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Place: Hyderabad

Date: 11-08-2021.

①

REPORT DATED 10.08.2021 OF THE ENVIRONMENTAL ENGINEER, TELANGANA STATE POLLUTION CONTROL BOARD (TSPCB), REGIONAL OFFICE, KOTHAGUDEM (RESPONDENT No. 2 O.A NO. 20 OF 2021 and RESPONDENT No. 3 O.A NO. 174 OF 2020) IN O.A. NO. 174 OF 2020 AND O.A NO. 20 OF 2021 FILED IN THE HON'BLE NGT.

It is to submit that Hon'ble NGT has issued an order dated 21.07.2021 in the matter of O.A. No. 174 of 2020 filed by Sri Banothu Nandu Nayak R/o. NTR Nagar, Sathupalli (V & M), Khammam District & O.A. No. 20 of 2021 was filed by Sri Oggu Srinivasa Reddy, S/o Keshava Reddy and another, R/o. Narayanapuram & Rejarla village, Sathupally Mandal, Khammam District and directed the Board to submit status report.

In this regard, the following details were submitted:

- M/s Singareni Collieries Company Limited is having two mines in the name of Jalagam Vengal Rao OC – I and Jalagam Vengal Rao OC – II in Ayyagarupeta (V) and Kommepelli (V) respectively in Sathupalli Mandal, Khammam District. These are two separate open cast coal mines for which they have obtained separate EC, CFE and CFOs.
- JVR OC –I Expansion was started in 2007 with mining capacity of 2.5 Million TPA (Peak production) in mine lease area of 547.08 Ha. (including Forest land of 380.52 Ha.). They obtained EC from MoEF&CC vide order dated 27.07.2007. They also obtained CFE from the TSPCB vide order dated 27.09.2007. The TSPCB has issued latest CFO vide order dated 03.10.2016 with validity upto 30.06.2021. Copies of the same are enclosed.
- Subsequently they increased the production from 2.5 Million TPA to 5 Million TPA for JVR OC –I as per the coal demand to meet power requirement by the State Government for which they have not obtained EC and Consent of the TSPCB. Later, they approached the MoEF&CC for violation of the EC on increase of production capacity and MoEF&CC directed to go for EC procedure and they obtained ToR (Terms of Reference) in which credible action is to be initiated which is one of the condition.
- The industry also requested the State Government to initiate Credible action against them and State Government has forwarded the same to the TSPCB for taking necessary action. As per the directions of the Head office, TSPCB, Hyderabad the Regional office, Kothagudem has filed a complaint against Singareni Collieries Company Ltd for initiating credible action regarding increase of production. The case was appeared before Hon'ble First Class Judicial Magistrate, Sathupalli and same is pending.
- For JVR OC – I, Public hearing was also conducted on 14.02.2020 under EC procedure and they obtained EC for increased production capacity vide EC dated 01.02.2021.
- The SCCL has applied for CFE & CFO for increased production to the TSPCB for JVR OC-I project and same are under process.
- M/s Singareni Collieries Company Limited, Jalagam Vengal Rao opencast mine-II (JVR OC-II), Kommepalli (V), Sathupalli (M), Khammam District has obtained Environment Clearance from MoEF & CC vide letter No.J-11015/268/2007-IA.II (M) dated

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28.03.2010 for mining capacity of 4 Million Tonnes per Annum (Normative) with a peak production of 5 Million Tonnes per Annum. They also obtained CFE from the TSPCB vide order dated 26.06.2015. The industry has started coal mining activity in October 2017. The industry obtained latest CFO from TSPCB vide order dated 03.01.2018 with validity upto 31.10.2022.

It is to submit that they proposed to increase the mining capacity from 5 MTPA to 10 MTPA by amalgamation of Jalagam Vengala Rao Opencast Mine Expansion (JVR OC-I Expansion) with Jalagam Vengala Rao Opencast Mine (JVR OC-II) in total mine lease (ML) area of 1953.46 Ha (including proposed area of 256.68 Ha.). After amalgamation, the project may be named as **Jalagam Vengala Rao Opencast Mine (I&II Expansion)**. In this regard, Public hearing was conducted on 14.02.2020 and minutes were communicated to MoEF & CC, New Delhi on 24.02.2020 for further process.

Earlier, the Board officials have inspected and conducted AAQ and Noise monitoring for the JVR OC – I and JVR OC-II during 07.12.2020 to 09.12.2020 and also collected water samples. As per latest analysis reports for the samples collected in December 2020, the values are within the prescribed standards for mine discharge water.

