



Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The Director (Planning & Projects)
THOMARAPPARA BRICKS & METALS

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/TG/CMIN/171196/2019 dated 26 Feb 2021. The particulars of the environmental clearance granted to the project are as below.

- | | |
|--|--|
| 1. EC Identification No. | EC21A006TG132986 |
| 2. File No. | J-11015/268/2007-IA.II(M) |
| 3. Project Type | Expansion |
| 4. Category | A |
| 5. Project/Activity including Schedule No. | 2(a) Coal washeries |
| 6. Name of Project | Jalagam Vengala Rao Opencast Mine (I&II Expansion) |
| 7. Name of Company/Organization | THOMARAPPARA BRICKS & METALS |
| 8. Location of Project | Telangana |
| 9. TOR Date | 21 May 2019 |

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 11/10/2021

(e-signed)
Lalit Bokolia
Scientist F
IA - (Coal Mining sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

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F.No. J-11015/268/2007-IA.II (M)]
Government of India
Ministry of Environment Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhavan,
JorBagh Road, New Delhi-110 003
Email: lk.bokolia@nic.in Tel: 011-24695363
Dated: 11th October, 2021

To,

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

Sub: Expansion of Jalagam Vengala Rao Opencast Mine (I&II Amalgamation + Expansion + 26.39 ha area) from 4 / 5 MTPA (Normative/ Peak) to 10 MTPA (Peak) with setting up of coal washery of 4 MTPA capacity in ML Area 1953.46 ha by M/s Singareni Collieries Company Limited at village Kommepalli near Sathupalli town, Sathupalli mandal, Khammam District, (Telanagana) - For Environment Clearance-reg.

Sir,

This has reference to your online proposal No. IA/TG/CMIN/171196/2019 dated 26th February, 2021 for grant of Environmental Clearance to the above project.

2. The Ministry of Environment, Forest and Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance to the project Expansion of Jalagam Vengala Rao Opencast Mine (I&II Amalgamation + Expansion + 26.39 ha area) from 4 / 5 MTPA (Normative/ Peak) to 10 MTPA (Peak) with setting up of coal washery of 4 MTPA capacity in ML Area 1953.46 ha by M/s Singareni Collieries Company Limited at village Kommepalli near Sathupalli town, Sathupallimandal, Khammam District, (Telanagana).

3. The proposal was considered by the sectoral Expert Appraisal Committee (EAC) in its 10th meeting held on 22nd March, 2021 and 16th meeting held on 22nd July, 2021. The details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meetings, are given as under:

- (i) The project area is covered under Survey of India Topo Sheet No. 65C/16 and is bounded by the geographical coordinates ranging from Latitudes 17°09'54.59"N to 17°13'01.70"N and longitudes 80°45'43.38"E to 80°49'20.86"E.
- (ii) Coal will be supplied to the major customers like Power houses, cement, Textiles, Paper, Railways and other Industries.
- (iii) Joint venture cartel has been formed - Not Applicable.

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- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13th January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation, Permanent / Contractual employment to 706/800 persons will be provided from the project.
- (vi) The project is reported to be beneficial in terms of socio-economics and improving living standards.
- (vii) Standard Terms of Reference for the expansion project was granted by Ministry on 21st May, 2019
- (viii) Earlier, the environment clearances to the project of JVR OC- II was granted by Ministry vide letter No. J-11015/268/2007-IA.II(M) dated 28th March, 2010 for 4.0 (Peak - 5.0) MTPA in mine lease area of 1409.81 ha. Further, Environment Clearance to Jalagam Vengal Rao Opencast - I Expansion Project of annual production of 2.50 MTPA to 5.00 MTPA in an ML area of 544.81 ha was granted by Ministry under Violation category on 1st February, 2021.
- (ix) Total mining lease area is 1910.09 ha. Mining Plan (Including Mine Closure Plan) has been approved by the Standing Committee of MoC, GoI in its meeting held on 11th February, 2019.
- (x) The land usage pattern of the project is as follows:

Pre-mining Land use details

(Area in ha)

