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

SUMMARY RECORD OF 55th MEETING OF THE EXPERT APPRAISAL COMMITTEE <u>THROUGH VIDEO CONFERENCING FOR ENVIRONMENTAL APPRAISAL OF COAL</u> <u>MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006, HELD ON</u> <u>29th MAY, 2020.</u>

The 55th meeting of the Expert Appraisal Committee (EAC) for coal mining projects was held on 29th May, 2020 through video conferencing with support NIC team due to Covid-19 lockdown. The following members were present:

1.	Dr. Navin Chandra	-	Chairman				
2.	Dr. N. P. Shukla	-	Member				
3.	Shri. S. D. Vora	-	Member				
4.	Dr. J.K. Pandey	-	Member				
5.	Shri G.P. Kundargi	-	Member				
6.	Shri S.K Paliwal	-	Member				
7.	Shri N.S. Mondal	-	Member				
8.	Prof. S. K. Gupta	-	Member				
9.	Shri N. Mohan Karnat	-	Member				
10.	Shri Manoj Kr Gangeya, Director, MoEFCC	-	Member Secretary				
MoEF	MoEF&CC						
11.	Shri Munna Kumar Shah, Scientist 'D'	-	MoEFCC				

Confirmation of Minutes of 54th meeting of EAC

No comment was made from any member of the Committee on the minutes of the 54th meeting of the EAC held on during 17th April, 2020, therefore the Minutes of the Meeting (MoM) was confirmed in the presence of the members who were present in the 55th meeting of the EAC (coal mining).

Agenda No. 55.1

Amalgamated Yekona I & II OC (Phase-I) with increase in production capacity from 1.0 MTPA to 2.75 MTPA (normative) and 3.44 MTPA (peak) of M/s Western Coalfields Limited and increase in land area from 680.06 ha to 1679.39 ha located in Tehsil Warora, District Chandrapur (Maharashtra) - For Environmental Clearance – reg

[Proposal No. IA/MH/CMIN/135434/2019; F.No. J-11015/381/2015-IA-II (M)]

55.1.1 The proposal is for grant of environmental clearance for Amalgamated Yekona I & II OC (Phase-I) with increase in production capacity from 1.0 MTPA to 2.75 MTPA (normative) and 3.44 MTPA (peak) of M/s Western Coalfields Limited and increase in land area from 680.06 ha to 1679.39 ha located in Tehsil Warora, District Chandrapur (Maharashtra).

55.1.2 Earlier EAC in its 53rd meeting held on 20th February, 2020 had observed the following and desired that PP should submit the details for further consideration of the project.

- (i). PP shall revise the approved mine plan for including proposed peak capacity calendar program of the Mine Plan (including Mine closure Plan)
- (ii). Air Quality data of PM10, PM2.5 at certain monitoring stations are high. PP must provide extra mitigation measures to reduce the dust pollution viz-a-viz impact on nearby villages.
- (iii). PP shall conduct baseline monitoring for two months on same monitoring station for comparison with the monitoring data (as in EIA)
- (iv). Approved Wildlife Conservation Plan for identified schedule I species should be submitted.
- (v). PP shall carryout Air Quality modelling for SOx and NOx and report on its impact and mitigation should be prepared
- (vi). Permission for disposal of OB dump to create Embankment along with the bank of river shall be taken from concerned authority of state government.
- (vii). Permission for diversion of irrigation canal and its impact on hydrogeology shall also be studied.
- (viii). The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity.
- (ix). The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1st May, 2018.
- (x). PP shall provide action plan with timeline for partial compliances reported in Certified compliance report by Ministry's Regional Office dated 19th August, 2019.

In view of the above observations, the Proposal was considered again in next meeting.

Sr.	Observations of EAC	Compliance / Submission of Project Proponent
No.		
1	PP shall revise the approved mine	WCL Board, in its 267th meeting held on
	plan for including proposed peak	11.08.2015 had recommended Project Report of
	capacity calendar program of the	Amalgamated Yekona I & II OC, for onward
	Mine Plan (including Mine closure	approval of CIL Board and subsequently approved
	Plan)	by CIL Board (in principle), in its 319 th meeting held
		on 12.05.2018, with a capacity of 2.75 MTPA and
		further recommended/directed for obtaining
		Environmental Clearance for peak capacity of 3.44

54.8.2 EAC noted following details with respect to compliance of above observations.

	MTPA.
	Thereafter, CIL Board in its 330th meeting held on
	19/20.07.2016 had accorded final approval. The
	capacity of the mine to raise above the normative
	by 25% i.e 3.44 MTPA has been envisaged & may
	be achieved within the existing set up in most
	favorable geo-mining & climatic conditions.
	The environmental impact assessment has been
	conducted considering the peak production capacity
	of 3.44 MTPA and accordingly environment
	management plan and provision for environment
	protection measures has been formulated for the
	pollution load to be generated at peak production
	capacity.
2 Air Quality data of PM10, PM2.5 at	 The baseline data for ambient air quality has been
certain monitoring stations are high.	generated from Oct'16 to Dec'16 at six location
PP must provide extra mitigation	within core and buffer zone of the mine.
measures to reduce the dust	• Only one village Naideo reflected PM10 value of
pollution viz-a-viz impact on nearby	93.9 and PM2.5 value of 56.0, both values are
villages.	nearing the permissible limits. Values at other
	five locations are well with permissible limit.
	• The village is about 450 m upwind of project and
	330 / 700 m downwind of fly ash dumps of GMR
	power plant.
	• The air quality data generated from Jan'20 to
	April'20 shows that the PM-10 level range within
	41-83 μ g/m ³ & PM2.5 range with 15-42 μ g/m ³ .
	This could be attributed due the prevalent
	meteorological conditions or mitigation measures
	taken by the power plants.
	• In order keep the values of to reduce the dust
	pollution viz-a-viz impact on nearby villages in
	future also following extra mitigation measures
	have been proposed to be taken up in the project:-
	• Three tier 30 m width GREEN BELT is
	proposed to be developed along the periphery
	of mine boundary, to control air pollution.
	• At present, No coal transportation is
	anywhere near to Naideo village and in
	future also, there is no plan to build any coal
	transportation road near to Naideo village.
	• Dust suppression measures like Water

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		sprinklers are already provided in the existing Yekona-II OC Mine and there is provision of
		more water sprinklers when Yekona-I OC
		will also start production.
3	PP shall conduct baseline	• As per earlier EAC directives, any two months
	monitoring for two months on same	(January, 2020 to April, 2020) baseline data has
	monitoring station for comparison	been generated at 8 locations as compared to 6
	with the monitoring data (as in EIA)	
	with the monitoring data (as in EIA)	locations generated earlier in 2016 for the EIA.The additional two stations are on the downwind
		direction as advised in the previous EAC
		Meeting.
		• The baseline air quality monitoring was carried
		out at each location covering months of January,
		2020 to April, 2020.
		• The water quality characterization has been
		conducted by collecting water samples from
		drinking water, surface water and mine water
		discharge for the proposed project during post-
		monsoon season i.e. Jan'20 to April'20.
4	Approved Wildlife Conservation	• The approval of the Office of PCCF (wildlife),
	Plan for identified schedule I	Government of Maharashtra, Nagpur / Competent
	species should be submitted	Authority has been secured for Conservation Plan
		for Schedule-I species vide letter no. 22(8) / VaJi
		/ Pra.Kra. 89 (19-20)/ 57/ 20-21 Nagpur, 440001
		dated 20.04.2020.
		• Since the aforesaid conservation plan is extension
		to the earlier conservation plan prepared by DFO,
		Warora, Chandrapur Dist., for EMCO Energy
		Ltd. during 2014-15, accordingly the financial
		provisioning is also done.
		• The cost for Conservation plan estimated to be
		around is approx., Rs 35.0 lakhs.
5	PP shall carryout Air Quality	Air Quality modelling / impact prediction study for
	modelling for SOx and NOx and	pollutants SOx and NOx has been carried out using
	report on its impact and mitigation	USEPA approved "AERMOD" version 16216r Air
	should be prepared	Quality Prediction Model.
		• The diesel consumption in a day has been
		estimated to be 12,740 Lit/day for the project
		considering the geo-mining parameters at the
		peak capacity of 3.44 MTPA.
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		• The modelling exercise has been conducted

			• The resultant concentrations at the peak production level of 3.44 MTPA for both SOx & NOx have been found to be well within the permissible limits.
6	Permission for disposal of OB dump to create Embankment along with the bank of river shall be taken from concerned authority of state government	•	Construction of an embankment for operation of any coal mine is required, where the activity area falls below HFL of nearby river, to protect the mine workings from danger of surface inundation. This is a statutory requirement and is covered under Reg 149 & Reg 152 of the Coal Mine Regulations (CMR), 2017. Before opening any coal mine, requisite permission under the provisions of coal mines regulation, 1957 and now as amended in 2017 is taken from the office of Directorate General of Mines Safety (DGMS). The permission letter clearly stipulates the conditions/precautions etc which are to be followed/taken during operation of the mine under specific provision of CMR 1957/2017. The aforesaid permission issued by DGMS also clearly covers all aspects of construction of embankment. As required under statute, necessary permission from the Office of Directorate General of Mines Safety(DGMS) (Western Zone, Nagpur) under Reg 126(2) of CMR for extraction of coal and removal of overburden with mechanized opencast method with deep hole drilling and blasting in an are below HFL of Wardha river in Yekona – II OC has been secured.
7	Permission for diversion of irrigation canal and its impact on hydrogeology shall also be studied	•	The permission for part canal diversion has been obtained from Irrigation department, Maharashtra Government vide letter क्रमांक /७४८/प्रशा- १/वेकोली/लाल नाला प्र./वशाका/एकोणा
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		 within the ML Area. Diverted length of the canal will be approx 3.5 kms. The entire area affected due to diversion will be used for the mining purpose i.e. for proposed Amalgamated Yekona I & II OC. The length of diversion for Yekona-I quarry is 2.1 kms and Yekona –II quarry is 3.0 km and 0.9 km for other mining activities. From the plan it can be seen here that the inlet & outlet points of the irrigation canal is not being disturbed. The diversion is being done only in between the inlet and outlet point, where the present land use will be totally changed to mining & will be acquired. As such as indicated above, the 6 km will now be 3.50 kms approx.
8	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity	The NOC from CGWA, for ground water abstraction from Amalgamated Yekona-I and II OC Mine has been obtained vide NOC letter no CGWA/NOC/MIN/ORIG/2019/6689 dated 06.12.2019, which is valid from 19.11.2019 to 18.11.2021
9	The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1 st May, 201	 As per the guidelines issued by MoEF & CC dated 1st May, 2018 regarding Corporate Environmental Responsibility (CER), fund allocation for CER will be 0.5 % (brownfield project) of the capital cost between 500 crore-1000 crore. As per the approved Project Report of the subject project, the capital cost is Rs. 727.28 Crores. Hence, the required CER Fund as per the aforesaid guidelines works out to Rs. 3.63 Crs. The activities for CER shall be made as per the guidelines issued by the ministry regarding CER on 1st May, 2018.
10	PP shall provide action plan with timeline for partial compliances reported in Certified compliance report by Ministry's Regional Office dated 19 th August, 2019.	• Action plan with timeline against partial compliances (reported in certified compliance report by Ministry's Regional Office dated 19th August, 2019) has been submitted by Project Proponent to office RO, MoEF & CC, Nagpur vide its letter Ref no.वेकोली/माक्षे/क्षेमप्र/पर्यावरण/2019/150 dated 28.08.2019 to RO, MoEF&CC.

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

The proposal for grant of environmental clearance for Amalgamated Yekona I & II OC (Phase-I) with increase in production capacity from 1.0 MTPA to 2.75 MTPA (normative) and 3.44 MTPA (peak) of M/s Western Coalfields Limited and increase in land area from 680.06 ha to 1679.39 ha located in Tehsil Warora, District Chandrapur (Maharashtra).

The forest land bearing survey no. 2/1 and 2/2 in the Nagala Rith mouza measuring 0.62 ha falls in the middle of proposed external OB dump of Amalgamated Yekona-I & II OC mine.

The Stage–I Forest Clearance (FC) for 0.62 ha of forest land is yet to be obtained. Mining Plan by excluding the Forest land 0.62 Ha and adjacent non-forest land 21.31Ha (for maintaining mine geometry) has been prepared in the Phase – I.

As per Hon'ble NGT order dated 30th July, 2019, the proposed mine is in Chandrapur which is Critically Polluted Areas (CPA).

Diversion of the road (Road from Warora to Madhari) which is passing through the proposed quarry of Yekona-I is involved.

55.1.4 In view of the incomplete compliance/information and unresolved issues, the EAC after due deliberation observed the following and sought information by PP.

- As this project falls in CPA, the details of the Proposed Environmental Protection Mechanism as per Ministry's OM dated 31st October, 2019 has not yet been submitted. It is to be submitted
- Permission for diversion of the road (Road from Warora to Madhari) which is passing through the proposed quarry of Yekona I
- The location of the mine boundary from the HFL and the bank of the river should be studied and thereby EAC will prescribe the distance of the mine wall from HFL as well as bank of river.
- As the new linkage of the Thermal Power Plants are being worked-out/explored located at different distances, Traffic impact assessment in terms of environmental, habitation and pollution control should be presented for all proposed routes.
- Map showing movement of dumping of External OB excluding Forest land proposed to be diverted in due course of time should be provided.
- Contradictory statement in EIA Report and Response to RO regarding installation of Coal Handling Plant should be avoided and firmed up plan should be presented before this committee.
- *HEMM is proposed by PP to be maintained by outsourcing agency, however, the overall responsibility of all the commitment made will rest with the PP.*
- In-pit conveyor belt till CHP should be installed and timeline should be given accordingly.