During Ambient Air Quality Monitoring, JVR OC – I was stopped its production (coal excavation). But, operations like overburden bund formation and vehicle transportation activities are going on and also coal mining excavation along with other works like coal transportation, overburden filling etc. of the JVR OC-II were in operation. Noise monitoring was conducted at the time of blasting operations. Hence, the AAQ analysis reports reflect its values when coal mining activity, coal transportation (from the Sathupalli mine site to Rudrampur CHP and other areas) and other ancillary operations were in active for JVR OC-I and JVR OC-II.

It is to submit that the Board officials have inspected M/s Singareni Collieries Company Limited, JVR OC-I & JVR OC-II, Sathupalli area, Khammam District on 15.07.2021 and 05.08.2021 and the observations made during inspection are submitted as follows:

1. Mining operations of JVR OC-I stopped due to exhaust of coal reserves. But, other activities like overburden bund formation and vehicle transportation activities are going on.
2. Coal mining excavation along with other works like coal transportation, overburden filling etc. of the JVR OC-II were in operation.
3. No discharges from JVR OC-I as mining operations of JVR OC-I stopped due to exhaust of coal reserves.
4. No discharges of mine discharge water from JVR OC-I & II projects into Jeenugumilli tank.
5. Now, they are discharging mine discharge water of the JVR OC-II project in to Chillavagu and Kistaram tank.
6. The industry has provided arrangement for manual mixing of lime for neutralization of mine discharge water and also provided settling earthen ponds. After treatment excess mine discharge water is discharging into Chillavagu cheruvu and Kistaram tank.

7. They provided water meters before pumping of mine discharge water into internal drains finally connected to Chillavagu and Kistaram tank.
8. They provided garland drains and siltation ponds around mine area.
9. They provided water sprinklers along haul roads and also provided 15 Nos. of mobile water tankers to control fugitive emissions due to coal transportation vehicles. And also provided 3 Nos. of mist spraying systems at Coal Handling Plant (CHP). These water sprinklers were in operation at the time of inspection.

It is to submit that, the Board officials have collected the samples of mine discharge water, water from Jeenugumilli tank and ground water samples during inspection on 15.07.2021. As per the analysis report of the mine discharge water the values are within the prescribed standards. Copies of the analysis reports of mine discharge water, Jeenugumilli tank water and Borewell samples are enclosed.

As per the analysis report of the Jeenugumilli tank water, the values are indicates that Dissolved Oxygen (DO) values fall under 'C' class and the same can be used for drinking water source after conventional treatment and disinfection and the values of Conductivity falls in class E Irrigation, Industrial Cooling, Controlled Waste disposal as per Central Pollution Control Board (CPCB) water quality criteria. The farmers and others have informed that they are using water from Jeenugumilli tank for irrigation purpose. The water sample collected from the Jeenugumilli tank. CPCB water quality criteria for the surface water standards is submitted as Annexure.

It is also submit that, the Zonal laboratory, TSPCB, Warangal is conducting AAQ monitoring and Noise monitoring on 09.08.2021 and 10.08.2021. Monitoring analysis reports are yet to be received.

Earlier, the TSPCB, Hyderabad has reviewed Singareni in the Task Force committee meeting and issued directions vide order dated 22.02.2021. Copy of the same is enclosed. Compliance of the Task Force directions dated 22.02.2021 are as follows:

| S. No. | Direction | RO remarks |
|--------|--|--|
| 1 | The mine shall comply with all the CFO & HWA conditions issued by the Board. | The industry applied for CFE & CFO for production of coal of 5 Million TPA as per EC i.e. including increased production for JVR OC-I Project. Applications are under process at Head office, Hyderabad. |
| 2 | The industry shall treat the mine water and the treated mine water shall be reused in the premises and excess treated water shall only be discharged into nearby water bodies. | <ul style="list-style-type: none"> ➤ No discharges from JVR OC-I as mining operations of JVR OC-I stopped due to exhaust of coal reserves. But, other activities like overburden bund formation and vehicle transportation activities are going on and also coal mining excavation along with other works like coal transportation, overburden filling etc. of the JVR OC-II were in operation. ➤ The industry has provided arrangement for manual mixing of lime for neutralization of mine discharge water and also provided settling ponds. After treatment excess mine |

