

Certified Compliance Report -JVR OCP-II



भारत सरकार
Government of India
पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forests & Climate change
एकीकृत क्षेत्रीय कार्यालय
Integrated Regional Office

3rd floor, Aranya Bhavan,
Saifabad, Hyderabad-500004,
Telangana.
irohyd.mofcc@gmail.com

File No. ENV/IRO-HYD/CCR-11/A/2021/

23.06 2021

To

The Director & Member Secretary,
Coal Mining projects, IA Division,
Indira Paryavaran Bhavan,
Ministry of Environment, Forest and Climate Change,
Jorbagh Road, Aliganj,
New Delhi – 110 003.

Sub: Jalagam Vengal Rao Opencast Project-II (4 MTPA Normative and 5 MTPA peak) in a project area of 1409.81 ha) of M/s. Singareni Collieries Company Ltd., located in Village Kommepalli, Mandal Sathupalli, District Khammam, Andhra Pradesh (Presently in the state of Telangana) –environmental clearance regarding – reg.

Ref: MoEF&CC F.No: J-11015/268/2007-IA.II (M) dated 28.03.2010

Sir,

The undersigned is directed to invite your kind attention on the above subject and letter under reference wherein MoEF&CC has accorded environmental clearance to M/s. The Singareni Collieries Company Limited for Jalagam Vengal Rao Opencast Project-II (4 MTPA Normative and 5 MTPA peak) at Village Kommepalli, Mandal Sathupalli, District Khammam, Andhra Pradesh (Presently in the state of Telangana). Project Proponent has requested Integrated Regional Office to issue certified compliance report. This project was monitored on 30.04.2021. Monitoring report is enclosed herewith for your information and further necessary action.

This issue with the approval of Regional Officer, IRO, MoEF&CC, Hyderabad.

Yours faithfully

(Dr. E. Arockia Lenin)

Scientist C

arockia.lenin@gov.in

Copy to

1. Dr. Shruti Rai Bharadwaj, Scientist E, Monitoring Cell, IA Division, Indira Paryavaran Bhavan, Ministry of Environment, Forest and Climate Change, Jorbagh Road, Aliganj, New Delhi – 110 003.
2. The Member Secretary, Telangana State Pollution Control Board, Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad-500 018, Telangana
3. The General Manager (Environment), M/s. Singareni Collieries Company Ltd., Kothakudam Collieries -507 101, Bhadrachalam Road Rly. Station, Bhadradri Kothakudam District, Telangana State (gm_env@scclmines.com)

sd/-

(Dr. E. Arockia Lenin)

Scientist C

डॉ. इ. आरोकिया लेनिन
DR. E. AROCKIA LENIN
वैज्ञानिक 'सी'
SCIENTIST 'C'

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
एकीकृत क्षेत्रीय कार्यालय, हैदराबाद-500 004.
Integrated Regional Office, Hyderabad-500 004.

Government of India
Ministry of Environment, Forests & Climate change
Integrated Regional Office, Hyderabad-500004, Telangana

MONITORING REPORT

PART - I

1.	Project Type: River-valley / Mining / Industry /Thermal / Nuclear / Other (Specify)	Coal Mining
2.	Name of the Project	Jalagam Vengal Rao Opencast Project-II (4 MTPA Normative and 5 MTPA peak) in a project area of 1409.81 ha) of M/s. Singareni Collieries Company Ltd., located in Village Kommepalli, Mandal Sathupalli, District Khammam, Andhra Pradesh (Presently in the state of Telangana) –environmental clearance regarding
3.	Clearance Letter (s) / OM No. and date	MoEF&CC F.No. J-11015/268/2007-IA.II (M) dated 28.03.2010
4.	Location	
	a. District (s)	Khammam
	b. State (s)	Telangana
	c. Latitude / Longitude	N 17 ^o 10'24" to 17 ^o 12'11" E 80 ^o 47'07" to E 80 ^o 49'11".
5.	Address for correspondence /	S.Venkata Chary
6.	Address of concerned Project Chief Engineer (with Pin Code & Telephone / Telex / Fax Numbers)	Project Officer S.C.Co. Ltd, Post: Sathupalli, Dist: Khammam, T.S. 507 303 oc_spl@scclmines.com 08761 – 282734, +9194911 44156 08761 - 282736
7.	Salient features	
	a. Of the Project	(a) Date of Opening 01.09.2017
	b. Of the Environmental Management Plan	(b) Total Life of the project as per EMP 29 Years(As per 2016 RCE-1)
		Seams
		(a) No. of Seams Present 16 (9 nos. are major, 7 nos. are minor coal seams with limited thickness)

		Depth	
		(a) Maximum Depth	365.45 m.
		(b) Present working depth	90 m.
		Reserves	
		(a) Total Geological Reserves	251.72 MT 231.17 MT 13.287 MT
		(b) Total extractable reserves	225.873 MT 3.546 MT
		(c) Reserve already extracted	
		(d) Balance reserves	
		(e) Coal production during last 6 months	
		Over Burden	
		(a) Total OB	1033.25 M.Cum(As per 2016 RCE-1)
		(b) OB extracted since inception	69.773 M.B.Cum (incl.Top soil)
		(c) OB removed in last 6 months	14.838M.B.Cum (incl.Top soil)
		(d) Stripping Ratio(planned)	4.32
		Top Soil	
		(a) Total Topsoil	4.50 MB.Cum.
		(b) Topsoil extracted since inception	1.505 MB.Cum.(Including Ex.Dump Area)
		(c) Top Soil preserved for future use	1.457 MB.Cum
		(d) Top soil removed in last 6 months	0.328 MB.Cum. (0.001 M.B.cm from Quarry area) (0.327 M.B.cm from Ex.Dump area)
		(e) Top soil spread in last 6 months	0.010 MB.Cum
		Land Requirement	
		(a) Total land Requirement	1409.81 Ha.
		(b) Forestland	788.22 Ha.