Sl. No.	Land owner ship	Land use	Within ML Area	Outside ML Area	Total
1	Tenancy/ Private	Agriculture	499.45	22.57	522.02
		Grazing	0.00		0.00
		Water Body	23.08		23.08
		Roads	7.38		7.38
		Villages	7.73		7.73
		Sub-Total	537.64	22.57	560.21
2	Govt. Land	Agriculture	192.29		192.29
		Grazing	3.75		3.75
		Water Body	14.21		14.21
		Roads	4.86		4.86
		Villages	0.62		0.62
		Waste Land		20.80	20.80
		Sub-Total	215.73	20.80	236.53
3	Forest Land	Reserve	1156.72		
		Sub-Total	1156.72		1156.72
	Total		1910.09	43.37	1953.46

Post Mining:

Post Closure Land use status is furnished hereunder:

(Area in ha)

Sl. No.	Type	Total Area	Plantation	Water Body	Public / Company Use	Forest Land (Returned)
Within ML Area						
1	Excavation/ Quarry Area:	1030.87				
	(a) Backfilled Area	531.75	141.40			390.35
	(b) Excavated Void	499.12		95.56		
2	External Dump	507.05	314.96			192.09
3	Safety Zone /Rationalization area	177.69	65.71		15.00	96.98
4	Road & Infra-structure area	152.74	7.88		93.85	51.01
	(a) CHP & Coal Yard	22.33				22.33
	(b) Coal Washery	13.03	1.13		11.90	
	(c) Road Diversion	18.97	1.15		5.09	12.73
	(d) Magazine	6.94	1.45		5.49	
	(e) Railway Siding	43.15	1.74		41.41	
	(f) Mine Service Facilities	48.32	2.41		29.96	15.95
5	Garland Drains, Settling Ponds	26.78	0.46	13.26		13.06
6	Embankment	14.96	5.29			9.67
7	Water Reservoir near pit/ Water Body					403.56
	GRAND TOTAL	1910.09	535.70	108.82	108.85	1156.72

- (xi) Total geological reserves reported in the mine lease area are 309.55 MT with 291.97 MT extractable reserves. Percent of extraction is 94.32%. Balance extractable reserves are 230.63 MT as on 31st March, 2020.
- (xii) Lease validity of all the mining leases with their extents

Detail of mining lease and validity	Extent(ha)
JVR OCP-II ML granted vides G.O. Ms. No. 29, dt. 03th November, 2016, valid up to 13th Feb, 2047 (30 Yrs.)	1300.69
JVR OCP-I Exp. ML granted vide G.O. Ms. No. 115, dt. 13th May, 2008, valid up to 09th Nov, 2028 (20 Yrs).	136.50
JVR OC-I ML granted vide G.O. Ms. No. 51, dated 21st February, 2005, valid up to 22nd Mar, 2025 (20 Yrs)	383.05
LoI Obtained- Lease area to be obtained is non-coal bearing and will be utilized for Road & infrastructure area)	89.85
Total	1910.09