| | | |
|---|--|--|
| | | <p>discharge water is discharging into Chillavagu cheruvu and Kistaram tank.</p> <p>➤ No discharges of mine discharge water from JVR OC-I & II projects into Jeenu gumilli tank.</p> |
| 3 | The industry shall stop open burning of the bushes and other wastes. The industry shall carryout composting / vermin composting of the organic waste. | No firing of bushes / solid waste in mine premises. |
| 4 | The industry shall carryout limited blasting and ensures that there shall not be any vibration to the surrounding areas. | The industry reported that they are carrying blasting operations within the norms prescribed by Director General of Mines & Safety (DGMS). This issue is falls under purview of the DGMS. |
| 5 | The mine shall provide water meters to measure the actual water consumption and wastewater discharge and maintain a log register to record the readings. | Provided water meters before pumping of mine discharge water into internal drains finally connected to Chillavagu and Kistaram tank. |
| 6 | The mine shall construct garland drain and siltation ponds of appropriate size at working area to arrest flow of silt and sediment. The water collected should be utilized for watering the mine area, roads, greenbelt development etc., after treatment. | Provided garland drains and siltation ponds around mine area. Mine discharge water is being used for dust suppression purpose. |
| 7 | The mine shall regularly carryout sprinkling of water at raw material loading and at transfer points to control dust emissions. | <p>➤ Provided water sprinklers along haul roads and also provided 15 Nos. of mobile water tankers to control fugitive emissions due to coal transportation vehicles.</p> <p>➤ Provided 3 Nos. of mist spraying systems at Coal Handling Plant (CHP).</p> |

The Regional office, TSPCB, Kothagudem has submitted report to the Head office, TSPCB, Hyderabad on the status of the directions issued vide order dated 22.02.2021 to review the industry and for taking necessary action on 10.08.2021.

It is further submitted that under EC violation for JVR OC – I Project, the industry has obtained Environmental Clearance for increased production vide order dated 01.02.2021 as per the MoEF&CC guidelines. The industry has submitted Bank Guarantee for Rs. 26.67 Crores to the TSPCB, Hyderabad under EC violation prior to the Grant of EC. As per the directions of the Head office, TSPCB, Hyderabad, the Regional office, Kothagudem has filed a complaint against Singareni Collieries Company Ltd for initiating credible action regarding increase of production under EC violation. The case was appeared before Hon'ble First Class Judicial Magistrate, Sathupalli and same is pending.

The Board will monitor the industry regularly and take necessary action against the industry for non compliance.

Date: 10.08.2021
Place: Kothagudem


 ENVIRONMENTAL ENGINEER
 ENVIRONMENTAL ENGINEER
 T.S. Pollution Control Board
 Regional Office KOTHAGUDEM

ANNEXURE

Central Pollution Control Board has classified the Criteria for the surface water standards is as follows:

| Designated-Best-Use | Class of water | Criteria |
|---|----------------|--|
| Drinking Water Source without conventional treatment but after disinfection | A | <ol style="list-style-type: none"> 1. Total Coliforms Organism MPN /100ml shall be 50 or less 2. Ph between 6.5 and 8.5 3. Dissolved Oxygen 6mg/l or more 4. Biochemical Oxygen Demand 5 days 200C 2mg/l or less |
| Outdoor bathing (Organised) | B | <ol style="list-style-type: none"> 1. Total Coliforms Organism MPN/100ml shall be 500 or less 2. Ph between 6.5 and 8.5 3. Dissolved Oxygen 5mg/l or more 4. Biochemical Oxygen Demand 5 days 200C 3mg/l or less |
| Drinking water source after conventional treatment and disinfection | C | <ol style="list-style-type: none"> 1. Total Coliforms Organism MPN/100ml shall be 5000 or less 2. Ph between 6 to 9 3. Dissolved Oxygen 4mg/l or more 4. Biochemical Oxygen Demand 5 days 200C 3mg/l or less |
| Propagation of Wild life and Fisheries | D | <ol style="list-style-type: none"> 1. Ph between 6.5 to 8.5 2. Dissolved Oxygen 4mg/l or more 3. Free Ammonia (as N) 1.2 mg/l or less |
| Irrigation, Industrial Cooling, Controlled Waste disposal | E | <ol style="list-style-type: none"> 1. Ph between 6.0 to 8.5 2. Electrical Conductivity at 250C micro mhos/cm Max.2250 3. Sodium absorption Ratio Max. 26 4. Boron Max. 2mg/l. |

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ANNEXURE-I

No.J-11015/301/2007-IA.II(M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
C.G.O.Complex, Lodi Road,
New Delhi -110003.

Dated: 27th July 2007

To:
M/s Singareni Collieries Company Ltd.,
Kothagudam Collieries - 507 101,
Bhadrachalam Road Railway Station,
Khammam District, A.P.

