



F.No. 23-77/2018-IA (III)

Government of India

Ministry of Environment, Forest & Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan,

Jorbagh Road, N Delhi – 3

Email: lk.bokolia@nic.in Tel: 01124695301

Dated: 1st February, 2021

To,

The Director (Planning & Projects)
M/s The Singareni Collieries Company Ltd (SCCL),
Kothagudam Collieries (PO)
Bhadradi- 507101 (Telangana)
Email: gm_env@scclmines.com, env_crp@scclmines.com

Sub: Jalagam Vengal Rao Opencast - I Expansion Project of annual production of 2.50 MTPA to 5.00 MTPA in an ML area 544.81 ha. of M/s The Singareni Collieries Company Limited, located at Village Ayyagaripeta, Mandal Sathupalli, District Khammam (Telangana) - For Environment Clearance - reg.

Sir,

This has reference to your online proposal No IA/TG/CMIN/152625/2017 dated 7th July, 2020 for grant Environment Clearance in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986 for Jalagam Vengal Rao Opencast - I Expansion Project of annual production of 2.50 MTPA to 5.00 MTPA in an ML area 544.81 ha. of M/s The Singareni Collieries Company Limited, located at Village Ayyagaripeta, Mandal Sathupalli, District Khammam (Telangana).

The project/activity is covered under category 'A' of item 1 (a) 'Mining of Minerals' the Schedule to the EIA Notification, 2006

2. The proposal was considered by the Expert Appraisal Committee (EAC) in the Ministry involving violation of EIA Notification, 2006 for Thermal & Coal Mining Sector in its 35th meeting held on 6-7 August, 2020 and in 36th meeting held on 21-22 September, 2020. The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- (i) Latitude and Longitude of the project: - Latitudes: 17°11'28.4" to 17°12'42.87" (North)
Longitudes: 80°46'44.99" to 80°49'26.53" (East) Survey of India Topo sheet: 65 C/16
- (ii) The Project is not located in the Critically Polluted Area (CPA) as per CEPI Index of CPCB
- (iii) Cost of the project: Rs. 106.76 Crores
- (iv) Employment generated / to be generated: 816 (Permanent - 416 and temporary - 400)
- (v) Benefits of the project :- To meet the coal requirements of thermal power plants of Telangana State.

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- (vi) The project is of Expansion of capacity from 2.50 MTPA to 5.00 MTPA
- (vii) Certified Compliance Report of Regional office of the MoEF has been submitted vide its Letter No. EP/12.1/583/AP/1778, dated 11th Nov, 2019.
- (viii) The ToR letter was issued vide letter No.23-77/2018-IA(III) Dt. 08th August, 2019 under violation category.
- (ix) Date of approval of mine plans and mine closure plan, Status & date : 17.11.2014 , Mine Plan & Mine Closure Plan approved by MoC, GoI Vide Lr.No. 13016/2/2006-CA-II.
- (x) Date of Board's approval: 10th July, 2013. Approved vide minute No. 513:5.20
- (xi) Date of Ground Water Clearance and surface water approval: 06th July, 2007 vide Letter No.13019/Hg.II(1)/06. Ground Water Clearance for JVR OC Mine (I&II Expansion) of 10 Mt was applied vide Lr. No. KGM /ENV /405 /2019 /149, dated 7th November, 2019.
- (xii) Existing Ground water level in (M) Pre-Monsoon : From 3.48 To 11.85 (Depth from surface) Post Monsoon : From 2.62 To 10.15 (Depth from surface).
- (xiii) There is no river / Nallaha flowing near or adjacent to the proposed mine.
- (xiv) Details of Mine Lease : JVR OCP-I Mining Lease for 383.05 ha: Date of entering into original lease deed: 23rd Mar, 2005' Date of expiry of original lease deed: 22nd Mar, 2025. JVR OCP-I Expansion Mining Lease for 136.50 ha: Date of entering into original lease deed: 10th Nov, 2008; Date of expiry of original lease deed : 9th Nov,2028
- (xv) Technical Details
 - a. Geological Reserve: Total Geological Reserves: 57.83 million tonnes; Mineable reserve: 50.90 million tonnes; Extractable Reserves:50.90 million tonnes; Percent (%) of extraction: 88.00 %;
 - b. Range of ground water level Pre monsoon: 3.48 m to 11.85m (Depth from surface) Post monsoon : 2.62 m to 10.15 m (Depth from surface)
 - c. Total estimated water requirement 1306 m³/day
 - d. Details of intersecting ground water level 26.56 m
- (xvi) Details of Deposits: Depth of the ore body: 25 to 150 m; Grade of ore : G9 and G13; Stripping ratio : 1 : 3.32
- (xvii) Method of mining: Mechanized opencast method.
- (xviii) Life of mine: 1 year from 2019-20
- (xix) Ambient air quality seasonal data has been documented: From March 2018 to May 2018 (Summer season) and the results are within the prescribed limits.
- (xx) Monitoring report of earlier EC from MoEF Regional Office has been obtained, in case the proposal is for expansion: Certificate No. F.No EP/12.1/583/AP/1778, dated 11th November, 2019.
- (xxi) Details of O.B. : External OB dumps: Present; No of OB dumps: One; Area (in ha) :130.39; Height: 90 m above Ground Level; Quantity (in M.Cu.m) : 38.49; Year of back filling : 1; No. of OB dumps reclaimed : 1 ; Garland drains and settlement facility for runoff has been created. Run-off water from OB dumps is being let out into nearby tanks for agriculture purpose through settling ponds.
- (xxii) Details of Internal Dumps : Number of internal dumps: One; Area (ha) : 143.60; Height: 60 m; Quantity (in MCum) :126.03
- (xxiii) Utilization potential of wastes:



- Within the mines: Overburden will be dumped in the earmarked dumping areas and top soil will be spread on the dumps and plantation will be raised.
- Outside mines: Nil
- Efforts made by proponent Nurseries are established and native species are raised and planted on the OB dumps.

(xxiv) Details of final Mine Voids: Area (ha): 164.86 ; Depth : 150 m

(xxv) Details of Quarry : Total Quarry area (ha): 371.02 ; Back filled quarry area that shall be reclaimed with plantation:143.60; A void of 164.86 ha at a depth of 150 m is proposed to be converted into a water body

(xxvi) Green belt created in ha. :318.90

(xxvii) Details of Land usage

Pre-mining

S.No.	Description	Land (ha)
1	Forest land	380.52
2	Agricultural land	101.93
3	Waste land	52.36
4	Other land	10.00
	Total	544.81

Post- Mining

S. No.	Description	Land Use (ha)			
		Plantation	Water body	Public/ Other Use	Total
1	External OB dump	112.37	-	-	112.37
2(a)	Excavation (Backfilled area)	143.60	-	-	143.60
2(b)	Excavation (Void area)	-	164.86	-	164.86
2(c)	Safe zone including Drains	46.39		34.19	80.58
3	Service buildings, CHP & sub-station		-	18.14	18.14
4	Road diversion	-	-	15.26	15.26
5	Colony/township	-	-	10.0	10.0
	TOTAL	302.36	164.86	77.59	544.81

Core Area (Present Land Use)

Description	Forest land	Non Forest land	Total
Excavation Area(Including Drains etc.)	355.14	15.88	371.02
External dump yard	-	130.39	130.39
Service buildings, CHP & sub-station	15.96	2.18	18.14
Road diversion	9.42	5.84	15.26
Colony/township (To be Acquired)	-	10.00	10.00
Total Land	380.52	164.29	544.81

(xxviii) Details of Forest issues :

- Total forest area involved (in ha) for mining lease 380.52; Total broken forest area: 380.52
- Extent of forest land in the project (including safety zone and all types of forest land) (in ha) 380.52
- Balance forest land for which Stage-I FC is not available (give area in Ha : Nil
- Status of Forest Clearance and extent of forest land diverted in ha. Total forest area of 380.52 ha was diverted.
 - 244.02 ha vide Lr.No.8-129/2003-FC dt.02-02-2005
 - 136.50 ha vide Lr.No.8-56/2008-FC dt.03-07-2012.

(xxix) No National Park, eco-sensitive Zones lies within 10 km radius.

(xxx) A Wildlife Conservation & Mitigation Plan for Schedule-I species has been prepared for an amount of Rs. 2.57 Crores. Wildlife Conservation plan is yet to be approved by CWLW wherein PP has submitted budget for Rs. 2.57 Crores.

(xxxi) Costs of the project : Total capital Cost: ₹106.76 Crores; Cost of Production: ₹ 554 per Tonne; Sale Price: ₹1851 per Tonne; CSR cost: As per Companies Act, 2013 and Companies (Corporate Social Responsibility Policy) Rules - 2014, SCCL is spending 2% of its average annual net profit calculated in accordance with the provisions of Section 198 of the Act made during three immediately preceding financial years in pursuance of its CSR policy on CSR activities each financial year. In addition, an amount of Rs. 84.31 crores (from February 2016 – April 2019) was deposited with District Collector, Bhadradi Kothagudem, as District Mineral Fund (DMF) for taking up CSR works; R&R Cost: Nil; Cost for implementing EMP Capital: ₹ 9.50 Crores; Recurring: ₹ 2.87 Crores per Annum

(xxxii) Details of villages/habitation in mine lease area: Inside the lease : Nil; Surrender by lease: Nil; Extent of cropland acquired/ being acquired in ha. : 101.93

(xxxiii) Details of transportation of coal: In pit : Dumpers; Surface to siding: Conveyor; Siding to loading: From JVR OC – I Exp. to RCHP by Road and from there to end users by Rail. Quantity being transported by Road/Rail/conveyer /ropeway: 5 Mtpa; Proposed change in transportation means if any, give details: Proposed to change the road transport from the project to end users by rail mode.