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- (xiii) 6 seams with thickness ranging from 0.05 m – 8.60 m are workable. Grade of coal is G-9 (34.06%) and G12 (65.94%), stripping ratio 4.26 Cum of OB per 1 tonne of coal, while gradient is 1 in 1.25 to 1 in 11.
- (xiv) Method of mining operations envisages by opencast method.
- (xv) Life of mine is 26 years from 2020-21.
- (xvi) The project has one external OB dumps in an area of 507.05 ha with 120 m height and 374.61 Mm³ of OB (Hard OB 363.93 Mm³ and Topsoil 10.68 Mm³).
- (xvii) The project has two Internal OB dumps ((Void of JVR OC-I Exp. & Void of JVR OC-II) in total area of 531.75 ha with 827.72 Mm³ (819.92 Mm³ Hard OB & 7.8 Mm³ Top Soil) of OB is envisaged in the project.
- (xviii) Total quarry area is 1030.87 ha out of which backfilling will be done in 531.75 ha while two final mine voids will be created in an area of 499.12 ha (121.24 ha of JVR OC-I void and 377.88 ha of JVR OCP-II void) with a depth of 146 m in JVR OC-I & 363.45 m in JVR OCP-II. Backfilled quarry area of 531.75 ha shall be reclaimed with plantation. Final mine voids will be converted into water body.
- (xix) Transportation of coal has been proposed as from quarry to pit head by Trucks/Dumpers, from surface to siding (pit head CHP, Sathupalli to RCHP, Kothagudem) by Road and from siding (RCHP Kothagudem) to customers by rail.
- (xx) After completion of proposed railway Line between Bhadrachalam Road and Sathupalli coal transportation is as follow.
- From quarry to pit head by Trucks/Dumpers, from surface to siding (Railway siding, Sathupalli) by belt conveyor) and from siding (Railway siding, Sathupalli) to customers by rail.
- (xxi) Reclamation Plan in an area of 1288.46 ha, comprising of 507.05 ha of external dump, 531.75 ha of internal dump and 162.29 ha of green belt. In addition to this, an area of 87.37 ha, included in the Infrastructure area etc has also been proposed for green belt development.
- (xxii) 1156.72 ha of forest land have been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 1156.72 ha of forest land for non-forestry purposes has been obtained vide MoEF&CC letter Nos. F. No.8-129/2003-FC, dated 02nd February, 2005 (JVR OCP-I 244.02 ha), F. No. 8- 56/2008-FC, dated 03rd July, 2012 (JVR OCP-I Expansion 136.50 ha) & F. No. 8-56/2014-FC, dated 30th May, 2017 (JVR OC-II 776.20 ha).
- (xxiii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.

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- (xxiv) The ground water level has been reported to be varying between 3.48 m to 11.85 m during pre-monsoon and between 2.62 m to 10.15 m during post-monsoon. Total water requirement for the project is 3220 KLD.
- (xxv) Ground Water Clearance was obtained vide Lr. No. 4693/Hg-II (2)/2008, dated 01st November, 2008 (JVR OCP II). Ground Water Clearance JVR OC-I: Department, AP has issued vide Memo No.13019/Hg-II (1)/06 dated 06th July, 2007
- (xxvi) Public hearing for the project of 10 MTPA capacity in an area of 1953.46 ha was conducted on 14th February, 2020 at JVR Government college, Satupalli, Chaired by Sri N. Madhusudan, IAS, and Additional Collector Khammam District. Major issues raised in the public hearing include development of surrounding areas, infrastructure facilities employment of local, compensations for land, education and health, effects of air, noise, water, and road repairs etc. The concerns raised by public have been addressed in EIA-EMP report.
- (xxvii) Consent to Operate for the existing capacity was obtained from the State PCB on 03rd January, 2018 and is valid till 31st October, 2022.
- (xxviii) No River/nalla is flowing within the boundary of lease.
- (xxix) Baseline data was collected during March 2018 - May 2018 (Summer season). Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to State Pollution Control Board and also to MoEF & CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations which can be attributed the specific local conditions during the day of sampling.
- (xxx) Two cases are being pleaded in National Green Tribunal, Southern Bench, Chennai.
- (xxxi) Case No-1: O.A. 174 of 2020 (SZ), dt: 08.09.2020 - Based on a complaint received from Sri Banothu Nandu Nayak, R/o Sathupalli in regard to environmental violations and damage caused to houses by SCCL in operation of JVR Opencast mines.
- (xxxii) Present Status: NGT appointed a Joint Committee comprising of District Collector, Senior Officers from MoEF&CC (RO, Chennai), TSPCB and DMG. It was stated that MoEF&CC, Regional Office, Chennai will be the nodal agency for co-ordination. 1st meeting was convened by the Joint Committee with SCCL on 02.12.2020 through video conference and next hearing is on 26.03.2021.
- (xxxiii) Case No-2: O.A.No.20 of 2021(SZ) , dt:27.01.2021 - Based on a complaint received from Sri Oggu Srinivasa Reddy, R/o Sathupalli and another in regard to violation of environmental conditions by SCCL in operation of JVR OCP-II.
- (xxxiv) Present Status: Case has been registered by NGT and adjourned to 26.03.2021. Both the cases have to be concluded by the NGT
- (xxxv) The Project does not involve violation of the EIA Notification, 2006 and amendment issued there under.
- (xxxvi) The coal production from the mine was started from the year 2017 onwards. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations.