Sub: Jalagam Vengal Rao Opencast-I Coal Mine Project (expansion in rated capacity from 0.70 MTPA to 2.0 MTPA with a peak production of 2.50 MTPA and increase in lease area from 410.58 ha to 547.08 ha) of M/s Singareni Collieries Company Ltd., located in village Ayyagaripeta, Mandal Sathupalli, District Khammam, Andhra Pradesh- environmental clearance - reg.

Sir,

This is in continuation to your application vide letter No. CRP/ENV/A/403/669 dated 14.10.2006 for Terms of Reference which was granted vide MOEF letter dated 15.01.2007, and with reference to your application for environmental clearance based on the prescribed Terms of Reference vide letter No. CRP/ENV/A/478/237 dated 31.03.2007 and your subsequent letter dated 19.07.2007 and E-mails dated 19.07.2007 and 20.07.2007 on the above-mentioned subject. The Ministry of Environment & Forests has considered your application. It has been noted that the project originally named **Sathupally Opencast Project-I** was granted environmental clearance vide MOEF letter NO. J-11015/240/2003-IA.II(M) dated 16.09.2004 for production of coal at a rated capacity of 0.7 MTPA in a lease area of 410.58 ha. The project has since been renamed as **Jalagam Vengala Rao Opencast-I Coal Mine Project**. The present application is for expansion in production from 0.7 MTPA to 2.50 MTPA (peak production) and for expansion in lease area from 410.58 ha to 547.08 ha of the Jalagam Vengal Rao Opencast (OCP)-I Coal Mine Project. The total lease area of the extension block is 136.50 ha which consists of forestland. Forestry clearance has not been obtained for the extension area. Of the total lease area, area for excavation is 298.32 ha, 133.10 ha is for external OB dumps, 72.75 ha is for safety barrier, and drainage along the quarry, 18.13 ha is for service buildings, CHP, and sub-station, 14.78 ha is for road diversion, 10 ha is for colony/township with 175 dwelling units is proposed to be constructed in non-forestland. There area no National Parks, Wildlife Sanctuary, Biosphere Reserves found within the 10 km buffer zone. The NTR Canal (formerly Bethupally Floop Flow Canal) passes through the lease area and it is proposed to modify the natural drainage by diverting the canal for a total length of 18.32 km and will be realigned with the original course so as to retain the existing feeder channels of downstream irrigation tanks. NOC form the State Minor Irrigation Department has been obtained on 23.09.2004. A bund exists against protection of flood. Project involves R&K of one village within the blasting zone, namely, Vengal Rao Nagar involving 335 PAFs. Mining will be opencast by mechanised method and involves controlled blasting. Expansion of the rated capacity of the mine is from 0.70 million tonnes per annum (MTPA) to 2 MTPA of coal production with a peak production of 2.50 MTPA from 4th year onwards. Mineral transportation of coal is by by road to CHP at Kothagudam covering a road length of 65 km. A separate CHP for this project of 500 TPH capacity is under construction at a distance of 1.2 km. Ultimate working depth of the mine is 150 m below ground level (bgl). Water table in the core zone is in the range of 2.50m - 12.10m bgl -19.52m bgl during the pre-monsoon and in the range of 0.75m - 10.80m bgl in the post monsoon period. Mining has intersected water table. Clearance from the State Ground Water Department has been obtained on 06.07.2007. Peak water requirement is 826 m3/d, which will be met from mine pit water. An estimated 177 Mm3 of OB and topsoil will be generated in life of mine; of which about 135.84 Mm3 (76.75%) of the OB will be backfilled (of which 14.70 Mm3 of OB has been already accumulated in one external OB dump) and the balance 41.16

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Mm3 will be dumped in the external dump of a max. height of 90m in 3 benches of 30m each. Backfilling will begin from 5th year onwards and concurrent backfilling from 11th year till end of mine life. A void of 129.17 ha will be left at the end of mine life which will be converted into a water reservoir. Public Hearing was held on 13.03.2007 for increasing the production from 7 lakhs TPA to 20-lakh TPA with a peak production of 25 lakh TPA (from 4th year onwards). Life of the mine at the rated capacity is 20 years. Mining Plan has been approved by Ministry of Coal on 21.05.2007 for 2 MTPA. Capital cost of the project is Rs. 131.06 crores.