(xxxiv) Details of reclamation: Reclaimed external OB dump in ha : 112.37; Internal Dump in ha : 143.60; Green belt in ha: 46.39; Density of the tree plantation (in no.): 2500 per hectare; Void (ha) at a depth of (m) proposed to be converted into water body : 164.86 ha at a depth of 150 m; Other in ha (such as excavation area along ML boundary, along roads and infrastructure, embankment area and in township located outside the lease etc..

(xxxv) Legal Issues : As per the ToR, State Govt/SPCB has to take action against the Project Proponent under the Provisions of the E(P) Act, 1986. State Govt. directed SPCB to take action in this regard. Action from SPCB is awaited.

4. The Expert Appraisal Committee in its 36th meeting held on 21st -22nd September, 2020 has recommended the proposal for grant of Environment Clearance. Based on the recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environment Clearance to the proposal of JalagamVengal Rao Opencast - I Expansion

Project of annual production of 2.50 MTPA to 5.00 MTPA in area of 544.81 ha at Village Ayyagaripeta, Mandal Sathupalli, District Khammam (Telangana) by M/s The Singareni Collieries Company Limited, under the provisions of Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions for environment safeguards: -

- (i) EAC recommended for an amount of Rs 2667.00 lakhs towards Remediation plan and Natural and Community Resource Augmentation plan to be spent within a span of three years. The details of Remediation plan, Natural resource Augmentation plan and Community Resource Augmentation plan with budgetary provision are mention below:
- (ii) Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is Rs. 2667.00 lakhs. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rs. 2667.00 lakhs towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.
- (iii) Remediation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee will be released after successful implementation of the remediation plan and Natural and Community Resource Augmentation Plan, and after the recommendation by regional office of the Ministry, Expert Appraisal Committee and approval of the Regulatory Authority.
- (iv) Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- (v) Wild life Conservation plan as approved by the Competent Authority shall be implemented.
- (vi) The Environmental Clearance will not be operational till such time the Project Proponent 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.

Remediation plan along with budgetary provision

S. No.	Component	Remediation Proposed	Description	Locations	Rate in Rs.	Total Qty.	Total Cost (Rs.)	Year I (Rs.)	Year II (Rs.)	Year III (Rs.)
1	Air Environment	Dust suppression	Laying of 10 feet road in the	NTR Colony	50,00,000 per 1km	1000 m	50,00,000	25,00,000	15,00,000	10,00,000

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			nearby village.							
1 b	Noise Environment and Ecology	Avenue Plantation / Plantation	Plantation of total 4900 No.s native plants at Rs.1000 per sapling, including maintenance for 3 years and 35 ha of block plantation around mine boundary.	1. Satupalli 2. Rejarla 3. Cherukupalli 4. Kothuru 5. Kommugudem 6. Kistaram 7. Mine boundary	1,000 + 1,00,000 per ha	4,900	75,00,000	25,00,000	25,00,000	25,00,000
2 a	Water Environment	Construction and annual maintenance of 100 Nos. Rain Water Harvesting structures in nearby villages	Construction of RWH-100 No. sand 11 No.s of roof top rain water harvesting facility (including raw material, labour, construction and maintenance)	1. Sathupalli 2. Kistaram 3. Cherukupalli 4. Rejarla 5. Kommugudem	2,55,000 + 2,00,000	100 + 11	2,77,00,000	95,00,000	95,00,000	87,00,000

		es	nce for one year)							
2 b		Constr uction of check dams and creati on of new water tanks	Lumpsu m (LS) cost includin g Material s, labour, construct ion and maintena nce for one year	1. Kistramche ruvu. 2. Jaganathpu ramcheruvu 3. Kothuru che ruvu 4. Jeenugupall i (New Tank)	LS	LS	2,00, 00,00 0	70,00 ,000	70,00 ,000	60,00, 000
2 c		Suppl y of potabl e water in surrou nding villag es.	RO plants of 1000 litres capacity with installati on and 3 years maintena nce	1. Vengalraon agar 2. Kistaram 3. Kakarlalli 4. Lingapalle m 5. Rejarla (2 No.s) 6. Ayyagaripe ta 7. NTR Nagar 8. Kothuru 9. Dwaraka Nagar 10. Gourigude m 11. Cherukupal li (R&R center) 12. Virat Nagar	9000 00	13	1,17, 00,00 0	40,00 ,000	40,00 ,000	37,00, 000
Total (Rs.)							7,19, 00,00 0	2,55, 00,00 0	2,45, 00,00 0	2,19,0 0,000