		Involved (c) Non-forestland	621.59Ha.
8.	Breakup of the Project affected population with enumeration of those losing houses/dwelling units only, agricultural land only, both dwelling units & both dwelling units & agricultural land & landless laborers/artisan a. SC, ST / Adivasis b. Others	R&R involved, (Kommepalli Village)	
9.	Financial Details		
	a. Project costs as originally planned & subsequent revised estimates and the	474.64 Crores (as per project authority)	
	b. Allocation made for environmental management plans, with item wise break up (Capital & Recurring)	Rs. 1999.2 Lakhs Recurring cost: Rs. 21.77 per ton (as per project authority)	
	c. Benefit cost ratio/ internal rate of environmental management	IRR – 100% - 19.85%	
	d. Whether (c) includes cost of environmental management as shown in (b) above	Yes	
	b. Actual expenditure incurred on the Environmental Management Plan so far	Year	Amount Rs.
		2018-2019	138262294
		2019-2020	143463202
		2020-2021	215507373
		(as per project authority)	
10.	Forest land requirement		
	a. The status of approval for diversion of Forestland for non-forestry use	788.22 ha	
	b. The Status of clearing felling	-	
	c. The status of compensatory Afforestation if any	-	
11.	The status of clear felling in non-forest areas (such as submergence area of reservoir, Approach roads), if any with quantitative information	-	
12.	Status of construction (Actual and/or Planned)	-	
13.	a. Date of commencement (Actual and/or Planned)	01.09.2017	
	b. Date of completion (Actual and/or Planned)	-	
14.	Reasons for the delay if the project is yet to start	-	
15.	Dates of site visits		

	a. The dates on which the Project was monitored by Integrated Regional Office on previous occasions, if any	19.07.2019
16.	b. Date of site visit for this monitoring Report	30.04.2021

Project Background: JVR Opencast Project-II

Environmental clearance:

- a. Ministry of Environment, Forest and Climate Change vide letter no. J-1015/268/2007-IA.II (M) dated 28.03.2010 accorded environmental clearance for Jalagam Vengal Rao Opencast Project-II (4 MTPA Normative and 5 MTPA peak) in project area of 1409.81 ha) to M/s. Singareni Collieries Company Ltd., located in Village Kommepalli, Mandal Sathupalli, District Khammam, Andhra Pradesh (Presently in the state of Telangana)

Forest clearances:

- b. The total land requirement of the project is 1409.81 ha. Out of this 788.22 Ha is forest land. Forest clearances have been obtained from MoEF&CC for diversion of forest land of 776.20 ha of forest land vide F. No.8-56/2014-FC dated 31.05.2017

Consent for Establishment & Consent for Operation:

- c. Project proponent has obtained Consent for Establishment vide order no.5/PCB/CFE/RO-KGM/HO/2015-570 dated 26.06.2015 and Consent of Operation vide letter no.16082281186 dated 03.10.2016

Ground water withdrawal permission:

- d. District Ground Water Authority, Khammam, Telanagana for withdrawal of water vide Memo no. 4693/Hg.II (2)/2008 dt. 01.11.08.

R&R status:

- e. About 229 families in Kommepalli village were identified as PAFs. An amount of Rs. 17.7969 Crores has been deposited with District Collector; Khammam on 07.08.2018 for distribution to PAFs. All the PAFs have been paid R&R entitlement from 28.08.2018 to 30.08.2018 by RDO, Kallur.PAFs are partially evacuated and relocated in R&R center at Ayyagaripeta of Sathupalli town.

Implementation of Environmental Protection Measures:

- f. This company has environmental policy duly approved by Board of Directors. A separate environment management department has been set up and functioning under the control of General Manager (Environment). Post Project Environmental Monitoring has been carried out through third party agency,

M/s. Environment Protection Training and Research Institute (EPTRI),
Hyderabad

- g. Ambient air, water, noise qualities have been monitored by third party laboratory regularly. One continuous online AAQ system has been installed near at mine office building.
- h. Green belt has been developed on the over burden of 8.80 ha so far.
- i. ETP has been provided with for workshop with oil and grease trap. Monitoring of ETP effluents were carried out by third party.
- j. Necessary PPEs were provided to workers including outsourced workers engaged in mining activities.
- k. Solar power unit (Phase-I) of 37 MW is under construction in Kothagudem area

Pending Court cases and show cause notices:

1. There are two cases pending in Hon'ble NGT(SZ), Chennai pertaining to JVR Opencast mine projects i.e. (i) OA 174 of 2020, (ii). OA 20 of 2021