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Jajagam Vengala Rao Opencast-I Coal Mine Project of M/s Singareni Collieries Company Ltd. for expansion in production of coal from 0.7 MTPA to 2.50 MTPA (peak) rated capacity and expansion in lease area from 410.58 ha to 547.08 ha** under Section 12 of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and under Para 2.1.1 of MOEF Circular dated 13.10.2006 subject to the compliance of the terms and conditions mentioned below:

A. Specific Conditions

- (i) No mining operations shall be undertaken in the 136.50 ha of forestland until forestry clearance has been obtained under the provisions of FC Act, 1980.
- (ii) Diversion of the NTR Canal (Bethupally Flood Flow Canal) for a length of 18.32 km shall be undertaken with the approval of the State Irrigation Department and shall ensure that it is realigned with the original course so as to retain the existing feeder channels of downstream irrigation tanks.
- (iii) Diversion of the PWD road passing through the lease shall be done with the prior approval of the competent authorities.
- (iv) Topsoil should be stacked properly with proper slope at earmarked site(s) and should not be kept active and shall be used for reclamation and development of green belt.
- (v) OB should be stacked at earmarked external OB dumpsite(s) within ML area and shall be a maximum height of 90m only consisting of 3 benches of 30m each. The ultimate slope of the dump shall not exceed 28°. Backfilling shall begin at the end of 5th year in the decoaled area. Monitoring and management of existing reclaimed dumpsites should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional office located at Bangalore on an yearly basis.
- (vi) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilised for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly.
Garland drains of suitable size, gradient and length and sump capacity should 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 provided for adequate retention period to allow proper settling of silt material.
- (vii) Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.
- (viii) Crushers at the existing CHP and that to be constructed should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, and transfer points.
- (ix) Drills should be wet-operated only.

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- (x) Controlled blasting shall be practiced only during daytime with use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.
- (xi) Afforestation shall cover a total area of not less than 393.13 ha which includes reclaimed external OB dump (72.75 ha), reclaimed topsoil dump, backfilled area (169.15 ha), along ML boundary, along drains and along service buildings (18.13 ha) within the lease and in the township by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.
- (xii) A Progressive Mine Closure Plan shall be implemented by reclamation of quarry area of 298.32 ha which shall be backfilled and afforested by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. The balance 129.17ha of decolled area being converted into a water reservoir shall be gently sloped, and the upper benches of which shall be stabilised and reclaimed with plantation and the reservoir peripherally fenced.
- (xiii) The conditions stipulated by the State Ground Water Department shall be effectively implemented. The company shall obtain prior approval of CGWA/CGWB Regional Office for use of groundwater if any, for mining operations.
- (xiv) Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new peizometers. The monitoring for quantity should 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 should be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.
- (xv) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- (xvi) Besides carrying out regular periodic health check up of their 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.
- (xvii) ETP should also be provided for workshop and CHP wastewater. Mine discharge water shall be treated to prescribed standards before discharge into any natural water course.
- (xix) A sewage treatment plant shall be installed in the combined township and in the proposed township to be established within the lease.
- (xx) 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 any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bangalore.
- (xxi) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

B. General Conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.

- (ii) No change in the calendar plan including excavation, quantum of mineral coal and waste should be made.
- (iii) Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for SPM, RPM, SO₂ and NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.
- (iv) Fugitive dust emissions (SPM and RPM) from all the sources should be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, dump trucks (loading and unloading) points should be provided and properly maintained.
- (v) Data on ambient air quality (SPM, RPM, SO₂ and NO_x) should 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.
- (vi) Adequate measures should 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.
- (vii) Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before discharge. Oil and grease trap should be installed before discharge of workshop effluents.
- (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.
- (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.
- (x) Personnel working in dusty areas should wear protective respiratory devices and they should 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 observe any contractions due to exposure to dust and to take corrective measures, if needed.
- (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.
- (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.
- (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 Regional Office by furnishing the requisite data/ information/monitoring reports.
- (xiv) A copy of the will be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.
- (xv) State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.
- (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.nlc.in>.

3. The Ministry or any other competent authority may stipulate 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.
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.


(Dr. T. Chandini)
Director

Copy to:

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Andhra Pradesh, Secretariat, Hyderabad.
3. Chief Conservator of Forests, Regional office (SZ), Ministry of Environment & Forests, 4th Floor, F-Wing, Kenriya Sadan Block, Kormangala, Bangalore - 560034.
4. Chairman, Andhra Pradesh State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanalnagar, Hyderabad - 500038.
5. Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
7. District Collector, Khammam Government of Andhra Pradesh.
8. Monitoring File 9. Guard File 10. Record File



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ANNEXURE-II

ANDHRA PRADESH POLLUTION CONTROL BOARD
PARYAVARAN BILAYAN, A - 3, INDUSTRIAL ESTATE,
SANATHINAGAR, HYDERABAD - 500 018

Phone: 23887500
Fax: 040 - 23815631
Grams : Kalushya Nivara
Website :www.appcb.org

REGD.POST WITH ACK.DUE

CONSENT ORDER FOR ESTABLISHMENT

Order No. 35/PCB/CFE/RO-KGM/HO/2007 -1475 Dt.27.09.2007

Sub: PCB - CFE - M/s. Singareni Collieries Co. Ltd., JVR OC-I Sathupalli Open Cast Project, Sathupally (M), Khammam District - Consent for Establishment (Expansion) of the Board under Sec.25 of Water (P & C of P) Act, 1974 and Under Sec.21 of Air (P&C of P) Act, 1981 - Issued - Reg.