Natural Resource Augmentation plan with budgetary provision

S. No	Component	Activity Proposed	Description	Locations	Rate	Total Qty.	Total Cost (Rs.)	Year I (Rs.)	Year II (Rs.)	Year III (Rs.)
1a	Natural Resource Augmentation Plan	Energy Conservation by adapting Green Energy technology.	Providing 1 KW Capacity Solar Lighting system (includes panels, inverters, wiring, structure, connectors, junction boxes, etc.)	1. Sathupalli 2. Kistaram 3. Rejarla 4. Ayyagaripeta 5. Kommugudem	50,000	200	1,00,000	40,000	30,000	30,000
1b			Solar water pump sets of 5 HP capacity for agriculture (including panels, inverters, wiring, structure, connectors, junction boxes, etc.)	1.Kistaram 2.Rejarla 3.Kothuru 4.Kommu gudem	3,00,000	130	3,90,000	1,30,000	1,30,000	1,30,000
1c			Improvement	Providing Bio	Sathupalli town	1,60,000	10	16,00,000	6,00,000	5,00,000

		of Public Sanitation	toilets in Sathupalli town.							
Total (Rs)							5,06,000	1,76,000	1,65,000	1,65,000

Community Resource Augmentation plan with budgetary provision

S. No	Component	Activity Proposed	Description	Locations	Rate	Total Qty.	Total Cost (Rs.)	Year I	Year II	Year III
1 a	Community Resource Augmentation Plan	Development of Infrastructure	Construction of CC Roads and drains (2 km in each village) and bore wells.	1. Kistara 2. Rejarla 3. Kothuru	1,00,000	3	3,00,000	1,00,000	1,00,000	1,00,000
			Construction of Godown for storage of the agriculture products (Dimensions 20 m x 8 m x 6 m)	1. Rejarla 2. Kothuru	50,000	2	1,00,000	40,000	30,000	30,000
Repair of road and road widening as requested in the Public Hearing.			V.M.Banjar to sathupalli town (20 km) and widening of y-junction near Kistaram village	LS	LS	5,67,000	2,00,000	2,00,000	1,67,000	
Construction of Community halls / Community			1. Kistaram 2. Rejarla 3. Kothuru	75,000	3	2,25,000	75,000	75,000	75,000	
1 b										
1 c.										
1 d										

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		health centres (300 Sq. m. each)							
1		Land for dump yard (about 8 acres) used for treatment of solid waste for generation of compost.	Sathupalli	25,00,000	8	2,00,00,000	2,00,00,000	-	-
1f		Development of New Urban park	1. Sathupalli town 2. Kothuru	LS	2	50,00,000	20,00,000	20,00,000	10,00,000
Total (Rs)						14,42,00,000	6,35,00,000	4,25,00,000	3,82,00,000

Summary

Sl. No.	Description	Estimated cost (Rs. in Lakhs)
1	Remediation Plan	719
2	Natural Resources Augmentation Plan	506
3	Community Resources Augmentation Plan	1442
Total		2667

- (vii) Fund allocation for Corporate Environment Responsibility (CER) as per OM of 1st May, 2018 i.e 1.05 crore in this case may now be considered as fund allocated on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (viii) Effective dust suppression system shall be adopted at the transportation site and in the other parts of the mining lease to arrest the fugitive dust emission.
- (ix) Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
- (x) The mining lease holder shall, after ceasing mining operations, under take re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to condition which is fit for growth of fodder, flora and fauna etc.State

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Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology 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) As mine lease is valid till 22nd March 2025 and balance extractable reserve is only 1.30 Mt therefore validity of Environment Clearance shall be upto 22nd March 2025 and all activities proposed under RP, CRA and NRA shall be completed within three years of the grant of EC.

Standard Conditions

(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 be 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 statute 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-20012/1/2006-1A.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.

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- (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 riverine/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. 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**

- (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) 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**
- (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 & it's RO on six-monthly 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.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'.
- (i) Corporate Environment Responsibility**
- (i) 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
 - (iv) The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (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.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'.

- (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.
5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.
6. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any



further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

7. Any appeal against this environmental clearance 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.
8. The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2nd August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.
9. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.
10. This environmental clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.


(Lalit Bokolia)
Director

Copy to: -

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The APPCF, Regional office (EZ), Ministry of Environment, Forest and Climate Change, 1st&2nd Floor, Handloom Export Promotion Council, Cathedral Garden Road, Nungambakkam, Chennai - 34 (Tamil Nadu)
3. The Secretary, Department of Environment & Forests, Government of Telangana
4. The Chairman, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
5. The Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
6. The Chairman, Telangana State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanatnagar, Hyderabad - 38
7. The District Collector, Khammam, Government of Telangana
8. Monitoring File/Guard File/Record File 9. PARIVESH Portal


(Lalit Bokolia)
Director