Recommendations of Joint Committee constituted by Honorable NGT in the matter of O.A. 174 of 2020 and O.A. 20 of 2021

1. Though there is no blast induced vibrations are detected at the NTR Nagar on the day of present site inspection, it appears that the alleged damage of the houses might have been attributed due to combined effect of the inadequate civil structure of the houses and the nearby blasting operations in the past. In either of the case, the residents are not responsible for the said damages and thus on humanitarian ground the Committee recommends for the grant of suitable relief to the damaged house of the applicant as well as other such damaged houses
2. in the three villages namely NTR Nagar, Jalgam Vengal Rao Nagar and Rejarla village by meeting the fund requirement either from the District Mineral Fund (DMF) or the project authority or any other means as direct by the Hon'ble NGT.
3. Though the project authority has already contributed Rs.161.40 Crores towards DMFT fund from JVR-OC project, it has to be more effectively utilized as mandated in the nearby villages. Further, DMFT shall implement the same and the plan of action shall be shared to the

project authority in order to avoid overlapping in the implementation of various community development programmes by them in the vicinity of project area. DMFT shall upload the activities implemented on public domain as mandated under the Proviso 10.5 of the Telangana State District Mineral Foundation (Trust) Rules, 2015.

4. Respondent Project authority (SCCL) undisputedly exceeded the production capacity than the sanctioned capacity by not complying with the stipulated calendar plan including excavation & quantum of coal and thus violated the EC and Consent accorded. In this regard credible legal action has already been initiated by the Telangana State PCB and the matter is under sub-judice. Further, as approved by the MoEF&CC, the project authority, has also executed a bank guaranty of an amount of Rs. 26,67,00,000/- (rupees twenty-six crores and sixty seven lakhs) to the TSPCB towards implementation of remediation plan and natural and community resource augmentation plan. The project authority shall implement the same within 3 years as stipulated by the MoEF&CC.
5. The Committee has not arrived an environmental compensation again, considering the facts that there is no any further direction in this regard from the Hon'ble Tribunal in its subsequent Order dated 21.01.2021 and also again arriving environmental compensation for the same violation would lead to double jeopardy.
6. The project authority has implemented the progressive mine closure activity and reclamation of mined out area as per the approved Mining Plan. Considering the facts mentioned above under para (II)(a)-(e), the Joint Committee observed that the implementation of final Mine Closure plan does not arise now to JVR-OC-I Expansion project. Project authority so far has not claimed the amount of Rs. 41.9107 Crores deposited in the ESCROW Account, after completing the third-party audit. The said amount shall not be transferred to the amalgamated project of JVR-OC-I and JVR-OC-II in order to ensure effective implementation. if Hon'ble
7. Tribunal desires to get more clarification on the issues of implementation of final mine closure plan, the details may be obtained from the regulatory authority imploding Ministry of Coal as a Respondent in the above O.As.

8. Presently no violation has been observed in the mode of coal transport. Project authority shall expedite and complete the erection of railway siding and conveyor belt well in advance. No coal transport shall be made by road beyond 31.12.2021.
9. Project authority shall provide potable drinking water to the nearby villages inter-alia to the NTR Nagar by installing RO plants immediately and shall be maintained by the project authority for 3 years as stipulated by the MoEF&CC.
10. Though the mobile medical camps are regularly conducted, Project authority shall make a uniform schedule for the visit of doctors / mobile medical camp in nearby villages in a fixed day and time in each village in order to avail the facility by the residents.
11. Safety as well as pollution control mechanisms provided appears to be sufficient. Monitored analytical data show that there is no any Air, Water, noise and soil pollution as alleged. Necessary green belt has also been developed.
12. No violation has been observed on the alleged Forestry clearance accorded.
13. Project authority shall ensure regular calibration of Seismographs Minimate used for monitoring the vibrations.

Post EC Monitoring by IRO, MoEF&CC:

1. This project was monitored on 19.07.2019 by IRO, Chennai for certified compliance report. Again, this project was monitored on 30.04.2021 by IRO, Hyderabad to reissue certified compliance report, as requested by project authority. The status of compliances stipulated in the EC conditions in the vide letter no. J-11015/268/2007-IA.II (M) dated 28.03.2010 of MoEF&CC is submitted in Part II.

Observed Non/Partial compliances

Partial compliances

Specific conditions

Condition no. xi: the total area of developed green belt so far was found to be less than the stipulated area which was 790.75 ha. Project Proponent shall submit the time bound action plan to be taken in the future to this office.

Condition no. xvi: Details were not made available for three stage sedimentation tank along with coagulants, monitoring of water quality parameter before discharge into natural water courses

Additional Recommendations by IRO, MoEF&CC

- i. PP shall increase number ambient air quality monitoring stations in core zone area
- ii. PP shall replace old sprinklers, rain guns and install additional sprinklers, mobile water tanker to mitigate fugitive emission on the transportation road.
- iii. PP shall upgrade capacity & technology for the present ETP, which is not sufficient for expansion project.
- iv. PP shall develop more ponds in and around the mine lease area and in affected villages for augmentations of ground water resources. The excess water from mine sump during rainy season may be discharged into those ponds after treatment and quality check.
- v. PP shall install waste segregation dust pins as per Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules 2016.
- vi. PP shall obtain permission from Central Ground water Authority.
- vii. PP shall develop green belt as stipulated
- viii. PP shall utilize the topsoil as stipulated.