- PH mentions that Overburden is 100 meters away from yekona village, which may cause pollution around the village. Also in the event of an accident which may fall of OB into the river, water may enter into village causing damage. Necessary mitigation measures should be proposed by PP and presented before the committee.
- Road between Naidev village to Warora appears to be causing dust emission due to movement of coal trucks. Plan for upgradation of road up to the specified standard and widening of road along with the environmental mitigation measures should be submitted to the committee.

The proposal was deferred for want of above compliance.

Agenda No. 55.2

Cluster 12 comprising of 15 mines of a combined production capacity of 27.16 MTPA (Normative)/31.83 MTPA (Peak) in a combined ML area of 12736 ha of M/s Eastern Coalfields Limited located in Raniganj Coalfields in Tehsil Haripur Block, District Burdwan (West Bengal)– Amendment in Environmental Clearance – reg.

[Online Proposal No. IA/WB/CMIN/9503/2011; F.No. J-11015/76/2011-IA.II(M)]

55.2.1 The proposal is for Amendment in EC condition of Cluster 12 comprising of 15 mines of a combined production capacity of 27.16 MTPA (Normative)/31.83 MTPA (Peak) in a combined ML area of 12736 ha M/s Eastern Coalfields Limited located in Raniganj Coalfields in Tehsil Haripur Block, District Burdwan (West Bengal).

55.2.2 The EAC during deliberations noted the following: -

Earlier, EAC in its meeting held on 31st August, 2018 observed that the proposal for construction of railway siding was still in the initial stages as only work order for preparation of DPR was issued on 22nd December, 2017. Further, no acquisition of land was done and as such, no satisfactory progress was observed.

Further, the Committee especially in view of no forest clearance available for 38.44 ha of forest land involved under one of the constituent mines namely, Tilaboni UG, did not agree to the proposed amendment in the environmental clearance dated 9th February, 2015, amended on 3rd March, 2016.

Further EAC in its 52nd meeting held on 24th January, 2020 observed the following: -

The EAC after deliberations reiterated the earlier observation as mentioned above. Also, committee noted that these amendments would not be required if PP comply all the conditions however PP does not bother to comply and keep on seeking amendments and relaxation. PP should strictly abide the conditions and should not increase the production beyond 3.5 MTPA till the compliance of conditions

are completed. Further, committee desired that this Ministry may communicate to Ministry of Coal that enforcement and regulating the compliance status of EC conditions should be on top priority.

The proposal was then deferred on the above line.

55.2.3 In this meeting, the following amendments were sought :-

(i) Relaxation of specific condition in EC Amendment letter dated 3rd March, 2016 for Jhanjra UGP. i.e.

"the silo loading facility at Jhanjra should be completed within three years, and the production from Jhanjra should be enhanced to 5.0 MTPA only after commissioning both of the new railway siding, and the silo loading facilities"

(ii) Reduction in Cluster Area

Cluster area reduced from 12736.00 Ha to 12694.47 Ha consequent to removal of 41.53 Ha of Forest Land falling within the project area of Tilaboni UGP thereby reducing the project area 869 Ha to 827.47 Ha.

(iii) Amendment in configuration

Reassessment of mine capacities keeping the overall cluster capacity unchanged.

- It has been desired by PP that the mine (Jhanjra UGP) may (be allowed to) produce up to 4.5 MTPA with the existing system of coal transportation by road. However, production beyond 4.5 MTPA may be allowed only after commissioning of railway siding and silo loading facilities.
- Detailed PR for laying of railway track from Ukhra to MIC, Jhanjra has been approved for a capital expenditure of 241.02 Cr and work order awarded on 08.01.2020 to RITES to complete the work within 3 years.
- Work-order issued to RITES vide WO no. ECL/HQ/GM(C)/W.O./89/239/1521 dated 08.01.2020 completion period of which is three (03) years.
- Purchase order for procurement of 1875.65 MT new rails was issued by RITES vide: RITES/RPO-KOL/Jhanjra-ECL/Rail Procurement/2019-20/763 dated: 05.03.2020.
- The entire land required for the purpose is under possession of ECL.
- Further, carrying capacity of the existing coal transport route as per Guidelines issued by Indian Road Congress has been carried out and it has been found that there is sufficient capacity for further increase in coal transportation.
- The Air Quality Impact assessment has been done for incremental production of 1.0 MTY and no significant increase in pollution load is anticipated.

- The mine is in a position to produce @4.5 MTY from the current year itself (the mine has produced 3.50 MT up to 20.03.2020 in the FY2019-20). It is therefore requested to kindly reconsider our proposal for EC amendment of Cluster no.12 in next EAC meeting. Form-IV and other related documents for EC amendment of Cluster No.12 have also been prepared and uploaded in PARIVESH portal.
- The road conditions are very good over 4 kms and slightly broken over the remaining 3 kms due to monsoons.
- A report (compliance report) and data on air quality were sent to Addl. PCCF (C), MoEF&CC, RO(EZ), Bhubaneswar vide letter no: GM/SBA/2017/386 dated 13.01.2017.
- 2. Three (03) Nos. of Mobile Water Sprinkler of 23 KL each and four (04) Nos. Hired Mobile Water Sprinkler of 10 KL each are engaged for dust suppression in mining area of Sonepur Bazari OCP. Further Three (03) Nos mobile sprinklers of 10 KL capacity each at Jhanjra UG and thirteen (13) Nos Fixed sprinklers are installed at Purusottampur railway siding. In addition, at Jhanjra, all the machineries (PSLW, CM, LHCM) operate only when continuous supply of water for dust suppression at source is provided. These are apart from dust control equipment available and operating at other mines of cluster12
- It has been submitted that the revised mining plan for Cluster no.12 is prepared and approved by ECL on 22.04.2020. In the approved mining plan, forest land falling in Mine lease of Tilaboni UGP (not having Stage-I Forest Clearance) have been removed from the Cluster and some production capacity redistribution of certain mines has been made keeping overall cluster capacity unchanged. Now, in view of above observation substantial progress has been made for compliance towards construction of Railway siding of Jhanjra UGP:

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Reassessment of mir	ie capacities keepin	g the overall cluster	r capacity unchanged
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As	As per Existing Mining Plan (EC letter dated 03.03.2016)					A	ary	Remarks			
Sl No	Name of mines	Existin g Lease Area (Ha)	Existing Capac (MTF	city	Life (yr)	Sl no.	Name of mines	Proposed Lease Area (Ha)	Proposed EC Capacity (MTY)	Bala nce Life (yr)	
1	Pandaveswar - Dalurband UG & OC	1385	UG : 1.47 OC : 2.00	2.45	>25	1	Pandavesw ar- Dalurband UG & OC	1385	2.25	>25	(-)0.20
2	Manderboni UG	467	0.1	7	13	2	Manderboni – South Samla UG	1025	0.28	>25	Merged with South Samla UG
3	Madhaipur	622	UG:	0.78	>25	3	Madhaipur	622	0.65	>25	(-)0.13

	UG		0.21				UG & OC				
	Madhaipur		UG:		3						
	OC Patch		0.57		5						
4	Nutandanga UG	543	0.12	2	20	4	Nutandanga UG	543	Production suspended	-	(-)0.12
5	Kendra UG	459	0.1	0	10	5	Kendra UG	459	Production suspended	-	(-)0.10
6	Samla UG	676	0.12	2	>25	6	Samla UG & OC	676	0.60	3	(+)0.48
7	Sonepur Bazari OCP	2405	12.0)0	17	7	Sonepur Bazari OCP	2405	12.00	13	No change
8	South Samla UG	558	0.1	1	>25	-		-	Merged wit	h Ma UG	nderboni
9	Nakrakonda – Kumardih B UG & OC	642	UG : 1.12 OC: 3.00	4.12	>25	8	Nakrakonda – Kumardih B UG & OC	642	4.12	>25	No change
10	Kumardihi A UG	457	0.2	0	>25	9	Kumardihi A UG	457	0.20	>25	No change
11	Jhanjra UG	1520	5.0	0	>25	10	Jhanjra UG	1520	5.00	>25	No change
12	Tilaboni UG	869	2.1	4	>25	11	Tilaboni UG	827.47	2.14	>25	Area reduced after removal of 41.53 Ha forest land
13	Shyamsunda rpur UG	533	1.1	2	>25	12	Shyamsund arpur UG	533	1.59	>25	(+)0.47
14	Bankola UG	830	0.3	0	>25	13	Bankola UG	830	0.30	>25	No change
15	Kottadih UG & OC	770	UG : 0.90 OC : 2.20	3.10	>25	14	Kottadih UG & OC	770	2.70	>25	(-)0.40
	Total	12736	31.8	33				12694.47	31.83		Area: (-) 41.53 Ha Capacity

					:
					No
					change

55.2.4 The EAC, after detailed deliberation, **recommended** the proposal for the grant of amendment in the environmental clearance (EC) as mentioned in table at 55.2.3 to the **Cluster 12, comprising of 15 mines of a combined production capacity of 27.16 MTPA (Normative)/31.83 MTPA (Peak) in a combined ML area from 12736 to 12694.47 ha by reducing 41.53 ha of forest land falling within** the project area of Tilaboni UG and restructured mine capacities (as in para 55.2.3 above) keeping the overall cluster capacity unchanged, M/s Eastern Coalfields Limited located in Raniganj **Coalfields in Tehsil Haripur Block, District Burdwan (West Bengal),** under the provision of EIA Notification, 2006 and it's subsequent amendments/circulars thereto subject to the compliance of the following specific terms & conditions in addition to the conditions already mentioned in the original *EC*.

- (i) Production from Jhanjra shall be increased from 3.50 MTPA to 4.0 MTPA. However, the silo loading facilities at Jhanjra should be completed within three years and the production from Jhanra should be enhanced to 5 MTPA only after commissioning of both the new railway siding, and the silo loading facilities. Also, PP should not seek further extension and expansion without completion of this condition.
- (ii) The project proponent shall obtain Consent to establish/Operate from the State Pollution Control Boards for the proposed changes in production capacity prior to commencement of the increased production.
- (iii) Transportation of coal from Coal Handling Plant shall be through covered trucks.
- *(iv)* To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.
- (v) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.
- (vi) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (vii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (viii) Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (ix) Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- (x) Distance from the mine and OB Dump shall be 150 m away from river all along the bank of river.

- (xi) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (xii) A third party assessment of EC compliance shall be undertaken once in three years through reputed Government Institutes or any other expert agency identified by the Ministry.
- (xiii) Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
- (xiv) Project proponent to plant 100,000 nos. of native trees with broad leaves along the villages and 50,000 nos of native trees along transportation route to prevent the effect of air pollution in 2 years. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer and Ministry's Regional Office.
- (xv) Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (xvi) The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xvii) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xviii) Project Proponent shall follow the mitigation measures provided in Office Memorandum No.
 Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (xix) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- (xx) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the

State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

(xxi) Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.

Agenda No.55.3

Mahakali Underground Coal Mine Project of 0.40 MTPA capacity in mine lease area of 404.98 ha of M/s Western Coalfields Limited (WCL), located in Village Babupeth, District Chandrapur (Maharashtra) - For revalidation of EC

[Online Proposal No. IA/MH/CMIN/7189/2006; J-11015/113/2006-IA.II(M)]

55.3.1 The proposal is for revalidation of environmental clearance dated 2nd August, 2006 granted to Mahakali Underground Coal Mine Project of (from .168 to 0.40 MTPA) capacity in mine lease area of 404.98 ha of M/s Western Coalfields Limited (WCL), located in Village Babupeth, District Chandrapur (Maharashtra) in compliance of the Ministry's Notification S.O. No.1530 (E) dated 6th April, 2018.

55.3.2 Earlier the proposal was considered by EAC in its 36^{th} meeting held on 31^{st} August, 2018 and desired for additional information in respect of the following: -

(i) Public notice to be issued in leading newspapers (one national and two local) for information of the stakeholders about the project and present coal mining operations of capacity 0.40 MTPA in mine lease area of 404.98 ha, inviting comments and their redressal,

(ii) Valid Mining Plan and the Mine Closure Plan duly approved by the competent authority,

(iii) Compliance status of the conditions stipulated in the environmental clearance dated 2nd August,
 2006 from the Regional Office at Nagpur,

(iv) Consent to operate from the State Pollution Control Board for the present mining operations.

(v) Redressal of issues raised during the last public hearing conducted by the SPCB on 20^{th} October, 2005.

(vi) Coal production realized from the mine from 1994-95 vis-à-vis capacity stipulated in the environment clearance dated 2^{nd} August, 2006 and CTO granted by the MPCB.

(vii) Details of court cases and the compliance status.