- Ref:
- 1) Public hearing conducted on 13-3-2007 at Tahasildhar Office, Sathupalli, Khammam district.
 - 2). Environmental Clearance issued by MOE&F, GOI on 27.7.2007
 - 3) Industry's application received through SWCC on 3.8.2007
 - 4) R.O's inspection report dt. 29.8.2007.
 - 5) CFE Clearance Committee meeting held on 17.9.2007

1. In the reference 3rd cited, an application was submitted to the Board seeking Consent for Establishment (CFE) (Expansion) for open cast coal mining with installed capacities as mentioned below, with a project cost of Rs.39.8 crores.

| Sl. No. | Product | Existing | Proposed | After Expansion |
|---------|-------------|-----------------|-----------------|-----------------|
| 1 | Coal mining | 0.7 million TPA | 1.3 million TPA | 2.0 million TPA |

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Peak production of coal (2.5 million TPA) is expected in the 4th year.

As per the application, the above activity is to be located at Sy.No. 168 & 169, Near Sathupally Town, Sathupally (M), Khammam District. The details of area are as follows:

| Sl. No. | Particulars | Forest land (Ha.) | Non-Forest Land (Ha.) | Total Land (Ha.) |
|---------|------------------------|-------------------|-----------------------|------------------|
| 1. | Already acquired | 201.80 | 208.78 | 410.58 |
| 2. | Proposed for expansion | 136.50 | - | 136.50 |
| | Total | 338.30 | 208.78 | 547.08 |

3. The above site was inspected by the Environmental Engineer, Regional office, Kothagudem, A.P Pollution Control Board on 21.8.2007 and found that the site is surrounded by

- North : OC - I and followed by Vengal Rao Colony
 South : Lankapally Reserve forest
 East : Bethupalli Canal followed by Sathupally
 West : Lankapally Reserve Forest

APPCB
KOTHAGUDEM
No. 1098
Date 17/10/2007

4. The Board after careful scrutiny of the application and verification report of Regional Officer, hereby issues CONSENT FOR ESTABLISHMENT (Expansion) to your activity Under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. This order is issued to produce the product as mentioned at para (1) only.
5. This Consent Order now issued is subject to the conditions mentioned in Schedule 'A' and Schedule 'B'.
6. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.

Encl: Schedule 'A'
Schedule 'B'

Sd/-
MEMBER SECRETARY

To
M/s. Singareni Collieries Co. Ltd.,
JVR OC-I Sathupalli Open Cast Project,
Head Office, Kothagudem,
Khammam district - 507 101

Copy to: 1. The JCEE, Z.O., Vijayawada for information and necessary action.
2. The E.E., R.O, Kothagudem for information and necessary action.

/// T.C.F.B.O ///

P. R. Srinivas
JOINT CHIEF ENVIRONMENTAL ENGINEER (CFE)

29/9/07

SCHEDULE - A

1. Progress on implementation of the project shall be reported to the Regional Office, Kothagudem, A.P. Pollution Control Board once in six months.
2. The proponent shall obtain Consents for operation from APPCB, as required Under Sec.25/26 of the Water (P&C of P) Act, 1974 and under sec. 21/22 of the Air (P&C of P) Act, 1981, before commencement of the activity.
3. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power Under Sec.27(2) of Water (Prevention and Control of Pollution) Act, 1974 and Under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to review any or all the conditions imposed herein and to make such alternation as deemed fit and stipulate any additional conditions by the Board.
4. The consent of the Board shall be exhibited in the factory premises at a conspicuous place for the information of the inspecting officers of different departments.
5. Compensation is to be paid for any environmental damage caused by it, as fixed by the Collector and District Magistrate as civil liability.
6. Rain Water Harvesting (RWH) structure (s) shall be established on the mine site.
7. The rules and regulations notified by Ministry of Law and Justice, GOI, regarding the Public liability insurance Act, 1991 shall be followed.
8. This order is valid for period of 5 years from the date of issue.