PART II

Sub: Jalagam Vengal Rao Opencast Project-II (4 MTPA Normative and 5 MTPA peak) in a project area of 1409.81 ha) of M/s. Singareni Collieries Company Ltd., located in Village Kommepalli, Mandal Sathupalli, District Khammam, Andhra Pradesh (Presently in the state of Telangana) –environmental clearance regarding – reg.

Ref: MoEF&CC F.No. J-11015/268/2007-IA.II (M) dated 28.03.2010

A. Specific Conditions:-

S. No.	EC conditions	Compliance status
(i)	No mining operation shall be undertaken in the 776.20 ha. of forest land until prior clearance has been obtained under the provisions of FC Act, 1980.	Complied Forest Clearance (Final stage) has been accorded by MoEF&CC for diversion of 776.20ha of forest land vide F. no.8-56/2014-FC dated 31.05.2017. As informed, mining operations were carried out after obtaining clearance only.
(ii)	Topsoil should be stacked properly with proper slope at earmarked site(s) and shall not be kept active and shall be used for reclamation and development of green belt.	Being complied It was submitted that the topsoil of 1.505 Mm ³ were excavated till 31.03.2021, out of total topsoil of 5.5 Mm ³ available. As of now, 0.010Mm ³ has been utilized on the external dump and balance of 1.457 Mm ³ top soils has been stacked separately on earmarked sites. Project proponent has submitted that stacked topsoil shall be used once the active over dump is completed.
(iii)	Adequate safety distance/barrier shall be maintained from the drainage along the ML boundary. Diversion Bathupalli Flood Flow Canal flowing across the lease and	Complied Adequate safety distance/barrier has been provided from the drainage along the Mine Lease boundary. It was submitted that diversion of Bethupally Flood Flow

	its realignment at the boundary of the lease shall be carried out in consultation with the State Flood and Irrigation Department.	canal (NTR canal) for a length of 18.32 km has already been carried out with the approval of the State Irrigation & CAD Department vide G.O. Rt. No.1932 dated 30.12.2005. The diverted canal has been realigned with the original course and retained the existing feeder channels of downstream irrigation tanks.
(iv)	OB shall be stacked at earmarked external OB dumpsite of 411.49 Ha. Within ML area and shall not exceed a maximum height of 90m consisting of 3 benches of 30m each. An estimated 55.28 Mm ³ of OB shall be rehandled from west ext. OB dump to backfill the decoaled void. The ultimate slope of the dump shall not exceed 28°. Slope stability studies shall be carried out and monitoring of the stability of the dumps continuously undertaken and particularly during monsoon and post-monsoon seasons to ascertain its stability. Monitoring and management of existing reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the MoEF and its Regional office located at Bangalore on a yearly basis.	<p>Being complied</p> <p>As submitted by PP, Over Burden (OB) of 69.773 Mm³ were excavated till 31.03.2021 and stacked at earmarked external OB dumpsite of 411.49 ha area. The maximum height of +90 m height with each deck of 30 m height with an ultimate slope of below 28° was maintained. Green belt has been developed on the over burden of 8.80 ha so far.</p> <p>National Institute of Karnataka, Surathkal has been awarded to carry out the scientific study of stability & slope of OB dump. Monitoring and management of existing reclaimed dumpsites are being continued till vegetation becomes self sustained. Project proponent has agreed to submit the status of OB dumps, green belt development and other compliance status to regional office of Ministry</p>
(v)	Catch drains and siltation ponds of	Being complied

	<p>appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilised for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted and maintained properly.</p> <p>Garland drains of suitable size gradient and length and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide for adequate retention period to allow proper settling of silt material.</p>	<p>Catch drains (3.5 km (length) and Settling ponds (5) were provided to arrest silt and sediment flows from soil, OB and coal dumps.</p> <p>The collected water were settled first, after siltation, the water reused for mining operations</p> <p>The drains was being desilted after monsoon and maintained properly.</p> <p>Garland drains (9.6 km, size: 2mx1m) has been provided around the external over burden dump. PA informed that construction of garland drains have been designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine lease area.</p> <p>Sump has been provided based on the annual rainfall data and designed to have adequate retention period and proper settling of silt material. After settling, the water has been pumped out and reused for mining operation and excess water has been discharged into nearest pond for augmentation of ground water.</p>
(vi)	<p>Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.</p>	<p>Complied</p> <p>As submitted by PP, retaining wall of 910m has been constructed at the toe of OB dump based on the rainfall data.</p>
(vii)	<p>Crushers at the proposed CHP shall be operated with high efficiency bag filters, water</p>	<p>Being Complied</p> <p>Water spraying arrangement was provided at Coal stock pile/crusher/feeder</p>