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

	3 EAC noted following details with respect	1
Sr.	Observations of EAC	Compliance / Submission of Project
No.		Proponent
1	Public notice to be issued in leading	Public Notice was published in the following
	newspapers (one national and two local)	News papers inviting comments from
	for information of the stakeholders about	stakeholders within 30 days :
	the project and present coal mining	Business Standard (English) dated 18-10-2018
	operations of capacity 0.40 MTPA in	Chandrapur Samachar (Marathi) dated 20-10-
	mine lease area of 404.98 ha, inviting	2018
	comments and their redressal	Mahavidharbha (Hindi) dated 18-10-2018
		No comments have been received from
		stakeholders
2	Valid Mining Plan and the Mine Closure	The Mining Plan was prepared and
	Plan duly approved by the competent	subsequently approved by WCL Board vide
	authority	letter dated 07-01-2006
		Mine Closure Plan was approved by WCL
		Board vide letter dated 02-02-2013.
3	Compliance status of the conditions	Certified Compliance of the existing EC
	stipulated in the environmental clearance	conditions from RO, MoEF & CC, Nagpur
	dated 2 nd August, 2006 from the Regional	vide letter no. F.No:3-52/2006(ENV)/5798
	Office at Nagpur	dated 03-10-2019
		ATR against the Certified Compliance has
		been submitted vide email dated 25-05-2020
4	Consent to operate from the State	The CTO has been obtained from MPCB for a
	Pollution Control Board for the present	capacity of 0.40 MTPA vide letter dated 24-
	mining operations.	12-2019 with validity upto 31-03-2022
5	Redressal of issues raised during the last	PH was conducted for Mahakali UG with 0.40
	public hearing conducted by the SPCB on	MTPA Production capacity in an ML Area of
	20 th October, 2005.	404.98 ha on 20.10.2005 at Talathi
		Prashikshan Hall, New Administrative
		Building, Chandrapur.
		The latest status of PH compliance was
		presented to EAC
6	Coal production realized from the mine	Provided during the presentation to EAC
	from 1994-95 vis-à-vis capacity stipulated	
	in the environment clearance dated 2 nd	
	August, 2006 and CTO granted by the	
	MPCB.	
7	Details of court cases and the compliance	There are no cases pending against the mine. A
	status	certificate from the mine authority was

55.3.3 EAC noted following details with respect to compliance of above observation.

presented

Further, it was noted that RO, Nagpur highlighted the non-compliance with respect to forest land. Mahakali Colliery involved with 193.19 ha Forest Land for which Forest Clearance Proposal was submitted on 18.1.2005. Stage I Forest Clearance also received vide letter no. F.No.8-34/2007-FC dated 22.06.2005. As per the query raised against EC condition no. iii, the forest land measuring 193.19 Ha is not violated intentionally. Total forest land inside mining lease is 193.19 Ha. Out of which 77.71 Ha used for mining before commencement of FC Act 1980, 47.07 Ha used after commencement of FC Act 1980 till 31.03.2005 but before issuance of MoEF guideline dated 06/07th Dec 2004 regarding pre-1980 UG Mining and Fresh Forest Land applied for 68.41 Ha.

PP submitted the following points in chronological order to EAC:

- Opening of Mahakali Colliery 1922
- Nationalization of Mahakali Colliery by Government of India by virtue of Coal Mines Nationalization Act 1973 in 1975
- Legislation of Forest Conservation Act 1980 25.10.1980. There is no clarity regarding Underground Mining under the Forest Land.
- Issual of MoEF Guidelines vide letter F.No.2-1/2003-FC(Part-IV), dated 06/07th December 2004 regarding Pre-1980 Underground Mining Leases for extraction of minerals involving extension of already broken up underground forest land. <u>The guideline suggested Ex-Post Facto approval of Central Government for the underground area broken, if any, after 25.10.1980 to till date, along with the permission for underground mining if required, must be obtaining under Forest (Conservation) Act, 1980. (Copy enclosed)
 </u>
- Accordingly, proposal for Ex-Post Facto approval for Forest Clearance was submitted on date18.01.2005 for 193.19 Ha forest land of Mahakali Colliery, WCL-Chandrapur Area vide letter no.WCL/CHA/CGM/PLG/REV/ 13588 and violation report also enclosed along with the proposal
- Mining already done up to 25.10.1980 = 77.71 ha (worked before enforcement of FC Act 1980.)
- Mining done after 25/10/1980 to till 31.03.2005 = 47.07 ha. (As there was no clarity or clear cut guidelines regarding underground mining under forest land till 6/7th December 2004, WCL officials have not violated the FC Act 1980 intentionally by working underground under the forest land. During this period from 25.01.1980 to 31.03.2005 the officials of Mahakali Colliery was not aware about the applicability of FC Act 1980 for Underground Mining under forest land. This violation is unintentional and no damage happened to the surface area.)
- Fresh Forest Land applied for 68.41 Ha
- Total Area Applied = 77.71 Ha + 47.07 Ha + 68.41 Ha = 193.19 Ha
- Temporary Working Permission accorded for 01 year vide MoEF, FC Section letter F.No.8-82/2005-FC dated 23.11.2005.
- FAC made a field visit to the Mahakali Colliery on 18-20th June 2016 and verified the records/mining data of User Agency. It is concluded that area of 77.71 Ha was worked prior to 1980 and no mining work seems to be in progress in this area at present. Also, an area of 47.07

Ha beneath compartment no.484 fo RF has been worked after 1980 and at present (June 2016) the galleries of the area (47.07 Ha) are filled with water and no mining work is possible.

Environmental clearance dated 2nd August, 2006 was granted to Mahakali Underground Coal Mine Project of (from 0.168 to 0.40 MTPA), however production details submitted by PP shows higher production from 0.168 prior to grant of EC of 0.4 MTPA.

Year	Production in	Year	Production in	EC capacity	
	(MT)		(MT)	(MTPA)	
1994-95	0.174	2006-07	0.228		
1995-96	0.172	2007-08	0.221		
1996-97	0.172	2008-09	0.204		
1997-98	0.175	2009-10	0.151		
1998-99	0.171	2010-11	0.156		
1999-2000	0.161	2011-12	0.116		
2000-01	0.170	2012-13	0.097	0.40 MTPA	
2001-02	0.165	2013-14	0.114	0.40 MITA	
2002-03	0.201	2014-15	0.090		
2003-04	0.218	2015-16	0.076		
2004-05	0.224	2016-17	0.058		
2005-06	0.220	2017-18	0.099		
		2018-19	0.118		
		2019-20	0.083		

55.3.4 The EAC after deliberation, at the first instance observed that the proposal for revalidation was earlier considered in 31st August, 2018 as per Ministry's Notification dated 6th April, 2018. Notification was to implement the judgments of the Hon'ble Supreme Court as well as for the protecting and improving the quality of environment and abating the environmental pollution, that all projects mentioned in clause (b) of fourth paragraph above of notification, be brought under the regulatory framework of the EIA Notification, 2006.

However, the PP has submitted the reply/information/compliance of EAC observation almost after 1 year and 8 months! The long delay in replying after availing the window of time for regularisation and compliance of regulatory requirements could have been avoided by the PP!

Similarly, it has come to the notice of EAC that there are a large number of such cases pending on the part of PPs, where, PPs have applied for regularisation of ECs after SC orders, however, no replies have been submitted to the ministry on the queries raised by EAC, even after more than a year has elapsed. Therefore, it is desirable that the Ministry may issue letters to all concerned PPs for submitting the compliance of observations of EAC made earlier while considering the Revalidation proposals within a time period (say six months) from the date of issue of letter. The validity of EC may be considered as expired in case PPs fail to comply and PP may not be allowed to carry out mining

operations. State Pollution Control Board may also be informed accordingly. The Ministry may take a decision in this regard.

With regard to instant proposals of revalidation of Mahakali UG, EAC observed that 193.19 ha forest land has been used for mining activity with forest clearance though some portion of land was broken up for mining prior to FC Act, 1980 but 47.07 ha forest land was used for mining activity after FC Act, 1980. The matter of violation is being dealt by FC Division and already being considered by FAC. Further, EC granted by Ministry was of capacity from 0.168 to 0.4 MTPA however from the table above, it is seen that PP has exceeded the production level prior to the grant of EC. This can be considered violation of EIA Notification, 2006. EAC desired that the proposal may be sent to violation sector of the Ministry so as to recover the damage to the environment for overproduction. In view of this, this EC cannot be revalidated and Ministry may take action as per extent rules and guidelines.

The proposed is therefore *returned* accordingly.

Agenda No.55.5

Expansion of Cluster VII coal mining project from 8.16 MTPA to 11.42 MTPA in mine lease area of 2127.70 ha of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand) – Amendment in Environment Clearance – reg.

[Online Proposal No. IA/JH/CMIN/142279/2020; J-11015/238/2010-IA-II(M))]

55.4.1 The proposal is for amendment of Environment Clearance to Expansion of Cluster VII Coal Mining Project from 8.16 MTPA to 11.42 MTPA in mine lease area of 2127.70 ha of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand).

55.4.2 The EAC, during deliberations noted the following:

The proposal was granted Environment Clearance to Expansion of Cluster VII Coal Mining Project from 8.16 MTPA to 11.42 MTPA in mine lease area of 2127 ha of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand) on 12th October, 2018.

Earlier, EAC considered the proposal in its 54th meeting held on 17th April, 2020 for amendment and observed the following: -

PP has submitted approved Mining Plan along with the Mine Closure Plan of Rajapur/South Jharia OC on Parivesh Portal. PP's letter dated 4th January 2020 regarding Certified copy of minutes of 358th Board meeting held on 19th December, 2019 encloses the approved mine plan with a normative capacity of 1.97 MTPA. However, it proposes to increases the capacity to 2.56 MTPA with the overall production capacity remaining same and in same mine lease area. The proposal of 2.56 MTPA does not have valid approved Mine Plan. It was desired that PP should submit the approved Mine Plan of desired peak capacity.

The proposal was **deferred then**.

55.4.3 Now, PP has submitted the approved Mining plan for 1.97 MTPA and peak of 2.56 MTPA (30% above normative capacity) which was considered in 363rd Board held on 24.04.2020 and has confirmed the same and revised the resolution mentioning all the parameters (normative and peak capacity; life of project; leasehold area). The peak capacity of 2.56 MTPA is mentioned in the Board resolution. However, earlier in 358th Board held on 19.12.2019, the peak capacity was inadvertently not indicated in resolution.

Mining Plan along with Mine Closure Plan of Rajapur/South Jharia OC with a Normative capacity of of 1.97 MTPA (30%) i.e. peak capacity 2.56 MTPA, lease hold area 207.48 ha, Balance life 10 years and the total mine closure cost being Rs. 2390.860 lakhs (Rs. Two thousand three hundred ninety lakhs and eighty thousand only), to be deposited in the excrow account (including already deposited amount of Rupees five hunder two lakhs four thousand and one hundred only), is approved by the Board

SI.N			Leasenoiu	Balance Life of Mine (in	Peak Production Capacity	Proposed prod. (MTPA)				
0	Mines	Mine	Area (in Ha)	years)	(in MTPA)	2018-19	2019-20	2020-21	2021-22	2022-23
1	Amalgamated Dhansar- Industry Colliery	ос	276.62	30	2.07	1.5	2.00	2.00	2.00	1.6
2	Ena OC	OC	216.00	25	3.00	2.0	3.00	3.00	3.00	2.00
3	Amalgamated East Bhuggatdih Simlabahal OC	OC	420.75	15	2.30	1.0	2.3	2.3	2.3	1.76
4	Rajapur/S- Jharia OCP	OC	207.48	17	1.69	1.69	1.69	1.69	1.69	1.69
5	Kusunda OC	OC	247.70	23	2.00	2.0	2.0	2.0	2.0	2.0
6	Bhutgoria UG to be re- opened	UG	131.67	23	0.36	0	0.2	0.36	0.36	0.36
7	Alkusa UG	UG	101.77			Inc	operative ti	ll fire dealin	g at Kusuno	da
8	Hurriladih UG	UG	127.17			Inoperative till fire dealing at AEBS Colliery				
9	Burragarh UG	UG	147.83			Inoperative till fire dealing at AEBS Colliery				
10	Kustore UG	UG	250.71			Inoperative till fire dealing at Kusunda				
		9.33	2127.70		11.42	8.19	11.19	11.35	11.35	9.41

Existing Production Scenario and Proposed Production Scenario

Proposed production schedule (with revised Mining Plan)

S.N	Name of Mine	Type of Mine Id A	Leaseho Id Area		Peak Producti on Capacity	Production Schedule (As per Peak Capacity)				apacity)
0.			(In Ha)	years)	(in MTPA)	Year-I	Year-II	Year-III	Year-IV	Year-V
1.	Amalgamated Dhansar-Industry Colliery	ос	276.62	30	2.07	2.00	2.00	2.00	1.60	1.60
2.	Ena OC	ос	216.00	25	3.00	3.00	3.00	3.00	2.00	2.00
3.	Amalgamated East Bhuggatdih Simlabahal OC	ос	420.75	15	2.30	1.00	1.30	1.43	1.43	1.43
4.	Rajapur/S-Jharia OCP	ос	207.48	10	2.56	2.56	2.56	2.30	1.50	1.50
5.	Kusunda OC	ос	247.70	23	2.00	2.00	2.00	2.00	2.00	2.00
6.	Bhutgoria UG (to be reopened)	UG	131.67	23	0.36	0.20	0.36	0.36	0.36	0.36
7.	Alkusa UG	UG	101.77			Inc	perative til	l fire dealir	ng at Kusur	nda
8.	Hurriladih UG	UG	127.17			Inope	rative till fi	re dealing a	at AEBS Co	olliery
9.	Burragarh UG	UG	147.83			Inoperative till fire dealing at AEBS Colliery				
10.	Kustore UG	UG	250.71			Inoperative till fire dealing at Kusunda				
	Total		2127.70		11.42*	10.76	11.22	11.09	8.89	8.89

55.4.4 The Committee after detailed deliberation and considering the critical situation in Jharia Coalfields due to persistent mine fire, **recommended** the proposal for the amendment in Environment Clearance as proposed in para 55.4.3 above without any change in overall production capacity and mine lease area to expansion of Cluster VII Coal Mining Project from 8.16 MTPA to 11.42 MTPA (Peak) in mine lease area of 2127 ha of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand). In addition, all the conditions of EC dated 12th October, 2018 shall remain also be applicable along with the following conditions mentioned below: -

- (i) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.
- (ii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (iii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- *(iv)* Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (v) Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- (vi) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (vii) A third party assessment of EC compliance shall be undertaken once in three years through reputed Government Institutes or any other expert agency identified by the Ministry.

- (viii) Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
- (ix) Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (x) The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xi) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xii) Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (xiii) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- (xiv) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- (xv) Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for

growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.

Agenda No. 55.5

KDH extension OCP Project of (4.5 MTPA Normative) to (5.0 MTPA Peak) Project in an ML area 489.30 ha of M/s Central Coalfields Limited located in village Bisrampur, District Ranchi, (Jharkhand) – For Amendment in Environment Clearance – reg.