(xxxvii) The project does not involve project affected families.

(xxxviii) Total cost of the project is Rs. 55,322 lakhs. Cost of production is Rs. 1,090.49/- per tonne, CSR cost is 2% of average net profits of the company made during last three years at company level, R&R cost is Nil. Environment Management Cost is Rs. 13.70 crores.

4. The sectoral Expert Appraisal Committee in its 16th meeting held on 22nd July, 2021 has recommended the project for grant of Environment Clearance (EC). Based on recommendations of the EAC, Ministry of Environment, Forest and Climate Change hereby accords approval for Environment Clearance to **Expansion of Jalagam Vengala Rao Opencast Mine (I&II Amalgamation + Expansion + 26.39 ha area) from 4 / 5 MTPA (Normative/ Peak) to 10 MTPA (Peak) with setting up of coal washery of 4 MTPA capacity in ML Area 1953.46 ha by M/s Singareni Collieries Company Limited at village Kommepalli near Sathupalli town, Sathupallimandal, Khammam District, (Telanagana)**, under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions in addition to the standard environmental conditions notified by the Ministry as under :-

- (i) All the conditions mentioned in EC dated 27th July, 2007 for JVR-OC I and 28th March, 2010, 1st February, 2021 and EC Amendment dated 19th April, 2019 should be strictly complied within 8 months and shall be read with instant EC. Grant of this integrated EC is subject to mine lease period of mine.
- (ii) Transportation of coal from Coal Handling Plant shall be through mechanized covered trucks for 2 years. No transportation by trucks after 2 years and proposed railway siding should be constructed within 2 years of mine operations.
- (iii) Third party monitoring (by reputed institute) for air quality shall be carried out at identified locations, both ambient and the process area, to oversee the impact and mitigations measures vis-à-vis details mentioned EIA report.
- (iv) PP shall install continuous online monitoring station (24X7) at appropriate location and data so generated should be displayed at entry gate of mine for public domain within period of 6 months and also shared with respective SPCB and upload on the company's website.
- (v) Mining shall be carried out only by surface miners for the project and silo loading through in-pit conveyor should be installed to stop road transportation in 2 years of mine operations.
- (vi) PP shall plant 200 ha of Sal trees(only) and 200 ha of fruit bearing trees and create a nursery of 10 ha to distribute the species freely in the region for redevelopment of Sal forest in the region.
- (vii) PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis.
- (viii) 10 Fog canon shall be installed to reduce the impact of air pollution for nearby villages, along the haul road, transportation route and at railway siding.

- (ix) With confirmation of further utilisation/recovery of Sand by PP, it shall establish a pilot plant of 100 TPH capacity M-Sand (Manufactured sand) Plant at MOCP, Godavarikhani (BOO modal if feasible) for a period of minimum 6 years within one year of issue of EC letter.
- (x) PP shall implement three tier 50 mts peripheral tree plantation along the boundary of coal washery.
- (xi) 2 nos. of water tank similar to the area of Jeenugupalli tank will be created by PP in one year in nearby villages and shall be continuously maintained. Regular desiltation of nearby water tanks will be carried out PP and quality shall be monitored every six months (of atleast 10 tanks)
- (xii) PP shall establish one new higher secondary school in the 5 km of the project area within 2 years.
- (xiii) PP shall construct new multispeciality hospital in the 10 km of the project area within 2 years.
- (xiv) PP shall supply domestic water supply by treating mine water to nearby villages through water distribution pipeline network
- (xv) PP shall maintain V-M Banjara - Sathupalli road and any other road used for coal transportation and regular cleaning and maintenance shall be conducted by PP in collaboration with state PWD. All approach roads to mine and all other roads which are in regular use should be black topped. The maintenance of road shall be done by PP in collaboration with state government. The details of expenditure incurred shall be submitted to Ministry's Regional Office.
- (xvi) PP shall employ appropriate measure to control the environmental impacts of blasting such as noise, vibration, air blast etc. Use of state of the technology solution for design and simulation of each blast is strongly recommended to minimize the environmental impacts of blasting. PP should as far as possible maintain a distance of 500 m from the blasting point to the nearby habitation.
- (xvii) In-active OB dump shall not be kept barren/open and immediately reclaimed and re-graded to improve the land form and covered by temporary grass etc. for better land use post mining on closure
- (xviii) PP shall regularly check the water quality of mine pit water for drinking water standards at regular interval of time.
- (xix) Peripheral tree plantation around the affected villages and nearby villages (particularly Kistaram village, siddaram village, vengalarao nagar, rajarla village)
- (xx) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (xxi) Project Proponent shall 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
- (xxii) Raw coal, washed coal and rejects shall be stored in covered silos or in dome shaped storage to reduce air pollution.