	sprinkling system shall be provided to check fugitive emissions from crushing operation, conveyor system, haulage roads and transfer points.	and breaker material transfer points. Belt-conveyors were covered with GI sheets to avoid air borne dust. Side cladding all along the conveyor gantry was provided with dust suppression system. Drills are wet operated only. It is recommended that Crushing unit shall be covered with GI sheet additionally to reduce the dust emission during crushing of coal..
(viii)	No coal transportation shall be undertaken by road.	Being complied It was submitted that MoEF&CC has accorded permission to SCCL to transport coal by road with covered tarpaulin up to 31 st December,2021 based on the recommendations of 8 th EAC(Coal Mining Sector) held on 11.02.2021
(ix)	Drills shall be wet operated only.	Complied Drills are wet operated only.
(x)	Controlled blasting shall be practiced only during day time with use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.	Complied Controlled blasting was being practiced as per DGMS guidelines.
(xi)	Afforestation shall cover a total area of not less than 790.75 ha. which includes reclaimed external OB dump (411.49 ha), reclaimed topsoil dump, back filled quarry area (296.17 ha), along ML boundary, along roads and along	Partly complied Project authority has set up separate forest division with the experienced retired forest officers. Separate nursery were set up at Sathupalli for the purpose of green belt development. Green belt has been developed along ML boundary, roads,

	<p>service buildings and CHP, and other areas within the lease (83.09 ha) by planting native species in consultation with the local DFO / Agriculture Deptt. The density of the trees should be around 2500 plants per ha.</p>	<p>service buildings and CHP, and other areas within the lease with native species at a density of not less than 2500 nos. of plants/ha as per EMP. As submitted by PP, 14,000 saplings were planted in an area of 8.80 ha (external dump area- 7.30 ha. Avenue Plantation-1.50Ha) against the total area of 790.75 ha.</p> <p>However, the total area of developed green belt so far was found to be less than the stipulated area which was 790.75 ha. Project Proponent shall submit the time bound action plan to be taken in the future to this office.</p>
(xii)	<p>A Progressive Mine Closure Plan shall be implemented by reclamation of quarry area of 296.17 ha which shall be backfilled from the 10th year of mining and backfill the void and by rehandling 55.28 Mm³ OB from the external OB dump and leaving a final mine void of 35 m depth at the final mine closure stage. The back filled quarry area shall be afforested by planting native plant species in consultation with the local DFO / Agriculture Department. The density of the trees shall be around 2500 plants per ha.</p>	<p>Agreed to comply</p> <p>Project proponent has submitted that progressive Mine Closure Plan will be implemented by reclamation of quarry area which shall be backfilled from the 10th year of mining. Aforestation of backfilled area will be carried out by planting the native plant species at a density of not less than 2500 plants/ha in consultation with the local DFO/SCCL Forest Department.</p>
(xiii)	<p>Besides carrying out regular periodic health check up of their</p>	<p>Being complied</p> <p>It was submitted that Periodical Health</p>

	workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check up for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmedabad within a period of one year and the results reported to this ministry and to DGMS.	checkups for occupational diseases and hearing impairment have been carried out by SCCL PME cell for both SCCL and contractual labors. Suspected cases for special occupational diseases and hearing impairment have been referred for consultation of specialists at Main Hospital, SCCL Kothagudem and corporate hospitals at located at Hyderabad. The results are being submitted to Regional office of Ministry and DGMS periodically.
(xiv)	ETP shall also be provided for workshop and CHP waste water. Mine discharge water shall be treated to prescribed standards before discharge into any natural water course.	Being complied ETP has been provided with for workshop with oil and grease trap. Monitoring of ETP effluents were carried out by third party. As per the report, monitored effluents were within prescribed limits. As informed, ETP sludge was disposed off with PCB authorized vendor.
(xv)	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the MoEF and to the	Complied Ground water levels and quality were monitored at nineteen existing wells and seven piezometers. As submitted, Monitoring of ground water levels were being carried out four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons. Monitoring report were submitted to regional office along with half yearly compliance report.

	Central Pollution Control Board quarterly within one month of monitoring.	
(xvi)	Mine discharge water 28,450 m ³ /d during peak monsoon shall be treated in a three stage sedimentation tank along with coagulants, if required and shall meet standards prescribed especially with respect to pH, As, F and Total Suspended Solids (TSS) before discharge into natural water courses/agriculture.	<p>Partly complied</p> <p>Mine sump water has been allowed to be settled in settling pond first, after siltation, the supernatant water has been reused for mining operations. As informed, the excess water from the sump was discharged into Kistaram tank.</p> <p>Details were not made available for three stage sedimentation tank along with coagulants, monitoring of water quality parameter before discharge into natural water courses.</p>
(xvii)	No ground water shall be used for the mining/project activities. Additional water required, if any, shall be met by recycling/reuse of the water from the existing activities and from rainwater harvesting measures.	<p>Being Complied</p> <p>As submitted, Ground water has not been withdrawn for mining operations. Mine sump water were pumped out and settled in settling ponds developed at the surface of mine lease area. After siltation, water has been reused for mining operations. Admin and other office buildings were connected and provided with rain water harvesting structure. .</p>
(xviii)	The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring of groundwater level indicates decline in the water table. The project authorities shall meet water requirement of nearby	<p>Being Complied</p> <p>Five settling ponds and two check dams were constructed in the project area for the augmentation of ground water recharging. As submitted by project authority, the village wells were not dried due to dewatering of the mine. Project Authority has informed that they will</p>