[Online Proposal No. IA/JH/CMIN/131319/2019; J-11015/311/2010-IA-II(M)]

55.5.1 The proposal is for amendment/extension in Environmental Clearance dated 30th January, 2015 for additional 2 years (life of the mine) to KDH extension OCP Project of (4.5 MTPA Normative) to (5.0 MTPA Peak) Project in an ML area 489.30 ha of M/s Central Coalfields Limited located in village Bisrampur, District Ranchi, (Jharkhand)

55.5.2 The EAC during deliberation noted the following:-

Earlier, EAC in its 52nd meeting held on 24th January, 2020 considered the proposal and observed the following: -

The EAC after deliberation observed that though the application for extension is eligible under Ministry's Notification dated 29th April, 2015, however PP has not revised the Mine Plan (including Mine Closure Plan). It was noted by EAC that valid plan is very basic document for any coal mine project and PP and their consultants should atleast not do such silly mistake. EAC desired that the MoC may direct CIL subsidiaries to comply with these documents and come prepared with all relevant documents. For further extension it was desired that PP must submit approved revised Mine Plan and certified compliance status of EC conditions duly certified by Ministry's Regional Office, Ranchi.

The proposal was then deferred on the above lines.

Observation	Compliance status/comments
Approved revised Mine Plan	The mining plan of KDH OCP is revised and approved by CCL Board in 483rd meeting of Board of Director of CCL held on 3rd February, 2020. The copy of approved mining plan is enclosed on

55.5.3 PP submitted the following details with respect to above observation: -

	PARIVESH Portal
1	The site inspection of KDH OCP was made on 3rd March, 2020 by Regional Office, Ranchi. The details sought during inspection were submitted on 5th March, 2020 to RO Ranchi

Observations after inspection and submission of action taken report by PP was forwarded by Ministry's Regional Office on 14th April, 2020. It was observed that there are various partial compliance of EC conditions and PP needs to expedite the compliance of all conditions.

55.5.4 The Committee after deliberation **recommended** the proposal for amendment/extension of Environment Clearance dated 30th January, 2015, which was valid till 30th January, 2020 (as per Mine life of 5 years noted in EC), for additional 2 years (life of the mine) KDH extension OCP Project of (4.5 MTPA Normative) to (5.0 MTPA Peak) Project in an ML area 489.30 ha of M/s Central Coalfields Limited located in village Bisrampur, District Ranchi, (Jharkhand). Further all the conditions in EC dated 30th January, 2015 shall remain unchanged with additional conditions mentioned below: -

- (i) All the partial conditions observed by Ministry's Regional in its report dated 14th April, 2020 on the basis of site visit dated 3rd March, 2020 shall be completed within 1 year and separate compliance report should be submitted to Regional Office. If the conditions still not fully completed than Regional Office may issue a show cause notice to PP and accordingly inform the EAC Coal sector. EAC coal sector shall revoke the EC if conditions were not fully complied.
- (ii) Further no expansion proposal will b considered if EC conditions are not complied within stipulated timeframe.
- (iii) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.
- (iv) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (v) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (vi) Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (vii) Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- (viii) Continuous monitoring of occupational safety and other health hazards, and the corrective

actions need to be ensured.

- *(ix)* Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
- (x) Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (xi) The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xii) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xiii) Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (xiv) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- (xv) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- (xvi) Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been

disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.

Agenda No. 55.6

Kathara Opencast Coal Mine project of 1.9 MTPA with mine lease area of 792.81 ha of M/s Central Coalfields Limited located in District Bokaro (Jharkhand) - Amendment in Environmental Clearance

[Online Proposal No. IA/JH/CMIN/11566/2008; J-11015/482/2008-IA.II(M)]

55.6.1 The proposal is for amendment/extension in environmental clearance dated 8th January, 2014 to Kathara Opencast Coal Mining project of capacity 1.90 MTPA with mine lease area of 792.81 Ha of M/s Central Coalfields Limited located in District Bokaro (Jharkhand).

Earlier EC was granted for a life of 3 years which needs amendment/extension as it is found that mine has sufficient balance reserves with increased quarry area of 258.46 ha and increased mine life of 12 years.

55.6.2 The EAC during deliberations noted the following:

Earlier the proposal was considered by EAC in its 46^{th} meeting held on 25^{th} June, 2019 observed the following: -

The EAC, after deliberations, observed that in view of the mine life earlier estimated to be of 3 years, environmental clearance dated 8th January, 2014 was valid till 8th January, 2017 only. There being no amendment so far in the said environmental clearance and the same no more valid as of now, ongoing/continuing mining would be seen as violation of the EIA Notification, 2006. The Committee suggested that the Ministry may take necessary action as per the extant norms/guidelines in this regard.

The proposal was deferred for the needful on the above lines

55.6.3 Now again PP has requested for necessary amendment/extension of EC and submitted the following:

- The mine produces washery grade coal and is linked to existing and proposed Kathara coking coal washery. It is not operational since July,2019 rendering approximately 500 workers idle and also causing economic loss to the CCL and Jharkhand State.
- It is submitted that the project has not exceeded the EC capacity of 0.96 / 1.9 MTPA till 2016-17 since grant of EC or coal production of 1993-94 (0.9 MTPA) afterwards. Further the mine

was operated within the same project area of 792.81 Ha. The coal production since grant of EC is given below:

SN	Financial Year	Coal Production (in MTPA)
1	2013-14	0.465
2	2014-15	0.658
3	2015-16	0.923
4	2016-17	0.937
5	2017-18	0.493
6	2018-19	0.733
7	2019-20	0.132

Coal Production	at Kathara OCP
Cour i rouuction	

• A revised plan was prepared which was approved by Board of Director of CCL on 29.10.2012 with total mineable reserve of 26.80 MT with a mine life of 15 years. Based on this approval, a proposal for extension in mime life as per EC was submitted to MoEF&CC, that was apprised by EAC (Coal Sector) in 46th EAC meeting on 25.06.2019. The EAC Committee suggested that the Ministry may take necessary action as per the extant norms/guidelines in this case.

Request letter for extension of EC. It has been observed from the submission of letter of PP that mining activity has been carried out till 2019-20 and clear cut case of violation of EIA Notification, 2006.

55.6.4 The EAC after deliberation reiterated its earlier observation that as the mine life earlier was estimated to be of 3 years, environmental clearance dated 8th January, 2014 was valid till 8th January, 2017 only. Extension for EC was not applied within the timeline. Production being done as submitted by PP beyond the validity of EC may be considered as case of violation. Further, Committee observed that as the coal mine is of high-grade Coking coal (occurrence of which is limited in India) and the idle manpower of the company deployed for this operation may be indirect loss of employment in the region. Ministry may take a policy decision as it was informed by the PP that there are some other similar cases wherein Ministry's direction is required as the window of six month based on Ministry's Notification dated 14th March, 2017 has expired and therefore it requires further directions. An expeditious decision may be useful to coal sector. EAC suggested that Ministry may consider such projects to be appraised by EAC Violation sector also for taking appropriate action, including recovery of the environmental damage cost, if any, as per extant rules to pave the way for appraisal and grant of EC/TOR as the case may be.

Agenda No. 55.7

Expansion of Jhingurda Opencast Coal Project of 3 to 5 MTPA capacity in ML area of 1200 ha for M/s Northern Coalfields Limited located in Jhingurda, Tehsil Morwa, District Sidhi (Madhya Pradesh) - Revalidation of Environmental Clearance

[Online Proposal No. IA/MP/CMIN/7617/2003; F.No. J-11015/171/2003-IA.II(M)]

55.7.1 The proposal is for revalidation of environment clearance dated 13th May, 2005 granted by the Ministry in favour of M/s Northern Coalfields Limited for Expansion of Jhingurda Opencast Coal Project of 3 to 5 MTPA capacity in ML area of 1200 ha for M/s Northern Coalfields Limited located in Jhingurda, Tehsil Morwa, District Sidhi (Madhya Pradesh), in pursuance of this Ministry's Notification dated 6th April, 2018.

55.7.2 The EAC during deliberations noted the following:-

Earlier, the proposal was considered by EAC in its 45th meeting held on 27th May, 2019 and observed the following for compliance:

The Committee, after deliberations, desired for inputs/details in respect of the following:-

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

55.7.3	EAC noted following details with respect to compliance of above observation.

Sr.	Observations of EAC	Compliance / Submission of Project	
No.		Proponent	
1	Public notice shall be issued through	Public Notice has been issued through Madhya	
	concerned SPCB for information of the	Pradesh Pollution Control Board in 3 Hindi	

	stakeholders about the present coal mining operations inviting comments and their redressal,	Newspapers (Dainik Bhaskar – Singrauli, Dainik Jagran - Rewa, Patrika – Satna) and 1 English Newspaper (The Times of India - Delhi) on 12.10.2019. No Comments/ Suggestions have been received from any of the stakeholder which was communicated by RO, MPPCB or Jhingurda Project in response to the advertisement. Subsequently, the MS, MPPCB-Bhopal sent a letter (No. 349 dated 05.02.2020) to the Secretary, MoEF & CC, New Delhi that "no
		comments or suggestions were received".
2	Mining Plan and Progressive Mine Closure Plan duly approved by the competent authority	Mining Plan and Mine Closure Plan was approved by NCL Board in its 233rd meeting on 26-09-2018.
3	Compliance status of the conditions stipulated in the environmental clearance from the concerned Regional Office of the Ministry	Certified copy of EC conditions by RO, MoEFCC, Bhopal vide letter no. 3- 14/2005(ENV)/808 dated 24-10-2018.
4	Valid Consent to operate from the State Pollution Control Board for the present mining operations.	Consent to operate from the MPPCB, valid up to 31.07.2020 (Consent No. AW- 50898). Fresh application submitted online on 04.03.2020 (No. 1000057.)
5	Redressal of issues raised during the public hearing conducted by the SPCB	The issues raised during the Public Hearing held on 12.08.2002 are complied with.
6	Coal production realized from the mine from 1993-94 vis-à-vis capacity stipulated in the environment clearance	Coal Production has not exceeded the sanctioned EC Capacity in any Financial Year.
7	Need assessment survey for the activities proposed under the CSR and the comprehensive plan to be prepared accordingly for implementation by the project proponent. Also, impact of the CSR activities undertaken at an interval of 5 years to be evaluated and a report to be submitted.	CSR activities are decided and finalized after thorough examination at Area and Company HQ level. Need and Impact Assessment is an integral part of the CSR.
8	Forest clearance for diversion of forest land as required under the Forest (Conservation) Act, 1980.	Mining operations commenced in 1966 well before enactment of Forest (Conservation) Act, 1980. Hence it does not attract Forest (Conservation) Act, 1980.
9	Details of court cases and the compliance	NIL

of the orders, if any

Submission of PP on queries raised by EAc

Sl.Issues Raised by Honorable EACReply to the Issues RaisedNo.Members	
Viempers	
1 Approved Mine Plan Preliminary report sanctioned by the Gove	
MTPA in March'1965 vide letter No. C2	2-5(27)/63 dated
02.03.1965 (Annexure 1).	
PR Sanction for 3 MTPA- Jan'1977 – Life	of the Mine was
42 Years from 01.04.1974	
Status of Coal Reserve	
	144.6 MT
Proved Geological Reserve of Coal :	
Mineable Reserve of Coal :	
The Blocks A, B, G and F of Jhingurda :	130.0 MT
OCP	
Total Remaining Mineable Reserve in :	121.0 MT
above blocks is estimated	
	~
Subsequently, scheme for maintenance of	-
was prepared and approved for production	
2019-20 and thereafter, one more scheme ha	
for production of Coal in addition to the quan	
in the scheme approved on 06.04.2016 (Anne	
Based on the above scheme and balance rese	
plan was prepared and approved by 1	
26.09.2018 for production from 2018-19 to 20	021-22.
About the renewal of the Humble Submission of the Facts	
lease It is stated that Jhingurdah Coal Mine of NC	-
sanctioned by the Central Govt in M	,
activities/working and its mining operation v	were started after
taking possession of the land. In this pro-	
question was acquired in the year 1963, 197	77 & 1982 under
the provisions of Coal Bearing Areas (A&D)	Act 1957 by the
Central Govt. in consultation with the state	Government and
thereafter as per Sec 10(1) of the Act as tabul	ated below:-
Year of Land Rema	rks
Acquisition Acquired	
(Ha)	
1963 1053 Ministry of Stee	el, Mines and

-			
			Heavy Engineering, Govt. of
			India S.O. 3483 dated
			13.12.1963.
	1977	20	M.P. Gazette No. F-5-236-76-
			X(2) dated 14.06.1977.
	1977	1.50	M.P. Gazette No. F-6/107/77
			dated 02.07.1977.
	1982	124.24	Ministry of Energy, Govt. of
			India, S.O. No. 660 dated
			04.02.1982.
	Total	1198.74	

Thus, by virtue of the notification issued by the Central Govt under the statute i.e. the provisions of the CBA Act 1957 the right and title over the land in question was vested to the National Coal Development Corporation, later Central Coalfields Ltd (now Northern Coalfields Ltd) for the exclusive purposes mentioned therein and in accordance with the provisions of the said Act neither the lease deed was required to be executed for the said acquisition of the land nor such provision exist in the said Act. The notification issued thereof is still in existence.

As the land had been acquired for mining operation for mining the coal therefore the mining operations were started in the year 1966-67 and accordingly, extraction of coal from the land were being carried out since then. Thus the said forest land was cleared/broken up before the Conservation of Forest Act 1980 came into force and there was no lease deed executed for the said purposes.

DFO Singrauli's Letter dated 27.05.2020 is enclosed for reference.

Humble Submission:

There is no provision of lease/lease period for the land acquired by Central Govt. under CBA (A & D) Act and land measuring 1198.74 Ha under question– was vested by the Central Government to the then National Coal Development Corporation and now NCL before coming into effect of FC Act, 1980.

