of **M/s Hindalco Industries Limited.**

Requested for Deferment.

62.7 Jagannath Re-organization Opencast Project of **M/s Mahanadi Coalfields Limited.**

1. Shri R C Sahoo
2. Shri D Basu
3. Shri R K Shrivastava
4. Shri R P Gupta
5. Shri D K Das
6. Shri R K Das
7. Shri N K Singh
8. Shri C Jayadev
9. Shri J P Singh

62.8 Expansion of Krishnashila OCP coal mining project of **M/s Northern Coalfields Limited.**

1. Shri Omveer Singh
2. Shri Rakesh Kumar
3. Shri V K Bajaj
4. Shri B K Sharma
5. Shri V N Dupatta wala
6. Shri Prabhu Sharma
7. Shri Prem P Kumar

62.9 Barjora (North) Block Coal Mining Project of **M/s West Bengal Power Development Corporation Limited**

1. Shri A Kumar
2. Shri A B Halder

62.10 Review of EC conditions granted dated 12th June, 2012 for operating Coal Block Gare IV/2 and IV/3 by **M/s South Eastern Coalfields Limited**

-

62.11 Dugda NLW Coal Washery of 2.5 MTPA of M/s Bharat Coking Coal Ltd.

Internal discussion

62.12 Kakatiya Khani Opencast 2 (KTK OC-2) Coal Mining project of M/s The Singareni Collieries Company Limited

1. Shri A Manohar Rao
2. Shri M Vasanta Kumar
3. Shri W Vivek
4. Shri K Raghukumar
5. Shri P S M
6. Shri S S Meena
7. Shri N Bhaskar

Generic ToR for coal washery

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

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

ANNEXURE -4

GENERIC TOR FOR AN OPENCAST COALMINE PROJECT for EC

- (i) An EIA-EMP Report shall be prepared for..... MTPA rated capacity in an ML/project area of.....ha based on the generic structure specified in Appendix III of the EIA

Notification, 2006.

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

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

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

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

of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.

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

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

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

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

* As a representative example

Table 2 : Stage Wise Cumulative Plantation

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

* As a representative example

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

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

S.N.	Land use	Land Use (ha)
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during Mining		Plantation	Water Body	Public Use	Undisturbed	TOTAL
1.	External OB Dump					
2.	Top soil Dump					
3.	Excavation					
4.	Roads					
5.	Built up area					
6.	Green Belt					
7.	Undisturbed Area					
	TOTAL					110

- (xxx) Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be done.
- (xxxi) Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.
- (xxxii) Risk Assessment and Disaster Preparedness and Management Plan should be provided.
- (xxxiii) Integration of the Env. Management Plan with measures for minimizing use of natural resources - water, land, energy, etc. should be carried out.
- (xxxiv) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
- (xxxv) Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
- (xxxvi) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
- (xxxvii) Corporate Environment Responsibility:
- a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
- (xxxviii) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general

public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

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

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

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

ANNEXURE -5

GENERIC TORs FOR AN UNDERGROUND COALMINE PROJECT

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

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

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

Area under Surface Rights

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

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

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

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

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

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

(xxviii) Corporate Environment Responsibility:

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

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

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

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

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

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

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

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

		each FC			
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GENERIC TORs FOR AN OPENCAST-CUM-UNDERGROUND COALMINE PROJECT

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

Subject: **Fwd: Re: Approved Minutes of 23-24 Aug 2016**
To: sakhare.pr@nic.in

Date: 09/05/16 07:01 PM
From: "S.K Srivastava" <sk.smree66@gov.in>

Re: Approved Minutes of 23-24 Aug 2016.eml (13kB)

Please do the needful urgently.

(SKS)

—Original Message Re: Approved Minutes of 23-24 Aug 2016.eml—

Subject: Re: Approved Minutes of 23-24 Aug 2016
From: "C. R. Babu" <crbabu26@gmail.com>
Date: Mon, 05 Sep 2016 18:47:09 +0530
To: Srivastava Additional Director <sk.smree66@nic.in>, SK Srivastava EAC <sksmree@yahoo.co.in>
Cc: "J.L Mehta" <jlmehta06@gmail.com>, Anil Kumar <anilk1953@yahoo.com>

Dear Dr Srivastava:

I had a discussion with the Chairman, Shri Anil Kumar regarding the changes made in items of 62.10.3 by me. He has agreed with the changes made under items (i), (ii) and (iii). For item (iv), he wants to keep the following statement "to expedite dealing with this case" before the EAC also desired. Accordingly the revised item (iv) reproduced below:

To expedite consideration of the case by the EAC in view of the directions of the NGT contained in their judgment reproduced above in para 62.10.2 (vi), the EAC desired that the response of ISM, CIMFR and CMPDI should be sought simultaneously. In addition, to save time, in the light of the NGT order to consult such other expert bodies as may be considered appropriate, to expedite dealing with this case, the EAC also desired that the scientist of the concerned Regional Office to visit the site for an on the spot assessment of the ground reality and submit report urgently to the Ministry which may also be placed before the EAC.

In the item (v) the last sentence "The proposal was accordingly deferred" be deleted and the revised item (v) is as follows:

The EAC was also of the view that it would be more appropriate for it to interact if required with the concerned parties (such as JPL, SECL etc), only after studying the desired information as mentioned above.