SCHEDULE - B

Water:

1. The source of water is Mine discharge water and the maximum permitted water consumption after expansion is 852 KLD.
2. The Effluent Treatment Plant (ETP) shall be constructed and commissioned and Air Pollution control equipment shall be installed along with the commissioning of the activity. All the units of the ETP shall be impervious to prevent ground water pollution.
3. The effluents from the workshop shall be treated to the on land for irrigation standards, stipulated under Environment (Protection) Rules, 1986, notified and published by Ministry of Environment and Forests, Government of India as specified in schedule VI vide G.S.R.422 (E), dt.19.05.1993 and its amendments thereof.

4. Details of ETP proposed:

| Effluent source | Treatment proposed | Mode of final disposal |
|--|----------------------|--|
| Excess mine water (1348 KLD) | Sedimentation tanks | Nearby irrigation tank and ground water recharge. |
| Hydraulic Earth Moving Machinery (HEMM) washings (100 KLD) | Oil and grease trap. | For development of plantation after treating to standards of on land for irrigation. |
| Domestic (17 KLD) | -- | Septic tank followed by soak pit. |

5. Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned below.

- a) Industrial washings, spraying in mine pits.
- b) Domestic purposes.

Air:

6. The proponent shall comply with the following for controlling air pollution.

➤ To avoid the dust generation from the drilling operations, wet-drilling methods, shall be adopted.

➤ Appropriate explosives shall be used for blasting, and overcharging of blast-holes is to be avoided.

➤ The volume of dust raising from dumps by the action of wind shall be controlled by planting grasses on slopes and plants on dumps soon after their formation.

➤ Dust from Coal and OB transport roads, shall be controlled by taking following measures.

- Black topping of permanent roads like routes to coal handling plant, permanent internal roads etc.

- Water spraying on haul roads and permanent transport routes at required frequencies. Provisions for two mobile water sprinklers has been made for this purpose.

- Avenue plantation along roads.

- Taking up thick plantation around the quarry and OB dump, which will serve as a barrier to prevent the dispersion of dust.

➤ Effective dust suppression measures shall be taken up at Coal Handling Plant (CHP). Crusher house shall be enclosed to the extent possible and dust suppression arrangement shall be provided at suitable locations in the CHP. All conveyors, screens, crushers etc, shall be provided with covers fugitive dust during operation. The following measures shall be adopted at CHP in order to control dust emissions

- Minimization of height of fall at all coal transfer points.

- Internal lining of chutes and bins to take care of abrasion & dust.

- Continuous water spraying arrangements for dust suppression.

➤ The exhaust emissions from HEMM containing CO, Sox & NOx shall be controlled by adhering to the schedule maintenance that includes periodical tuning of engines.



Ministry of Environment & Forests (MOEF)

No.J-11015/268/2007-LA.II(M).

Paryavaran Bhawan,
C.G.O.Complex,
New Delhi -110510.Dated: 28th March 2010

To,
Director (P & P),
M/s Singareni Collieries Company Ltd.,
Kothagudam Collieries - 507101,
Bhadrachalam Road Railway Station,
Khammam District, A.P.

Sub: Jalagam Vengalrao 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 - environmental clearance - reg.

Sir,

This is with reference to your application vide letter No. CRP/ENV/A/405/228 dated 29.03.2007 for Terms of Reference, which was granted vide MOEF letter dated 29.06.2007 and with reference to your application for environmental clearance based on the prescribed Terms of Reference vide letter No. CRP/ENV/A/405/530 dated 31.08.2009 and letters dated 07.10.2009 and 09.03.2010 on the above-mentioned subject. The Ministry of Environment & Forests has considered your application. The application is for opening a new opencast mine - Jalagam Vengalrao Opencast Coalmine-II Project with an annual production capacity of 4 million tonnes per annum (MTPA) (normative) with a peak production of 5 MTPA in a total lease area of 1409.81 ha. Grade of coal is D and E. Of the total project area, 540.01 ha is agricultural land, 788.22 ha is forestland, 14.61 ha is grazing land, 13.32 ha is water bodies, 4.10 ha is for roads and 50 ha is for colony to be established outside the lease. Forestry clearance has been obtained for 12.02 ha and applied for 776 ha of forestland. Of the total lease area, area for excavation is 749.38 ha, 411.49 ha is for external OB dumps, 22.12 ha is for infrastructure, 4.13 ha is for roads, 16.76 ha is for conveyor & railways, 126.47 ha is for safety zone, 6.94 ha is for magazine, 22.52 ha is for infrastructure, and 50 ha is for colony outside the ML. A pithead CHP of 6 MTPA is also proposed within the ML. There area no National Parks, Wildlife Sanctuary, Biosphere Reserves found within the 10 km buffer zone. A number of streams flow such as the Tammileru and Kattaleru flow adjoining the ML and join River Godavari and form the main drainage of the area. The project involves modification of the existing drainage due to diversion of the Batupalli Flood Flow Canal. The mining is opencast by mechanised method involving shovel-dumper. Mineral transportation of 12121 TPD of coal is by conveyor-cum rail from CHP. Ultimate working depth of the mine is 363.45 m below ground level (bgl). Water table in the study area during pre-monsoon is in the range of 2.50-12.10m bgl and during post monsoon period is in the range of near surface 0.75-10.80m bgl. Peak water requirement is 2370 m³/d of