Coal production from the mine began in the year 1966-67 and forest land has been broken up and used before the commencement of the FC Act, 1980. There is neither additional area required nor new activity proposed, rather

mine is tapering down its scale of operation and production
will phase out in the next two years.

55.7.4 The EAC, after detailed deliberations on the proposal and taking note of compliance of its earlier observations (table 55.7.3 above), **recommended** for revalidation of the environmental clearance dated 13th May, 2005 upto 2021-22 (as per Mine life approved in Mine Plan), as mandated under the Ministry's Notification dated 6th April, 2018, subject to terms and conditions stipulated therein remaining the same. Further, requirement of Forest Clearance for forest land which have been used for mining activity prior to FC Act, 1980, Ministry may seek clarification from its Forest Division. The recommendation is subject to clarification about requirement of Forest Clearance.

Agenda 55.8

Coal Washery of 2.5 MTPA in an area of 9.93 ha of M/s Phil Coal Beneficiation Pvt Ltd at Village Ghutku Tehsil Takhatpur, District Bilaspur (Chhattisgarh) – Extension of Amendment in Environment Clearance – reg.

[Online Proposal No. IA/CG/CMIN/152756/2020; F.No. J-11015/35/2018-IA.II (M)]

55.8.1 The proposal is for extension of EC amendment dated 21st June, 2019 granted by Ministry to Coal Washery of 2.5 MTPA in an area of 9.93 ha of M/s Phil Coal Beneficiation Pvt Ltd at Village Ghutku Tehsil Takhatpur, District Bilaspur (Chhattisgarh).

55.8.2 The EAC during deliberations noted the following:-

The Ministry of Environment, Forest and Climate Change has granted environmental clearance vide letter dated 31st July, 2017 in favour of M/s Phil Coal Beneficiation Pvt Ltd for Coal Washery of 2.5 MTPA in an area of 9.93 ha at Village Ghutku Tehsil Takhatpur, District Bilaspur (Chhattisgarh).

One of the specific conditions stipulated therein, reads as below :-

'Transportation of raw coal, clean coal, middlings and rejects shall be by rail with wagon loading through silo.'

The said environmental clearance was amended by the Ministry vide letter dated 16th April, 2018 to revise the above condition as under:-

'Transport of raw coal, washed coal and the rejects shall be through road/rail (60% by rail and 40% by road) with the exemption from wagon loading through silo, for a period of two years i.e. up to 31st March, 2020 only.'

In view of coal transportation not being possible by rail due to non-availability of sufficient number of rakes, and also wagon loading through silos not being economically viable and feasible for smaller washeries, further amendment in the environmental clearance has been sought for waiver off the above condition.

The proposal for amendment in environmental clearance was again considered by sectoral EAC in its meeting held on 24-25 April, 2019. The committee reiterated its earlier recommendation of 24th January, 2019 for the washery to operate, subject to the following:-

(i) The desired dispensation for coal transportation by road in place of 60:40 approved earlier, may be allowed for a period of one year. Based on findings of the study and compliance status of the EC conditions, the project would be considered by the EAC for its continuation thereafter.

(ii) The State Pollution Control Board, while considering consent to operate for the project, shall ensure that with the proposed coal transportation by road, air quality would remain within the national ambient air quality standards

(iii) The project proponent shall ensure compliance of this Ministry's notification dated 2nd January, 2014 for supply of washed coal to thermal power plants

Amended EC was valid till 20th June, 2020, therefore the proposal is for extension of EC amendment is submitted by PP.

55.8.3 Following are submission of PP as noted by PP

- It has submitted that the Indian Railways is not supplying the adequate number of rakes as per the requirement of the customers resulting huge pendency of rakes and hence lapsing of coal in a huge quantity, due to this none of our customers are willing to give us work, because of the incoming movement clause of 60% by rail as there is a huge shortage of coal rake supply from Indian Railways
- As of now the outgoing coal movement from our washery is 100% by rail mode only, for resolve the incoming coal movement issues, we have already approached the Railway Authorities but they have clearly indicated that at present they are not in a position to supply the adequate rakes. The problem will be solved in near future as the Indian Railway Minister had recently announced that 4 nos. of new Rail corridors for better movement of coal/goods transport to mitigate the matter of short supply of rakes. These projects are likely to be complete in 4 to 5-year time.
- We also would like to inform four lane road between SECL Collieries to our plant area is almost ready (85% work is completed), So, movement of vehicle will be smooth and will generate less dust.
- As we had mentioned earlier in our submission that SILO cost is humongous in comparison to our project cost, and same is not viable to carry out the business and justify the project cost.

Hence, we humbly submit to consider to exclude the SILO clause in our EC and request to amend the EC accordingly.

• Ambient Air Quality has been monitored at 6 nos. of habitations enroute from plant to SECL mines of Dipka, Gevra & Kusmunda in the months of March 2019 and February 2020

55.8.4 The EAC after deliberation duly considering the limited availability of rakes from Indian Railways for washery **recommended** the extension in amendment in Environment Clearance to Coal Washery of 2.5 MTPA in an area of 9.93 ha of M/s Phil Coal Beneficiation Pvt Ltd at Village Ghutku Tehsil Takhatpur, District Bilaspur (Chhattisgarh) for 5 years i.e. till 2025 with all the terms & conditions in EC remaining the same. Further, PP shall plant 20,000 trees in nearby areas and villages to reduce the overall impact of pollutants and get it certified by Ministry's Regional Office and concerned District Forest Officer.

Agenda 55.9

Cluster No. 1 Coal Mine Project (Group of 11 Opencast/Underground coal mines) of capacity 2.70 MTPA (Normative)/3.30 MTPA (Peak) of M/s Eastern Coalfields Limited, located at District Dhanbad (Jharkhand) - For amendment in Environment Clearance - reg.

[Online Proposal No. IA/JH/CMIN/135718/2020; F. No. J-11015/78/2011-IA.II(M)]

55.9.1 The Proposal is for amendment in EC dated 16th January, 2015 and further amended vide EC amendment dated 18th December, 2017 of Cluster No. 1 Coal Mine Project (Group of 11 Opencast/Underground coal mines) of capacity 2.70 MTPA (Normative)/3.30 MTPA (Peak) of M/s Eastern Coalfields Limited, located at District Dhanbad (Jharkhand).

55.9.2 Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The cluster area is covered under Survey of India Topo Sheet No. 73I/9, 73I/10, 73I/13, 73I/14 and is bounded by the geographical coordinates ranging latitudes from 23° 44' 18.48" N to 23° 49' 01.38" N and longitudes from 86° 39' 13.07" E to 86° 22' 08.55" E.
- (ii) Coal linkage of the project: Coal produced from Mugma Area is supplied to Mejia Thermal Power Station-Bankura, West Bengal; DSTPS, Durgapur, West Bengal; NTPC, Farakka, Dadri and Uchchahar, Haryana; DPL, Durgapur, West Bengal and RGTPP, Haryana
- (iii) The Project / the Cluster does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13th January, 2010 has imposed moratorium on grant of environment clearance.
- (iv) Present manpower of the cluster is 3593 and manpower to be generated is 290.
- (v) The project is reported to be beneficial in terms of economic growth of local population, employment generation both direct and indirect and community development under CSR.

- (vi) Earlier, the environment clearance to the Cluster No. 01 was obtained under EIA Notification, 2006 vide Ministry's letter No J – 11015/78/2011 – IA – II (M) dated 16.01.2015 and EC amended on 18.12.2017 for 3.30 MTPA in mine lease area of 3692.00 Ha.
- (vii) Total mining lease area of the cluster as per block allotment is 3692.00 Ha having 8 mining leasehold. Mining Plan including Mine Closure Plan approved on 01.09.2017 and subsequently supplementary note to mining plan is approved on 16.01.2020
- (viii) The land usage pattern of the project is as follows:

Sl. No.	Type of Land Use	Within ML area (Ha)	Area (Ha)	
1	Agricultural/Fallow Land	860.0	860.0	
2	Forest Land	0.0	0.0	
3	Wasteland/Danga	459.0	459.0	
4	Surface Water bodies (River/Nallah/Pond)	204.0	204.0	
5	Settlements (Village/Basti)	592.0	592.0	
	Others			
	Plantation/Natural Vegetation	122.0	122.0	
	Roads & Railway	108.0	108.0	
6	Built-up Area	654.0	654.0	
	Colliery Infrastructure	382.0	382.0	
	Running Quarry (Backfilled/Not Backfilled)	263.0	263.0	
	External OB Dump	48.0	48.0	
	Total	3692.0	3692.0	

Present Land Use

Post Mining Landuse

Sl.	Description	Land-use (Ha)						
No.		Plantation	Water	Public	Undisturbed	Total		
			Body	use				
1	Top-soil Dump	-	-	-	-	-		
2	External OB Dump	90.16	-	-	-	90.16		
3	Excavation	805.04	10.0	-	-	815.04		
4	Rail /Road	20.0	-	-	88.0	108.0		
5	Built-up Area	-	-	-	654.0	654.0		
6	Habitation	-	-	-	580.0	580.0		
7	Mine Infrastructure	125.0			299.93	424.93		
8	Barren / Vacant land	-	-	-	40.0	40.0		
9	Greenbelt/Afforestation							
	(60.0 Ha) / Natural	122.0	-	-	-	122.0		
	vegetation (62.0 Ha)							

Sl.	Description	Land-use (Ha)						
No.		Plantation	Water	Public	Undisturbed	Total		
			Body	use				
10	Water bodies	-	-	-	204.0	204.0		
11	Cultivable/fallow	-	-	-	653.87	653.87		
	Total	1162.20	10.0		2519.80	3692.0		

- (ix) Total mineable reserve is 545.18 MT in the cluster.
- (x) Method of mining operations envisages by opencast method as well as Underground method
- (xi) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xii) The ground water level has been reported to be varying between 0.60 m to 10.80 m BGL during pre-monsoon and between 0.40 m to 4.70 m BGL during post-monsoon.
- (xiii) Total water requirement for the project is 4667.0 KLD.
- (xiv) Application made to The Regional Director, Central Ground Water Board (Mid-Eastern Region), Patna, Bihar on 29.06.2018 and Application Fee has been paid.
- (xv) All running mines of the Cluster have valid Consent to Operate.
- (xvi) The cluster is drained by a seasonal river Khoodia, a tributary of the Barakar river, flowing about 4 kms from the cluster boundary on the east. Another seasonal river, Pusai, which is a tributary of Khoodia also drains the northern portion of the cluster.
- (xvii)Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to JSPCB and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations which can be attributed to the specific local conditions during the day of sampling
- (xviii) No court cases, violation cases are pending against the project of the PP except land related.
- (xix) All operating mines under Cluster No. 01 of ECL does not involve violation of the EIA Notification, 2006 and amendment issued thereunder.
- (xx) Give details of actual coal production vis-à-vis sanctioned capacity since the inception of mine in following format: None of the mines within the cluster have exceeded individual EC capacity since grant of EC

Name of	EC	sanctioned	Year	Actual	Excess	produ	ction
Project	capa	city (MTPA)		production	beyond	the	EC
				(MTPA)	sanctioned capacity		
			2015 - 16	1.15	Nil		
Cluster No. 1			2016 - 17	0.84	Nil		
(Group of	3	3.30 MTY	2017 - 18	0.92	Nil		
mines))		2018 - 19	1.05	Nil		
			2019 - 20	1.13		Nil	

55.9.3 The EAC during deliberations noted the following:-

The amendment is sought due to reassessment for capacities of constituent mines of the cluster. The proposed amendment is being sought for changes in capacities of constituent mines of the cluster without changing overall production capacity (3.30 MTPA) and leasehold area (3692.00 Ha).

Following changes have been made w.r.t. the cluster

- Amalgamation of four mines, Lakhimata UG & OC, Shampur B UG & OC, Mandman UG and Kapasara UG & OC. (consequently number of mines get reduced to 8).
- Increase in production capacity of Badjna colliery by introduction of OC mining within the leasehold.
- Reduction in the production capacity of Chapapur UG & OC, Hariajam UG and Khoodia UG & OC mines, due to geological disturbances, thinning of seams, accumulation of water during rainy season etc.

Supplementary Note for Mine Plan has been approved by the ECL Board on 16th January 2020 based on draft Minutes of Meeting.

Permission from Central Ground Water Authority for extraction of ground water is still pending though mining activity is being done continuously.

Conversion of Underground mine to Opencast is proposed which may increase ambient air quality in the area. Further amalgamation of the said mines requires details study on effect on R&R as it involves 182 PAFs, proposed to be rehabilitated to the nearby area available.

Around 2500 trees are present within and around old MS quarry and proposed to be cut for mining activity.

SI.	As per EC Amendment dated 18.12.2017			SI.	As per Revised Mining Plan				
No.	Name of the	Lease	Prodn	Mine	N.	Name of the	Lease	Prodn	Mine
	Mine	Area	Capacity	Life		Mine	Area	Capacity	Life
		(Ha)	(MTY)	(Yr)			(Ha)	(MTY)	(Yr)
1	Hariajam UG	316.0	0.10	>25	1	Hariajam UG	316.0	0.08	>25
2	Badjna UG	676.0	0.15	>25	2	Badjna UG & OC	676.0	0.45	>25
3	Chapapur – II UG	480.0	0.75	>25	3	Chapapur – II	480.0	0.68	>25
5	Chapapur-II OC Patch	400.0	0.75	-25	5	UG & OC	400.0	0.08	-25
4	Khoodia UG	106.0	0.05			Khoodia UG &	1000	0.025	10
4	Khoodia OC	186.0	0.05	>25	4	OC	186.0	0.035	10

The proposed changes for amendment are given table below:-

	Patch								
5	LakhimataUG Lakhimata OC Patch	217.0	0.95	20					
6	Shampur – B UG Shampur – B (Sangamahal) OC Patch	368.0	0.10	>25	5	Amalgamated Lakhimata, Shampur B, Mandman and Kapasara UG &	1239.0 2.30		>25
	Mandman UG	345.0	Amalgam ated with Lakhimat a OC	-		OC			
7	Nirsa OC Patch	147.0	0.40	8	6	Nirsa OC Patch	147.0	0.40	8
8	Shampur – A UG Shampur – A OC Patch	491.0	0.20	8	7	Shampur – A UG & OC	491.0	0.20	8
9	Gopinathpur UG Gopinathpur OC Patch	157.0	0.20	>25	8	Gopinathpur UG & OC	157.0	0.20	>25
10	Kapasara UG Kapasara OC Patch	309.0	0.40	>25		Merged with Sl. No. 5			
Total	Total 3692.0 3.3				Tota	al 3692.0	3.30*		
<u>*Max</u>	ximum production	n from th	e cluster in	any yea	ır wil	l not exceed 3.30 N	MTY.		