After incorporating the changes, the minutes may be put up on the website.

With best regards:

Sincerely

Professor C.R. Babu

On Fri, Sep 2, 2016 at 11:07 PM, Anil Kumar <anilk1953@yahoo.com> wrote:

For Member Secretary

approved minutes are in the attached file.

Anil Kumar

--
Professor C.R. Babu
Professor Emeritus
Centre for Environmental Management of Degraded Ecosystems (CEMDE)
University of Delhi
Delhi - 110007

**62nd EAC (THERMAL & COAL MINING PROJECTS) MEETING
SCHEDULED FOR 23rd – 24th August, 2016.**

AGENDA

**Venue: Brahmaputra Conference Hall, First Floor, Vayu Wing, Indira Paryavaran Bhawan,
Jorbagh, New Delhi-110003.**

Pl. check the MoEF website: <http://environmentclearance.nic.in/Report/Default3.aspx>

Important Note:

- i. Please send the information as per Annexure 1 by E-mail in word format and also a signed & scanned copy, to the Member-Secretary at sk.smree66@nic.in at least one week prior to the EAC meeting.**
- ii. Please send hard copies of the documents indicating agenda items to all the EAC members, at least one week prior to the meeting and ensure the receipt of same.**
- iii. Non receipt of the project will lead to deferment of the project.**
- iv. Without this information, EAC has discretion to invite the proponent for the meeting.**
- v. Please also provide a hard copy of presentation to the EAC Members during the meeting.**
- vi. No consultant is permitted into the meeting who has no accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) as per the MoEF OM dated 2nd December, 2009.**

COAL MINING PROJECTS

Tuesday 23rd August, 2016

- 62.1 Tapin South Expansion OCP (0.06 MTPA to 2.00 MTPA Normative & .6 MTPA to 2.50 MTPA Peak in an ML area 134.56 ha to 188.66 ha for Phase-I and 223.05 ha to 277.15 ha for Phase-II, **M/s Central Coalfields Limited**, Dist. Ramgarh, (Jharkhand) (EC based on TOR granted on 20.05.2014) - **For consideration of EC****
- 62.2 Expansion of Dipka Opencast Coal mine Project from 31 MTPA to 35 MTPA in an ML Area of 1999.41 Ha. of **M/s South Eastern Coalfields Limited** in District Korba (Chhattisgarh) - **For consideration of TOR****
- 62.3 Gevra OCP project from 41 MTPA to 50 MTPA in a total ML area of 4184.486 ha of **M/s South Eastern Coalfields Limited**, dist. Korba (Chhattisgarh)- **For consideration of TOR****
- 62.4 Expansion of Naheriya underground coal mine (from 0.36 MTPA to 0.54 MTPA within the existing EC ML area of 300.0 ha) of **M/s Western Coalfields Ltd**, Tehsil Parasia, District Chhindwara (Madhya Pradesh) - **For Further Consideration of EC****

62.5 Mugoli Nirguda Extension Deep OC Mine Project (TOR granted on 30.09.2014) - **For Modification in TOR.**

62.6 Flexibility in production capacity from Underground and Opencast Mine of Gare-Palma IV/4 upto (0.6 MTPA each keeping overall limit upto 1.0 MTPA in an ML area of 701.512 ha) **of M/s Hindalco Industries Limited** located in, District Raigarh (Chhattisgarh)- (EC transferred on 16.04.2015) – **For Amendment in EC**

Wednesday 24th August, 2016

62.7 Jagannath Re-organization Opencast Project from 6.0 MTPA to 7.5 MTPA of **M/s Mahanadi Coalfields Limited** in a total area of 578.426 Ha. located in District Angul (Orissa).-**For consideration of TOR**

62.8 Expansion of Krishnashila OCP coal mining project from 5 MTPA to 6.25 MTPA of **M/s Northern Coalfields Limited** in an area of 851.78 ha in Tehsil Dudhi, District Sonbhadra (Uttar Pradesh) - **For further consideration of EC**

62.9 Barjora (North) Block Coal Mining Project in District Bankura, West Bengal from M/s DVC Emta Coal Mines Ltd. to M/s West Bengal Power Development Corporation Limited. (EC letter dated 13.03.2006) - **Transfer of EC**

62.10 Review of EC conditions granted dated 12th June, 2012 for operating Coal Block Gare IV/2 and IV/3 by **M/s South Eastern Coalfields Limited** - **in compliance of the direction of NGT (CZ) at Bhopal**

62.11 Dugda NLW Coal Washery of 2.5 MTPA of **M/s Bharat Coking Coal Ltd** in an ML area of 21 ha located in District Bokaro (Jharkhand) - **For review of the EC conditions**

62.12 Kakatiya Khani Opencast 2 (KTK OC-2) Coal Mining project for production capacity of 1.25 MTPA (Normative) and 1.50 MTPA (Peak) in an ML area of 668.23 Ha; of **M/s The Singareni Collieries Company Limited** in District Warangal (Telangana) – (EC based on TOR granted 18.06.2015) - **For further consideration of EC**

62.13 Discussion on any other item