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- (xxiii) The PP should provide proper roads, toilets facilities, plantation, solar lights, drinking water facilities, stationaries to nearby villages, school and colleges
- (xxiv) PP shall pay to farmers of agricultural land if there is any loss and for cracks in the house due to blasting found by concerned District Commissioner as per extent rules or norms.
- (xxv) PP shall strictly comply the judgement of Hon'ble NGT in the matter of OA. 174 of 2020 and OA 20 of 2021 as and when judgment is pronounced.
- (xxvi) PP shall establish new Effluent Treatment plant for expansion project within 1 one year of issue of EC letter.
- (xxvii) PP shall use only mine water for washery operations (620 KLD) and effluent from washery shall be treated in ETP and shall implement principles of Zero Liquid Discharge. No surface and ground water to be drawn
- (xxviii) PP shall complete all the activity listed in Remediation plan and Natural and Community Resource Augmentation plan with three years and before the expiry of mining lease (valid upto 22nd March, 2025) as stipulated in EC dated 1st February, 2021.
- (xxix) 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.
- (xxx) Rejects and Middling generated from Washery shall be utilized as per Ministry's Notification dated G.S.R. 443(E) dated 25th June, 2021
- (xxxi) PP shall construct concrete road inside and peripheral road of washery boundary and haul road from mine to washery shall be black topped with all dust control mechanism.
- (xxxii) Transportation of rejects shall only be in 40 to 50 tonne trucks only if railway siding is not present at utilization points. If railway siding is available at any Thermal Power Plant, then no transportation shall be allowed by trucks.

4.1 The grant of Environment Clearance (EC) is further subject to compliance of the Standard EC conditions as under:

(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.

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- (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.
- (vii) Coal beneficiation practices shall be carried out under strict adherence to provisions of the Factories Act, 1957 and subordinate legislations made there under.

(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. Environment friendly sustainable technology should be implemented for mitigating such parameters.
 - (viii) 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.
 - (viii) 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.
 - (ix) Facilities for parking of trucks carrying raw material from linked mine shall be created within the unit.
 - (x) 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.
 - (xi) 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.
 - (xii) The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.
- (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) 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.
- (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 (from washery), 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.

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- (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 riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.
- (xiii) 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.
- (xiv) Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.
- (xv) Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.
- (xvi) 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.
- (xvii) Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.
- (xviii) 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 off from reject dumping sites.

(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,

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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

- (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.

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- (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.
- (iii) 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.
- (iv) 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.
- (h) Public hearing and Human health issues**

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- (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) Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-IA.III dated 30th September 2020 and based on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC
- (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

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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) 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.

(k) 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, 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.

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- (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 made their under 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.
 - (xvii) 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.
5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report as well as during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented by the EC 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 Environment Clearance (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.
8. The coal company/project proponent shall be liable to pay the compensation against 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 Environment Clearance (EC) 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, ShastriBhawan, 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 Jal Shakti, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
5. The Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
6. The Chairman, Telangana State Pollution Control Board, ParyavaranBhawan, A-3 Industrial Estate, Sanatnagar, Hyderabad - 38
7. The District Collector, Peddapalli, Government of Telangana
8. Monitoring File/Guard File
9. PARIVESH Portal


(Lalit Bokolia)
Director