	village(s) in case the village wells go dry due to dewatering of mine.	meet water requirement of nearby village(s) in case the wells go dry due to dewatering of the mine. However, PP shall also develop more ponds in and around the mine lease area and in affected villages for augmentations of ground water resources. The excess water during rainy season may be discharged into those ponds after treatment.
(xix)	For monitoring land use pattern and for post mining land use, a time series of landuse maps, based on satellite imagery (on a scale of 1:5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for anyone particular season which is consistent in the time series), and the report submitted to MOEF and its Regional Office at Bangalore.	Being complied Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey was carried out during 2019. The details were submitted to Regional Office of Ministry vide letter no.ENV/KGM/403, 404 &406/290, dated 12.09.2020.
(xx)	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the MoEF 5 years in advance of final mine closure for approval.	Agreed to comply As of now, mining activities are in progress. Project proponent has agreed to implement the requirements as stipulated.
(xxi)	An amount not less than a capital expenditure of Rs. 3625.39 lakhs and a revenue expenditure of Rs. 902 lakhs shall be earmarked and utilized for environmental protection measures, the status of	Being complied As informed by PP, the funds are earmarked for environment protection measures have not been diverted for any other purpose. The following amount has been incurred towards environment

	<p>which shall be uploaded regularly on the company website and also furnished as part of the Monitoring report.</p>	<p>protection measures for last three year.</p> <table border="1" data-bbox="906 297 1321 517"> <thead> <tr> <th>Year</th> <th>Amount Rs.</th> </tr> </thead> <tbody> <tr> <td>2018-2019</td> <td>138262294</td> </tr> <tr> <td>2019-2020</td> <td>143463202</td> </tr> <tr> <td>2020-2021</td> <td>215507373</td> </tr> </tbody> </table> <p>The above expenditure incurred towards Air, water pollution monitoring and control measures, green belt development, OB dump stabilization and Consultancy etc.,</p>	Year	Amount Rs.	2018-2019	138262294	2019-2020	143463202	2020-2021	215507373
Year	Amount Rs.									
2018-2019	138262294									
2019-2020	143463202									
2020-2021	215507373									
(xxii)	<p>The costs for implementation of a Project specific R&R Plan for R&R of one village Kommepalli involving 120 PAFs and land losers from 4 villagers – Kommepalli, Kistaram, Errakunta & Rejerla shall not be less than Rs. 12.40 Crores. The yearly activities undertaken and progress made on R&R along with details of expenditure made on the various activities undertaken under R&R shall be uploaded on the Company's website and updated at least once in six months.</p>	<p>Being complied</p> <ul style="list-style-type: none"> • It was submitted that 229 families in Kommepalli village has been identified as PAFs. • An amount of Rs. 17.7969 Crores has been deposited with District Collector; Khammam on 07.08.2018 for distribution to PAFs • All the PAFs have been paid R&R entitlement from 28.08.2018 to 30.08.2018 by RDO, Kallur. • PAFs are partially evacuated and relocated in R&R center at Ayyagaripeta of Sathupalli town. • The R&R status were submitted Regional office of Ministry along with half yearly compliance reports. 								
(xxiii)	<p>An amount not less than a capital expenditure of Rs. 27.52 crores and a revenue expenditure of Rs. 584.21 lakhs shall be earmarked and utilized for environmental protection measures, the status of</p>	<p>Being complied</p> <p>As informed by PP, the funds are earmarked for environment protection measures have not been diverted for any other purpose. The following amount has been incurred towards environment</p>								

	<p>which shall be uploaded regularly on the company website and also furnished as part of the Monitoring report.</p>	<p>protection measures for last three year.</p> <table border="1" data-bbox="847 286 1262 501"> <thead> <tr> <th>Year</th> <th>Amount Rs.</th> </tr> </thead> <tbody> <tr> <td>2018-2019</td> <td>138262294</td> </tr> <tr> <td>2019-2020</td> <td>143463202</td> </tr> <tr> <td>2020-2021</td> <td>215507373</td> </tr> </tbody> </table> <p>The above expenditure incurred towards Air, water pollution monitoring and control measures, green belt development, OB dump stabilization and Consultancy etc.,</p> <p>Details were submitted Regional office of Ministry along with half yearly compliance reports.</p>	Year	Amount Rs.	2018-2019	138262294	2019-2020	143463202	2020-2021	215507373
Year	Amount Rs.									
2018-2019	138262294									
2019-2020	143463202									
2020-2021	215507373									
(xxiv)	<p>The Project Authorities shall carry out a pre-mining socio-economic survey based on the UNDP Human Development Report and monitor the socio-economic status of the adjoining villages to be taken up under CSR once every three years and maintain records thereof and report in their Annual Report, the socio-economic impact of CSR activities. The yearly activities under taken and progress made on CSR along with details of expenditure made on the various activities undertaken under CSR shall be uploaded on the Company's website and updated at least once in six months.</p>	<p>Being complied</p> <p>Project authority has awarded M/s. Centre for Good Governance, Hyderabad to conduct the study on Pre-mining socio-economic survey based on the UNDP Human Development Report and the socio-economic status of the adjoining villages 2019-20. The report has been submitted to Ministry vide letter no.ENV/KGM/404/552//297 dated 26.09.2020.</p> <p>An amount of Rs. 476.27 lakhs incurred from 2015-2019. The yearly activities under taken and progress made on CSR along with details of expenditure made on the various activities undertaken under CSR will be uploaded on the Company's website and submitted along with half yearly compliance report.</p>								