55.9.4 The EAC after deliberation observed that though there is no increase in mine lease area and production capacity remains the same. However other factors within the cluster may impact to environment and needs detailed assessment. Therefore, EAC sought information on the following points for further consideration: -

- Permission from from Central Ground Water Authority for extraction of ground water
- Socio-economic studies need to be conducted for proposed R&R Villages
- One-month baseline data and impact assessment shall be conducted and addendum EIA/EMP should be submitted
- Water Quality characteristics of accumulated water in Patch-A of BadjnaUG &OC Patch and any other areas (if any). Specify the location of disposal of accumulated water

- Permission for diversion of DB road/village road, HT line and drain/nallah (flowing on eastern side of the patch)
- Permission for development of Embankment along Pusai River
- *Reason for cutting 2500 nos of trees, whether transplantation or the same area can be avoided for mining activity.*

The proposal was deferred on the above lines.

Other proposals discussed with the permission of Chairman EAC.

Agenda No. 55.10

Sayal D Opencast Coal Mine Project of 1.0 MTPA (Normative)/1.35 MTPA (Peak)of M/s Central Coalfields Ltd in a project area of 286.98 ha in District Ramgarh (Jharkhand) – Environmental Clearance

55.10.1 The proposal for EC of Sayal D (1.0 MTPA) of M/s CCL was considered and recommended by EAC in its meeting held on January, 2018 itself. However, during file processing Ministry found that project is at same site where mining operations have been carried out earlier. Hence it cannot be considered as greenfield and further sought details of its operation. PP submitted incomplete documents, so the proposal was kept on hold. After approval of JS(GM), the proposal was again taken to EAC in its meeting held on 24th January, 2020, with all facts and therein EAC noted its observation.

The EAC after deliberations and in view of facts on project file observed that PP must provide the details about earlier mining activity and therefore should submit the details of Mine Plan and Mine Closure Report for the previous mining operation. Also as the CTO's does not mention the quantity, earlier mine plan will support in ascertaining about violation from base year production of i.e. 1993-94. In case of non-submission of relevant documents by PP, the proposal may be kept on hold and earlier recommendation of EAC shall be kept in abeyance till further submission by project proponent

Ministry vide its letter dated 6th May, 2020 sought ADS from project proponent. Project proponent in submission dated 8th May, 2020 submitted the details. The same is enclosed for reference.

55.10.2 The EAC during deliberations, noted the following:-

Submission of the project proponent was noted by EAC as details mentioned below:-

SN	Additional Detail	Details Submitted
	Sought	

arlier mining ctivity	production de below-	tails of both Sayal D UGP and	Sayal D OCP are given
		Sayal D UG production	Sayal D OCP
	Year	(tonnes)	production (tonnes)
	1973-74	448500	0
	1974-75	506500	0
	1975-76	570900	0
	1976-77	597000	0
	1977-78	586400	0
	1978-79	584300	0
	1979-80	538000	0
	1980-81	451517	93618
	1981-82	405919	244381
	1982-83	429371	243629
	1983-84	428775	244801
	1984-85	451159	299780
	1985-86	420714	323556
	1986-87	361022	317336
	1987-88	374508	383693
	1988-89	413816	373723
	1989-90	412148	299711
	1990-91	386835	327273
	1991-92	373644	371867
	1992-93	331994	373006
	1993-94	341519	394465
	1994-95	323279	214705
	1995-96	318407	168772
	1996-97	314049	86606
	1997-98	248504	0
	1998-99	243140	0
	1999-00	268619	0
	2000-01	269497	10563
	2001-02	280880	0
	2002-03	288089	0
	2003-04	198221	0
	2004-05	180516	0
	2005-06	143240	0
	2006-07	137500	0

		2007.09	12(179					
		2007-08	136178	0				
		2008-09	152330	0				
		2009-10	138004	0				
		2010-11	131658	0				
		2011-12	106813	0				
		2012-13	90835	0				
		2013-14	79924	0				
		2014-15	77750	0				
		2015-16	65270	0				
		2016-17	50100	0				
		2017-18	8733	0				
		2018-19	0	0				
		2019-20	0	0				
		Coal production in Sayal D OCP stopped since 2001-02 whereas						
		UG mine closed in 2017.						
2	PP must submit Mine Closure Report for the previous mining operation	per Mine Closure guidelines, 2009, Mine Closure Plan of Sayal D UGP was approved by CCL Board in 2012 (copy enclosed in submission). After						
3	Earlier mine plan which will support in ascertaining about violation from base year production of i.e. 1993-94.	The Project Report of Sayal D OCP (present proposal) for 1 MT was approved by CCL Board in 2013. A project report of Sayal D was sanctioned in May 1960. This report was planned to work Kurse, Nakari and Semana seams. Subsequently in March 1984, a scheme to work Upper Balkudra seam by Mechanised opencast method was approved. The details about old approved reports are given at (Annexure-IV in submission). The production since 1993-94 in respect of Sayal D UG and Sayal D OC is given in table below-						
			Sayal D UG production	Sayal D OCP				
		Year	(tonnes)	production (tonnes)				
		1993-94	341519	394465				
		1993-94 1994-95	341519 323279					
				394465				

1997-98	248504	0
1998-99	243140	0
1999-00	268619	0
2000-01	269497	10563
2001-02	280880	0
2002-03	288089	0
2003-04	198221	0
2004-05	180516	0
2005-06	143240	0
2006-07	137500	0
2007-08	136178	0
2008-09	152330	0
2009-10	138004	0
2010-11	131658	0
2011-12	106813	0
2012-13	90835	0
2013-14	79924	0
2014-15	77750	0
2015-16	65270	0
2016-17	50100	0
2017-18	8733	0
2018-19	0	0
2019-20	0	0

55.10.3 The EAC after deliberations observed that these are old mines and during that time production figures were not mentioned in Consent orders. Further, production figure provided by PP does not exceed the base year of 1993-94. Regarding Mine Closure Report of Sayal DOCP, as the OCP was not closed and only mining operations was stopped as informed by project proponent. Keeping in view of limited availability of high value coking coal in India and its requirement, direct and indirect employment to be provided by restart of mining operations and considering the recommendation of EAC in its meeting held on 11th January, 2018 for grant of Environment Clearance, the proposal is **recommended** for grant of Environment Clearance with all terms & conditions therein and further subject to submission of affidavit by project proponent stating that "project proponent has not violated any provisions/rules of Mines Act, 1952, MMDR Act, 1957 and EIA Notification and amendments therein"

Agenda No. 55.11

Expansion of Tapin South Open Cast Coal Mine Project from 0.6 MTPA to 2.00 MTPA Normative/2.50 MTPA Peak with an increase in ML area from 54.10 ha to 178.06 ha of M/s

Central Coalfields Limited, located in Tehsil Churchu, District Hazaribagh (Jharkhand) – Environmental Clearance – reg

55.11.1 The proposal is for grant of Environmental Clearance to expansion of Tapin South Open Cast Coal Mine project from 0.6 MTPA to 2.00 MTPA Normative/2.50 MTPA Peak with an increase in ML area from 54.10 ha to 178.06 ha of M/s Central Coalfields Limited, located in Tehsil Churchu, District Hazaribagh (Jharkhand). The proposal was recommended by the sectoral Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Sector in its meeting held during 28th June 2018 subject to necessary clarification regarding diversion/regularization of the forest land of 24.71 ha and compliance of terms and conditions as applicable, and the additional conditions thereto.

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.

Also, sub-committee of the EAC conducted site visit on 15th May, 2018 and gave various observation for further compliance.

Ministry vide letter dated 23rd April, 2019 sought clarification from PP regarding diversion/regularization of 24.71 ha forest land. However, till date PP did not provided the required clarification.

55.11.2 PP has submitted the revised Mine Plan and Mine Closure Plan approved by M/s Central Coalfields Limited Board vide its letter dated 29th November, 2019 based on meeting held on 4th November, 2019. PP vide its letter dated 16th January, 2020 requested for grant of environmental clearance by revising/reducing the land area from 178.06 ha to 151.93 ha i.e excluding the area of 24.71 ha forest land.

The EAC after deliberation observed that PP has unnecessarily delayed providing the clarification sought by the Ministry after recommendation of EAC. EAC further desired that information uploaded on Parivesh portal is incomplete as due the reduced area of the project, the whole land use pattern changes. However, PP has uploaded only request letter along with approve mine plan letter. Casual approach towards process of environmental clearance of PP can be seen by this only. Further, EAC desired that Ministry may keep the earlier recommendation for environmental clearance i.e. on 28th June, 2018 on hold and desired the following from project proponent.

- (i) PP shall be called to EAC in the meeting for presentation for the proposed changes in land use pattern and mining activities.
- (ii) PP shall provide the status of recommendation of sub-committee site visit on 15th May, 2018
 (iii)Status of Consent to Operate vis-à-vis past production details
- (iv)One-month baseline data on same monitoring station and comparison with earlier data.
- (v) Permission for approval of extraction of ground water from Central Ground Water Authority.
- (vi)Compliance of issues address during Public Hearing held on 27th February, 2016

Ministry vide its letter dated 6th May, 2020 sought ADS from project proponent. Project proponent in submission dated 8th May, 2020 submitted the details.

55.11.3 The EAC during deliberations noted the submission of project proponent.

- The project area was revised from 178.06 Ha. to 151.93 Ha. by excluding 24.71 Ha. of Forest land.
- The mining plan has also been revised for the project area of 151.93 Ha. and annual capacity of 2.00 MTPA (Normative) and 2.50 MTPA (Peak) and approved by CCL board on 04.11.2019.
- The revised mining plan was submitted to MoEF&CC on 29.11.2019 and on 16.01.2020 as reply to the additional details sought on Parivesh Portal.

S	Additional Detail Sought	Compliance
N		
1	PP shall provide the status of recommendation of sub-committee site visit on 15 th May, 2018	The status of recommendations of sub-committee site visit is enclosed and noted below.
2	Status of Consent to Operate vis-à- vis past production details	The status of CTO issued and past production details is enclosed.
3	One-month baseline data on same monitoring station and comparison with earlier data.	The environmental baseline data was generated between March to May 2017 which is valid till May 2020 (Enclosed). Further, as per the direction, the generation of one month of baseline data is under progress.
4	Permission for approval of extraction of ground water from Central Ground Water Authority.	The application for obtaining approval from Central Ground Water Authority has been submitted vide letter no 21-4/396/JH/MIN/2019 dated: 29.03.2019. The copy of receiving is enclosed.
5	Compliance of issues address during Public Hearing held on 27 th February, 2016	The updated compliance status of issues addressed during Public Hearing is enclosed as Annexure-5 .

Status of recommendation of sub-committee site visit on 15th May 2018:

SN	Recommendations	Updated Status

1	A model scheme of eco- restoration over back-filled area, external OB dumps and around the mine premises with water conservation measures for adoption.	 The project includes an old external dump, the maximum height of which is about 30 meter above ground level. As per the mine plan/project report, the internal dump will be merged with the present external OB dump and the height of merged dumps will be increased upto 60 meter above ground level. As per the approved mine closure plan of the project about 12.95 Crores has been kept towards reclamation and plantation activities. (Enclosure-1) CCL has requested Institute of Forest Productivity (constituent of ICFRE) for a scientific study on eco- restoration taking into account the native eco-system of the area. On the basis of advice of IFP, the backfilled area in Tapin South OCP will be ecologically restored in conformity with local eco-system. The stored water in an adjacent quarry/mine void is utilized by State Govt. for supplying drinking water, after treatment, to Mandu town. After restoration of mine in post closure phase, the mine void water will be similarly used for community purpose as per MoU with State Govt. 				
2	Stabilisation of OB benches facing river Bokaro including catch drain, toe wall and plantation has to be provided.	 The total length of toe wall along the periphery of OB dump and Bokaro River is approximately 600 m which has been constructed. (Work order enclosed as Enclosure-2) at a tentative cost of Rs. 23 Lakhs. Photographs of the work are given as Photo 1 & Photo 2. 				
3	A customized CSR/R & R Scheme in place with compliance to provisions of RFCTLARR 2013, if applicable.	h 20) is given below: s SN Particulars Sum				

		8	Miscellaneous				14.35
			Total				152.53
		2. The R &	R scheme is	prepared	on the b		
			wo villages i.e				
		the proje	ct. Number of	PAFs is	approxin	nately 200) and total
			ent proposed			-	
		employn	ents has been	given to I	PAFs.		
			ing of PAFs w tive timeline is			suance of	EC (Year-
			Total No			ar of Shift	ina
		Name of	of PAFs		10		ling
		Village	To Be	Year-1	Year -	Year -	Year-
		Village	Shifted	1 cai-1	2	3	4
		Phusri	200	20	30	30	50
	Need-based CSR schemes	the cor under s provisio laws. 1. CSR pro Compan the re stakehol (2016-17	enting the pol accrned Acts hall not be vic ons of R & R ogrammes in ies Act 2013. commendation ders. The CS 7 to 2019-20) i	applicable blated". The for Tapir mines of The action of I SR expen	e and rul his will en n South C CCL are on plan is local re nditure of	es mentionsure com OCP with undertak preparec	oned there appliance of applicable cen as per l based on ives and bagh Area
	matching with inherent skills of PAPs and there-	SN	Parti	culars			Sum
	after scope of its		Infrastructure				13.08
	harnessing through		Education				10.61
4	intervention of PP in order		Drinking Wate	er		48.81	
4	to strive towards inclusive		Health			37.91	
	growth. This should		Sanitation				7.48
	specifically include the		Environment				8.95
	requirement of the two		Skill Develop				11.34
	affected villages in the	8	Miscellaneous				14.35
	close vicinity of the mine.		Total			1	152.53
		Area in	skill developr last three ye epair training,	ears inclu	ides moto	or driving	g training,

		1	Data pertaining mining plan and			arlier appr	oved
		S	Deutionlan		Land required]
		Ν	Particular	Forest	Non - Forest	Total	
		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	24.71*	17.59	42.30	
		6	Green Belt	0.0	18.64	18.64	
		7	Safety zone	0.0	18.69	18.69	
	Data presented in the		Total	24.71	153.35	178.06	
5	revised to overcome inconsistency or any ambiguity.	S N 1 2 3 4 6 7	mining plan has Ha forestland re approval of min the plan has be project area afte Particular Quarry Industrial area Haul road External OB Dump Green Belt Safety zone Total	zed forest s now bee eleased & ing plan & en submitt r revision 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	before 1980. Ad n revised to exc utilized forest be & mine closure p ted to MoEF&C of mining plan is Land required Non - Forest 89.78 6.75 1.9 17.59 18.64 17.27 151.93	ccordingly lude the 2 efore 1980 blan along C. The rev given belo Total 89.78 6.75 1.9 17.59 18.64 17.27 151.93	r, the 24.71 0.The with vised ow:
6	Impact assessment of Jharna Nallah diversion on the local riverine system considering it as a tributary to River Bokaro.	towards south through the mining area, will be diverted along a stretch of about 2000 m. The diversion channel of nala will meet Bokaro river in upstream in southwest					

Details of Consent to Operate

Year	Coal Production (In Tes)	Period of CTO as per the CTO application	Status of CTO along with application details & fee submitted
2001-02	78540	01.10.2001 to 30.09.2002 (Emission CTO) 01.10.2001 to 30.06.2002 (Discharge CTO)	 Application made to BSPCB Dated: 01.05.2001 CTO issued by BSPCB vide memo T-2493 Dated: 07.09.2001
2002-03 to	Mine not		
2010-11	operational		
2011-12	109063	01.10.2011 to 30.09.2012	• Application submitted in hardcopy vide no: 179 with DD no: 019730 Dated: 27.12.2011
2012-13	198356	01.10.2012 to 30.09.2013	• Application submitted in hardcopy vide no: 107 with DD no: 020728 Dated: 22.09.2012
2013-14	319031	01.10.2013 to 30.09.2014	• Application submitted in hardcopy vide no: 79 with DD no: 015656 Dated: 01.10.2013
2014-15	267074	01.10.2014 to 30.09.2015	 Application submitted in hardcopy with DD no: 00342 Dated: 25.09.2014
2015-16	59116	01.10.2015 to 30.09.2016	• Aplication submitted online with application No: 625241 Dated: 28-05-2016 along with fees
2016-17	0	01.10.2016 to 30.09.2019	 Application submitted online with application No:1167320 Dated: 25.11.2016 with fees of 3 Years. CTO issued on 26.03.2019 valid upto 30.06.2019 vide Ref No: JSPCB/HO/RNC/CTO-1167320/2019/571
2017-18	0		
2018-19	55590]	
2019-20	316318	01.10.2019 to 30.09.2020	 Application submitted online with application No: 5319833 Dated: 11.05.2019 with fees of 1 Years. The application is in-progress with JSPCB

55.11.4 The EAC after deliberation on the submission of project proponent observed that forest land of 24.71 ha of which Stage-I FC has not been obtained is excluded from project area and accordingly Mine Plan has been revised by project proponent. However, as submitted by PP, proponent was carrying out mining activity without any consent from State Pollution Control Board considering as deemed approved is not acceptable. Also, mine is operational since 1972 as mentioned in one of the points in Public Hearing and since PP is unable to provide Consent Order during the period of mining, this shall be considered as violation of EIA Notification. Further, as the project has been recommended by Expert Appraisal Committee (EAC) in its meeting held during 28th June 2018 itself, committee desired that project may be sent to EAC Violation as lateral entry to assess the environment damages and recovery as per the Ministry's guidelines.

EAC recommends for processing of this case by MoEF&CC as per its violation procedures expeditiously.

Agenda No. 55.12

Tirap Opencast Coal Mine Project of capacity 0.75 MTPA of M/s North Eastern Coalfields in mine project area of 586.91 ha located in Tehsil Margherita, District Tinsukia (Assam) – Terms of Reference – reg

55.12.1 The proposal is for Terms of Reference for Tirap Open Cast Project of from 0.60 MTPA to 0.75 MTPA capacity of M/s North Eastern Coalfields in mine project area of 586.91 ha located in Tehsil- Margherita, District Tinsukia, (Assam). The proposal was recommended by EAC in its meeting held on 3-4 October, 2019 for the above project.

However, during processing of files, violation of EIA notification was found with respect to over production from the base year of 1993-94 which is 0.59 MTPA and though the production figures are not mentioned in Consent to Operate granted by State Pollution Control Board. There is also no previous Environment Clearance for this project.

55.12.2 The EAC after deliberations, observed that as the production capacity submitted in the presentation (physically in file) shows overproduction from the base year of 1993-94, it can be considered as violation of EIA Notification, 2006 and therefore earlier recommendation of EAC may be changed accordingly and set aside. Ministry may consider the proposal as per violation procedures.

Agenda No. 55.13

Capacity enhancement of coal washery from 0.96 MTPA to 5.0 MTPA with increase in land area from 8.10 ha to 14.5 ha within existing plant premises of M/s Rajan Coal Washery Limited (A unit of M/s Bhatia Energy Minerals Private Limited), located in Village Chhote Dumarpali, Tehsil Kharsia, District Raigarh, State (Chhattisgarh) – Exemption of Public Hearing in ToR – reg due to covid-19

55.13.1 The proposal is for exemption for conducting Public Hearing due to ongoing COVID-19 pandemic outbreak. PP vide its letter to Secretary (MoEF&CC) has requested exemption for conducting Public Hearing due to ongoing COVID-19 pandemic outbreak and the nation is under compulsory lock down since 23.03.2020 under Disaster Management Act, 2005 for its proposal as mentioned in the subject above.

Ministry has granted Terms of Reference vide No. J-11015/71/2019-IA-II (M) dated 8th January, 2020 for capacity enhancement of coal washery from 0.96 MTPA to 5.0 MTPA within the existing plant premises with certain terms & conditions including conducting Public Consultations

Further, following are the submission of PP as mentioned in request letter:

- The proposed expansion is within the existing premises of the company and no acquisition of extra land is envisaged. Consequently, no relocation and resettlement of population is involved. Further, there would not be any significant incremental pollution load as a result of this expansion.
- Project is surrounded by 3 villages and 60% of our total employees strength constitute from local population from these villages. If the expansion is not completed on time, the local populace will also suffer in terms of economic activities.
- They are a business entity operating a washer unit at Raigarh, Chhattisgarh with a very limited capital base. It is a privately owned & closely held company due to which capital from money market is not very much easily accessible to us.
- PP has placed orders with the vendors and paid significant advances to them in anticipation that the public hearing would duly be conducted in time. These advances have been paid taking in view the lead time in delivery of machines which may run into months.
- The General Condition vide Clause 4.1 (iv) of the said TOR envisages for conducting of Public Hearing as prescribed in EIA Notification, 2006 for obtaining the Environment Clearance. However, in view of current COVID-19 situation, neither it is possible to conduct the public hearing nor it would be prudent to go for it in such a constrained situation.
- After getting the TOR, PP went on for EIA Studies and simultaneously placing the purchase orders for the required machineries. In the course of time, completed the EIA Studies and submitted the draft EIA Report to Chhattisgarh Environment Conservation Board, Raipur.
- Now PP is facing difficulty in conducting the public hearing as per the Terms of Reference (TOR) issued to us as section 144 (prohibitory orders) is invoked and congregation of people are not allowed.
- Now, we are very wary about the current situation and afraid about the project getting delayed due to delay in conducting the public hearing. Due to huge capital involved and no clear sign

of revocation of restrictions (in COVID 19 situation), the project may run into losses and even to bankruptcy.

- In the state of Chhattisgarh, it seems that the after effect of this lockdown and COVID-19 will continue for several months to come and it would not be possible to convene a Public Hearing before December 2020.
- Member Secretary, SEIAA, Raipur while acknowledging our application for public hearing has explicitly expressed his inability to conduct the same due to ongoing COVID 19 pandemic and lockdown situations. A
- Also section 144 (CrPC) has been once again imposed for 3 months w.e.f. 17.05.2020 in the state of Chhattisgarh. So, the conducting of public hearing in near future seems impossible due to these prohibitory orders.
- Further, in the coming months, with the advent of rainy season PP would be forced to operate below 50% of capacity and consequently, in absence of expansion, our business activity would also be slated down.
- The proposal for expansion is within the existing plant premises and no acquisition of extra land is envisaged. SEIAA, Raipur had conducted the Public Hearing for the existing project in the year 2013. Had the public hearing been conducted today (which is not possible in current situation), the location for the public hearing would be the same and the same set of people (local villagers etc.) would be present for participation in the hearing. And we should not be surprised, since there are chances that we get the same opinion about this project as we received in the year 2013 as the responding people would be the same as in 2013
- Therefore, it has been requested to amend the TOR issued **and waive off the condition for conducting of Public Hearing during this lock down period.** This way we could be saved of costs overrun and the project could be completed in time. We assure you that NOC from the respective Gram Panchayats would be made available as and when required by the EAC. We would be open to address any environmental concerns raised by the stake holders and amend the draft EIA Report accordingly as per provisions of the EIA Notification.

55.13.2 The EAC after deliberations, observed that the matters of conducting Public Hearing is under the purview of local district administration. However, conducting Public Hearing is mandatory as per EIA Notification, 2006 and amendments therein and exemption in Public Hearing due to Covid-19 does not fall in the purview of EAC. Hence Ministry may take the necessary decision as per extent norms and guidelines. EAC further suggested that observation/views of District Administration may be sought on this matter.

Agenda No. 55.14

Kakatiya Khani Opencast-III (KTK OC-III) coal mining project of capacity 3.75 MTPA (peak) by Opencast & 0.48 MTPA Underground in mine lease area of 1336.64 ha of M/s The Singareni Collieries Company Limited located in village Basawarajupalli, Tehsil Ghapur, District Jayashankar Bhupalpalli (Telangana) – Environmental Clearance - reg - Correction in Minutes of Meeting

55.14.1 The proposal for corrigendum in environmental clearance to the project Kakatiya Khani OC-III Project of 3.0 MTPA (Peak 3.75 MTPA) by OC and 0.48 MTPA by UG in mine lease area of 1336.64 ha located near Village Basawarajupalli, Mandal Ghanpur, District Jayashanker Bhupalpalli, (Telangana) was recommended by EAC in its meeting held on 15th November, 2019 with certain terms & conditions. One such condition at 4(i) is mentioned below

(i). The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 4.375 MTPA prior to commencement of the increased production.

55.14.2 SCCL vide its letter Ref. No. CRP/ENV/A/468/347 dated 15th May, 2020 has requested for necessary correction as capacity is mentioned as 4.375 MTPA instead of 4.23 MTPA (i.e. 3.75 by PC and 0.48 by UG) for taking Consent to Establish from Station Pollution Control Board

It is small typographial error at point no. 4(i) where the proposed peak production is mistakenly written as 4.375 MTPA instead of 4.23 MTPA

PP has requested for necessary correction from the Ministry.

55.14.3 The EAC after deliberation, observed typographical error in peak capacity and further recommended that the Minutes of meeting held on 15th November, 2019 now stands corrected and Ministry may issue a corrigendum to Project proponent with correct peak capacity of 4.23 MTPA.

The meeting ended with thanks to the Chair.

Annexure-I

Standard EC Conditions for Coal Mining Project (Opencast mining):

All the projects recommended for grant of environmental clearance by the EAC shall also comply with the following Standard EC conditions as per Ministry's circular issued from time to time:

(a) Statutory compliance

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iii) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
- (iv) The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vi) Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.

(b) Air quality monitoring and preservation

- (i) Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- (ii) The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- (iii) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM₁₀/PM_{2.5})

such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.

- (iv) The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- (v) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- (vi) Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- (vii) Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

(c) Water quality monitoring and preservation

- (i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.
- (ii) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- (iii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- (iv) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
- (v) Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- (vi) Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by

providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.

- (vii) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
- (viii) Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.
- (ix) The water pumped out from the mine, after siltation, shall be utilized for industrial purpose *viz*. watering the mine area, roads, green belt development *etc*. The drains shall be regularly desilted particularly after monsoon and maintained properly.
- (x) The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.
- (xi) The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A rivarine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

(d) Noise and Vibration monitoring and prevention

- (i) Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
- (ii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.
- (iii) The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

(e) Mining Plan

- (i) Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- (ii) Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- (iii) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.
- (iv) Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

(f) Land reclamation

- Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- (ii) The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
- (iii) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.
- (iv) Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- (v) Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.