B.General conditions:

(i)	No change in mining technology and scope of working shall be made without prior approval of the MoEF.	<p>Complied</p> <p>No change in mining technology and scope of the working as stipulated.</p>																										
(ii)	No change in the calendar plan including excavation, quantum of mineral coal and waste shall be made.	<p>Complied</p> <p>Calendar plan including excavation, quantum of mineral coal has been complied as stipulated and the details provided by project authority are given below.</p> <table border="1" data-bbox="826 779 1406 1227"> <thead> <tr> <th rowspan="2">Year</th> <th colspan="2">Coal (in MT)</th> <th colspan="2">Overburden (M.Cu.M)</th> </tr> <tr> <th>As per EC</th> <th>Actual</th> <th>As per EMP</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td rowspan="4">5.0</td> <td>0.749</td> <td>14.67</td> <td>7.573</td> </tr> <tr> <td>2018-2019</td> <td>2.955</td> <td>18.08</td> <td>18.071</td> </tr> <tr> <td>2019-2020</td> <td>4.828</td> <td>27.10</td> <td>24.179</td> </tr> <tr> <td>2020-2021</td> <td>4.756</td> <td>27.16</td> <td>19.950</td> </tr> </tbody> </table>	Year	Coal (in MT)		Overburden (M.Cu.M)		As per EC	Actual	As per EMP	Actual	2017-2018	5.0	0.749	14.67	7.573	2018-2019	2.955	18.08	18.071	2019-2020	4.828	27.10	24.179	2020-2021	4.756	27.16	19.950
Year	Coal (in MT)			Overburden (M.Cu.M)																								
	As per EC	Actual	As per EMP	Actual																								
2017-2018	5.0	0.749	14.67	7.573																								
2018-2019		2.955	18.08	18.071																								
2019-2020		4.828	27.10	24.179																								
2020-2021		4.756	27.16	19.950																								
(iii)	Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for PM ₁₀ , PM _{2.5} , SO ₂ and NO _x monitoring. 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.	<p>Complied</p> <p>One continuous online AAQ system has been installed near at mine office building. Seven Ambient Air Quality Monitoring Station were established both in Core and buffer Zone i.e., Project Office, ii. Workshop, iii. Pit Head CHP, iv. Kistaram village, v. Sathupalli town, vi. Vengatapuram village, vii. Pallewada village. Parameters of PM₁₀, PM_{2.5}, SO₂ and NO_x were monitored at every fortnight through MoEF&CC recognized laboratory. As per the report, monitored parameters were within prescribed limits. In addition,</p>																										

		<p>Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc were being carried out once in six months through MoEF&CC recognized laboratory. As per the report, monitored parameters were within prescribed limits.</p> <p>Half yearly compliance reports were submitted regularly to regional office</p>
(iv)	<p>Fugitive dust emissions (PM₁₀, PM_{2.5}) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, and dump trucks (loading and unloading) points should be provided and properly maintained.</p>	<p>Being complied</p> <p>Fugitive dust emission were being monitored. As per the report, the emission levels were within prescribed standards. PP shall follow the recommendations given in page no. 9 under ii.</p>
(v)	<p>Data on ambient air quality (PM₁₀, PM_{2.5} and NO_x) shall be regularly submitted to the Ministry including its Regional Office at Bangalore and to the State Pollution Control Board and the Central Pollution Control Board once in six months.</p>	<p>Being complied</p> <p>Data on ambient air quality (PM₁₀, PM_{2.5} and NO_x) were submitted regularly to Regional Office of Ministry regularly.</p>
(vi)	<p>Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc. should be provided with ear plugs / muffs.</p>	<p>Complied</p> <p>Necessary personal protective equipments (PPE) like ear plugs/muffs were provided to mine workers. Noise level were monitored at four locations. i.e., i. Site Office, ii. Base Workshop, iii. Kistaram village iv. Sathupally town.</p> <p>Project Proponent shall monitor noise level at least one location in core area.</p>

(vii)	Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E), dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time before discharge. Oil and grease trap should be installed before discharge of workshop effluents.	Being complied ETP has been provided with for workshop with oil and grease trap. Monitoring of ETP effluents were carried out by third party. As per the report, monitored effluents were within prescribed limits. As informed, ETP sludge was disposed off with PCB authorized vendor.
(viii)	Vehicular emissions should be kept under control and regularly monitored. Vehicles used for transporting the mineral should be covered with tarpaulins and optimally loaded.	Being complied It was informed that all the vehicles engaged in mining and allied activities were allowed only after verifying 'PUC' certificate from the authorized pollution testing centers.
(ix)	Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.	Complied As submitted by PP, Environmental laboratory has been established. Post Project Environmental Monitoring has been carried out through external agency M/s. Environment Protection Training and Research Institute (EPTRI), Hyderabad.
(x)	Personnel working in dusty areas should wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers should be undertaken periodically to	Being complied Necessary PPEs were provided to workers including outsourced workers engaged in mining activities. As informed, Periodical trainings were given to the mining workers at the time of joining and regular interval As submitted, Occupational health surveillance programme of the workers were carried out as per Mines Act periodically

	observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof.	and records are being maintained.																										
(xi)	A separate Environmental Management Cell with suitable qualified personnel should be set up under the control of a Senior Executive who will report directly to the Head of the Company.	<p>Being complied</p> <p>A separate environment management department has been provided and functioning under the control of General Manager. The members of environment cell are under,</p> <table border="1"> <tr> <td>SO to General Manager</td> <td>Chairman</td> </tr> <tr> <td>Project Officer</td> <td>Member</td> </tr> <tr> <td>Area Engineer (E&M)</td> <td>Member</td> </tr> <tr> <td>Area Civil Engineer</td> <td>Member</td> </tr> <tr> <td>Area Forest Officer</td> <td>Member</td> </tr> <tr> <td>Area Estates Officer</td> <td>Member</td> </tr> <tr> <td>Project Manager</td> <td>Member</td> </tr> <tr> <td>Project Engineer</td> <td>Member</td> </tr> <tr> <td>Project Surveyor</td> <td>Member</td> </tr> <tr> <td>Project Env. Officer</td> <td>Member</td> </tr> <tr> <td>Area Env. Officer</td> <td>Secretary</td> </tr> <tr> <td>Sr. Hydro Geologist</td> <td>Member</td> </tr> <tr> <td>Area Survey Officer</td> <td>Member</td> </tr> </table>	SO to General Manager	Chairman	Project Officer	Member	Area Engineer (E&M)	Member	Area Civil Engineer	Member	Area Forest Officer	Member	Area Estates Officer	Member	Project Manager	Member	Project Engineer	Member	Project Surveyor	Member	Project Env. Officer	Member	Area Env. Officer	Secretary	Sr. Hydro Geologist	Member	Area Survey Officer	Member
SO to General Manager	Chairman																											
Project Officer	Member																											
Area Engineer (E&M)	Member																											
Area Civil Engineer	Member																											
Area Forest Officer	Member																											
Area Estates Officer	Member																											
Project Manager	Member																											
Project Engineer	Member																											
Project Surveyor	Member																											
Project Env. Officer	Member																											
Area Env. Officer	Secretary																											
Sr. Hydro Geologist	Member																											
Area Survey Officer	Member																											
(xii)	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to this Ministry and its Regional Office at Bangalore.	<p>Being Complied</p> <p>It was submitted that the funds earmarked for environmental protection measures are kept in separate account and not diverted to any other purpose. Details of expenditure are being submitted along with Form-V to the State Pollution Control Board and Regional Office of Ministry.</p>																										
(xiii)	The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the	Agreed to comply with																										

	Regional Office by furnishing the requisite data / information / monitoring Creports.	
(xiv)	A copy of the same shall be marked to concerned Panchayat / local NGO, if any, from whom any suggestion / representation has been received while processing the proposal.	Being complied As submitted, a copy was EC letter was circulated to all the concerned vide letter no. .KGM/ENV/405/2010/66 dated:06.04.2010 The Environmental Clearance letter has been uploaded on company's website (www. scclmines. com)
(xv)	State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/ Tahsildar's Office for 30 days.	Complied As submitted, SCCL has requested TSPCB to display the EC letter vide letter no.KGM/ENV/405/2010/67 dated 06.04.2010
(xvi)	The Project authorities should advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at the website of the Ministry of Environment & Forests at http://envfor.nic.in .	Complied Advertisements regarding issuance of environmental clearance letter have been published in the local news paper i.e., i. Daily News paper of vernacular language in "Andhra Jyothi" Khammam Edition ii. English daily News paper "Deccan Chronicle" Vijayawada edition on in 04.04.2010. The Environmental Clearance letter has been uploaded on company's website (www. scclmines. com)
3.	The Ministry or any other competent authority may stipulate	Agreed to comply with

	any further condition for environmental protection.	
4.	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.	Agreed to comply with
5.	The above conditions will 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 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Complied. PA has obtained Consent for Operation from State PCB vide Order No.170421033095 dated 03.01.2018 which is valid up to 31.10.2022. PLI Policy has been taken from the New India Assurance Company Ltd under Public Liability Insurance Act, 1991 vide policy No. 61360136203300000004, valid from 30.04.2020 to 29.04.2021.

Obange

(Dr. E. Arockia Lenin)

Scientist C

डॉ. ई. आरॉकिया लेनिन

DR. E. AROCKIA LENIN

वैज्ञानिक 'सी'

SCIENTIST 'C'

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
एकीकृत क्षेत्रीय कार्यालय, हैदराबाद-500 004.
Integrated Regional Office, Hyderabad-500 004.

SITE PHOTOGRAPHS



View of site vist of the project along with the project officers



View of JVR OCP



View of JVR OCP



View of Coal Stock Yard



View of Green plantaion with native species including Red sandalwood species on the OB dump



View of Green plantaion with native species including Red sandalwood species on the OB dump



View of Green plantaion with native species as barrier along the transportation road



View of Green plantaion with native species and setling pond



View of Effluent Treatment Plant



View of Stone barrier along the base of OB dump



View of desilted Catch/Garland drains along the base of OB dump



View of transportation road and Green belt development



View of active OB dump