(vi) The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

(g) Green Belt

- (i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
- (ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

(h) Public hearing and Human health issues

- Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on sixmonthly basis.
- (ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
- (iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- (iv) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- (v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

(i) Corporate Environment Responsibility

 The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

- (ii) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

(j) Miscellaneous

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (vi) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
- (vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- (viii) The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- (ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (xi) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.
- (xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiv) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- (xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

Standard EC Conditions for Coal Mining Project (Underground mining):

All the projects recommended for grant of environmental clearance by the EAC shall also comply with the following Standard EC conditions as per Ministry's circular issued from time to time:

I. Statutory compliance:

- (i) The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project
- (ii) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- (iii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iv) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- (v) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (vi) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vii) Solid waste/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016

II. Air quality monitoring and preservation

- i. Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO_2 and NO_x . Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, *etc.* to be carried out at least once in six months. Online ambient air quality monitoring station/stations may also be installed in addition to the regular air monitoring stations as per the requirement and/or in consultation with the SPCB
- ii. The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- iii. Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water sprinkling/rain gun/ mist

sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.

- iv. Major approach roads shall be black topped and properly maintained.
- v. The transportation of coal shall be carried out as per the provisions and route proposed in the approved mining plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed that the impact of sound, dust and accidents could be appropriately mitigated.
- vi. Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- vii. Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- viii. Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

III. Water quality monitoring and preservation

- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-1A.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- iii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- iv. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
- v. Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- vi. The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary shall be of suitable

dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.

- vii. Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff
- viii. The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
 - ix. Industrial waste water from coal handling plant and mine water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water.
 - Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
 - xi. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and the same should be done with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.
- xii. The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

IV. Noise and Vibration monitoring and prevention

- i. Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in underground mining operations, operation of HEMM, etc. shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms/guidelines in this regard. Progress in usage of such accessories to be monitored. Adequate awareness programme for users to be conducted.
- ii. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.
- V. Mining Plan

- i. Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- ii. No change in mining method *i.e.* UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
- iii. Mining shall be carried out as per the approved mining plan (including mine closure plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- iv. Underground work place environmental conditions shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.
- v. No mining activity shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.
- vi. Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

VI. Land reclamation

- i. Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- ii. Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective State Government, as specified in the Guidelines for Preparation of Mine Closure Plan, issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
- iii. Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil/suitable material.
- iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, alongwith fly ash for external dump of overburden, backfilling or stowing of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- v. A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.
- vi. Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.

- vii. Native tree species shall be selected and planted over areas affected by subsidence.
- viii. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VII. Green Belt

- i. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted/reported in the study area. Action plan, in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
- ii. Greenbelt, consisting of three-tier plantation, of width not less than 7.5 m, shall be developed all along the mine lease area in a phased manner. The green belt comprising of a mix of native species shall be developed all along the major approach roads/ coal transportation roads.

VIII. Public hearing and Human health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.
- ii. The Project Proponent shall undertake Occupational Health survey for initial and Periodical medical examination of the workers engaged in the Project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS Circulars. Besides carrying out regular periodic health check-up of their workers, 20% of the workers engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any.
- iii. Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.
- v. Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.
- vi. Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing. Land oustees shall be compensated as per the norms laid out R&R Policy of the Company/ or the National R&R Policy/ R&R Policy of the State Government, as applicable
- vii. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

IX. Corporate Environment Responsibility

 The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
 - ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
 - x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Annexure-III

Standard EC Conditions for Coal Washery Project

I. Statutory compliance:

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iii)The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- (iv) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vi)Solid waste/hazardous waste generated in the washery needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016.
- (vii) Coal beneficiation practices shall be carried out under strict adherence to provisions of the Factories Act, 1957 and subordinate legislations made there under.

II. Air quality monitoring and preservation

- i. Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. carried out at least once in six months.
- Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- iii. Transportation of coal by road shall be carried out by covered trucks/conveyors. The transportation of clean coal and rejects shall be by rail with wagon loading through silo. Effective measures such as regular water sprinkling shall be carried out in critical areas prone

to air pollution and having high levels of particulates such as roads, belt conveyors, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled at source. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board

- iv. All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned. Coal transportation shall be carried out by covered trucks.
- v. Covered trucks shall be engaged for mineral transportation outside the washery upto the railway siding, shall be optimally loaded to avoid spillage en-route. Trucks shall be adequately maintained and emissions shall be below notified limits.
- vi. Facilities for parking of trucks carrying raw material from linked mine shall be created within the unit.
- vii. Vehicular emissions shall be kept under control and regularly monitored. The vehicles having 'PUC' certificate from authorized pollution testing centres shall be deployed for washery operations.
- viii. Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
 - ix. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.
 - x. The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.

III. Water quality monitoring and preservation

- The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-1A.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for compliance.
- iii. Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time.
- iv. The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the washery. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side stabilised with plantation so as to withstand the peak water pressure preventing any chance of inundation.
- v. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.

- vi. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run of from reject dumping sites.
- vii. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake *etc*. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.
- viii. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.
- ix. Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.
- x. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m3/tonne of raw coal.
- xi. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- xii. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
- xiii. The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government

IV. Noise and Vibration monitoring and prevention

- i. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis
- ii. Adequate measures shall be taken for control of noise levels as per noise pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

V. Coal beneficiation

- i. Coal stacking plan shall be prepared separately for raw coal, clean coal, middling and rejects.
- ii. Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.

VI. Green Belt

- i. Three tier greenbelt comprising of a mix of native species, of minimum 30 m width shall be developed all along the washery area to check fugitive dust emissions and to render aesthetic to neighbouring stakeholders. A 3-tier green belt comprising of a mix of native species or tree species with thick leaves shall be developed along vacant areas, storage yards, loading/transfer points and also along internal roads/main approach roads.
- ii. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VII. Public hearing and Human health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on sixmonthly basis.
- ii. The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any. as amended time to time.
- iii. Personnel (including outsoured employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- v. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

VIII. Corporate Environment Responsibility

- The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM_{10} , SO_2 , NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No change in coal beneficiation process and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC) with

such conditions mentioned therein. No change in the maximum quantum of raw material feed per annum against the approved washery capacity shall be made

- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE-IV

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}, SOx and NOx, noise, water (surface and groundwater), soil be submitted.
- ix. The wet washery should generally utilize mine water only. In case mine water is not available, the option of storage of rain water and its use should be examined. Use of surface water and ground water should be avoided.
- x. Detailed water balance should be provided. The break-up of water requirement as per different activities in the mining operations vis-a-vis washery should be given. If the source of water is from surface water and/or ground water, the same may be justified besides obtaining approval of the Competent Authority for its drawl.
- xi. The entire sequence of mineral production, transportation, handling, transfer and storage of mineral and waste, if any, and their impacts on air quality should be shown in a flow chart with specific points where fugitive emissions can arise and specific pollution control/mitigative measures proposed to be put in place. The washed coal and rejects should be transport by train as far as possible. Road transport of washed coal and rejects should

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

- xii. Details of various facilities proposed to be provided in terms of parking, rest areas, canteen etc. to the personnel involved in mineral transportation, workshop and effluents/pollution load from these activities should be provided.
- xiii. Impacts of CHP, if any, on air and water quality should also be spelt out alongwith Action Plan.
- xiv. O.M.no.J-ll0I3/25/2014-IA.I dated 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.
- Analysis of samples indicating the following be submitted:
 Characteristics of coal prior to washing (this includes grade of coal, other characteristics of ash, S and heavy levels of metals such as Hg, As, Pb, Cr etc).
 Characteristics and quantum of coal after washing.
 Characteristics and quantum of coal rejects.
- xvii. Details of management/disposal/use of coal rejects should be provided. The rejects should be used in TPP located close to the washery as far as possible. If TPP is within a reasonable distance (10 km), transportation should be by conveyor belt. If it is far away, the transportation should be by rail as far as possible.
- xviii. Copies of MOU/Agreement with linkages (for stand-alone washery) for the capacity for which EC is being sought should be submitted.
- xix. Corporate Environment Responsibility:
 - a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
- xx. A detailed action Plan for Corporate Social Responsibility for the project affected people and people living in and around the project area should be provided.

- xxi. Permission of drawl of water shall be pre-requisite for consideration of EC.
- xxii. Wastewater /effluent should confirm to the effluent standards as prescribed under Environment (Protection) Act, 1986
- xxiii. Details of washed coal, middling and rejects along with the MoU with the end-users should be submitted.

GENERIC TOR FOR AN OPENCAST COALMINE PROJECT for EC

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

ML/project area, the proposed route of diversion and its realignment should be shown in the map along with the status of the approval of the competent authority.

(xi) Break up of lease/project area as per different land uses and their stage of acquisition should be provided.

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

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

- (xii) Break-up of lease/project area as per mining plan should be provided.
- (xiii) Impact of changes in the land use due to the project if the land is predominantly agricultural land/forestland/grazing land, should be provided.
- (xiv) One-season (other than monsoon) primary baseline data on environmental quality air (PM₁₀, PM_{2.5}, SO_x, NO_x and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.
- (xv) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.
- (xvi) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the

appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.

- (xvii) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
- (xviii) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
- (xix) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing though the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- (xx) Detailed water balance should be provided. The break-up of water requirement for the various mine operations should be given separately.
- (xxi) Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users in the upstream and downstream of the project site. should be given.
- (xxii) Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
- (xxiii) Impact of blasting, noise and vibrations should be given.
- (xxiv) Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
- (xxv) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
- (xxvi) Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
- (xxvii) Details of waste OB and topsoil generated as per the approved calendar programme, and their management shown in figures as well explanatory notes tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use should be given. OB dump heights and terracing based on

slope stability studies with a max of 28° angle as the ultimate slope should be given. Sections of final dumps (both longitudinal and cross section) with relation to the adjacent area should be shown.

- (xxviii) Efforts be made for maximising progressive internal dumping of O.B., sequential mining, external dump on coal bearing area and later rehandling into the mine void.--to reduce land degradation.
- (xxix) Impact of change in land use due to mining operations and plan for restoration of the mined area to its original land use should be provided.
- (xxx) Progressive Green belt and ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEFCC given below) and selection of species (native) based on original survey/land-use should be given.

S.N.	Land use Category	Present	5 th	10 th	20 th	24 th Year
		(1 st Year)	Year	Year	Year	(end of
						mine
						life)*
1.	Backfilled Area(Reclaimed					
	with plantation)					
2.	Excavated Area (not					
	reclaimed)/void					
3.	External OB dump					
	Reclaimed with plantation)					
4.	Reclaimed Top soil dump					
5.	Green Built Area					
6.	Undisturbed area (brought					
	under plantation)					
7.	Roads (avenue plantation)					
8.	Area around buildings and					
	Infrastructure					
	TOTAL					

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

* As a representative example

Table 2 : Stage Wise Cumulative Plantation

S. No.	YEAR*	Greer	1	Extern	al	Backf	illed	Others(Undi	sturbed	TOT	AL
		Belt		Dump		Area		Area/etc)			
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					
	34 th year(end of mine life)					
10.	34- 37 th					
	34- 37 th Year (Post- mining)					
	mining)					

* As a representative example

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

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

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

- (xxxii) Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be done.
- (xxxiii)Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.

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

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

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

					-
TOTAL	TOTAL	Date of FC	Extent of	Balance	Status of appl
ML/PROJECT	FORESTLAND		forestland	area for	for. diversion
AREA (ha)	(ha)			which FC	of forestland
				is yet to be	
				obtained	

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

If more
than ,
provide
provide details of
each FC

GENERIC TORs FOR AN UNDERGROUND COALMINE PROJECT

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

S.N	ML/Project Land use	Area	under	Area	Under	Area under Both (ha)
		Surfac	ce	Mining	Rights	
		Rights	s(ha)	(ha)		

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

Area under Surface Rights

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

- (viii) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.
- (ix) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
- (x) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
- (xi) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing though the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- (xii) One-season (other than monsoon) primary baseline data on environmental quality air (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	Total	Date of FC	Extent	Balance area	Status of appl.
/Project	Area	Forest		of Forest	for which FC is	For diversion
(ha)		Land (ha)		Land	yet to be	of forest land
					obtained	
			If more than one			
			provide details of			
			each FC			

GENERIC TORs FOR AN OPENCAST-CUM-UNDERGROUND COALMINE PROJECT

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

ANNEXURE-VIII

Email	munna.shah@gov.				
Re: Draft MoM of 55th EAC held on 29th May, 2020 - Revised-2					
From : navinchandrarrl@yahoo.com	Wed, Jun 10, 2020 06:16 PM				
Subject : Re: Draft MoM of 55th EAC held on 29th May, 2020 - Revised-2					
To : Munna Kumar Shah <munna.shah@gov.in></munna.shah@gov.in>					
Cc : shuklanp55@gmail.com, mohankarnat4@gmail.com, mohankarnat@yahoo.com, Ram Kumar Giri <rk.giri71@imd.gov.in>, Sanjeev Paliwal <sanjeevpaliwal.cpcb@nic.in>, vskgsunil@gmail.com, Dr J K Pandey <jkpandey@cimfr.nic.in>, suramya vora <suramya.vora@gmail.com>, gpkundargi@gmail.com, shuklanp55@yahoo.co.in, hod ese <hod_ese@iitism.ac.in>, sunil@iitism.ac.in, cetppdcea@gmail.com, navinchandraampri@gmail.com, Manoj Gangeya <m.gangeya@gov.in></m.gangeya@gov.in></hod_ese@iitism.ac.in></suramya.vora@gmail.com></jkpandey@cimfr.nic.in></sanjeevpaliwal.cpcb@nic.in></rk.giri71@imd.gov.in>					
Reply To : navin chandra <navinchandrarrl@yahoo.com></navinchandrarrl@yahoo.com>					
10/06/2020					
Dear Shri Gangeya Ji/Shah Ji,					
We shall wait till 11.30 am on 11th June for Hon'ble EAC mem document and offer their comments. In case comments are re- shall incorporate otherwise it may be concluded that the corre- hence approved. Accordingly, tomorrow it may be uploaded or no comments are received from Hon'ble members.	eceived by that time, we ected MoM is acceptable and				

Email

With warm regards,

yours sincerely,

6/11/2020

(NAVIN CHANDRA)

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