| CRP PP | |
|--------|----------|
| W.No. | 628 |
| Date | 06/04/10 |

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to GMCE-NU

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which 2100 m³/d is for dust suppression and would be met from mine pit water. Clearance from the State Ground Water Board has been obtained. An estimated 1045.68 Mm³ of OB would be generated over the life of the mine; of which about 835.59 Mm³ of the OB would be backfilled which includes 225.17 Mm³ of OB to be used to fill the void of JVR OC-I and the balance 261.73 Mm³ would be dumped in external dump of a max. height of 90m in 3 benches of 30m each of which 55.28 Mm³ of OB would be rehandled from west ext. OB dump to leave a void of a max. depth of 35m at the final mine closure stage. Backfilling will begin from 10th year onwards. The project involves R&R of one village Kommepalli and land losers from 4 villages - Kommepalli, Kistaram, Errakunta & Rejerla. Life of the mine is 54 years. Public Hearing was held on 21.05.2009. Mining Plan has been approved by Ministry of Coal on 16.03.2010. Capital cost of the project is Rs. 474.64 crores.

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned Jalagam Vengalrao 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., under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and MOEF Circulars thereunder subject to the compliance of the terms and conditions mentioned below:

A. Specific Conditions

- (i) No mining operations shall be undertaken in 776.20 ha of forestland until prior clearance has been obtained under the provisions of FC Act, 1980.
- (ii) Topsoil shall 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.
- (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 its realignment at the boundary of the lease shall be carried out in consultation with the State Flood and Irrigation Department.
- (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 Mm³ 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 Ministry of Environment & Forests and its Regional office located at Bangalore on a yearly basis.
- (v) Catch drains and siltation ponds of 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.

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 shall also provided for adequate retention period to allow proper settling of silt material.

- (vi) 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.
- (vii) Crushers at the proposed CHP shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, and transfer points.
- (viii) No coal transportation shall be undertaken by road.
- (ix) Drills shall be wet operated only.
- (x) Controlled blasting shall be practiced only during daytime with use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.
- (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, backfilled quarry area (296.17), along ML boundary, along roads and along service buildings and CHP, and other areas within the lease (83.09 ha) by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.
- (xii) 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 35m depth at the final mine closure stage. The backfilled 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.
- (xiii) Besides carrying out regular periodic health check up of their 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.
- (xiv) ETP shall also be provided for workshop and CHP wastewater. Mine discharge water shall be treated to prescribed standards before discharge into any natural water course.
- (xv) Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new peizometers. 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 Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.
- (xvi) Mine discharge water 28,450 m³/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.

- (xvii) No groundwater 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.
- (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 village(s) in case the village wells go dry due to dewatering of mine.
- (xix) For monitoring land use pattern and for post mining land use, a time series of land use 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 any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bangalore.
- (xx) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.
- (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 utilised for environmental protection measures, the status of which shall be uploaded regularly on the company website and also furnished as part of the Monitoring report.
- (xxii) The costs for implementation of a Project specific R&R Plan of for R&R of one village Kommepalli involving 120 PAFs and land losers from 4 villages - 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.
- (xxiii) 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 utilised for environmental protection measures, the status of which shall be uploaded regularly on the company website and also furnished as part of the Monitoring report.
- (xxiv) 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 undertaken 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.

B. General Conditions.

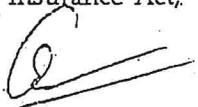
- (i) No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral coal and waste shall be made.
- (iii) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM10, PM2.5, SO2 and NOx 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.
- (iv) Fugitive dust emissions (PM10 and PM 2.5) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, dump trucks (loading and unloading) points shall be provided and properly maintained.
- (v) Data on ambient air quality (PM10, PM 2.5, SO2 and NOx) 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.
- (vi) 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 shall be provided with ear plugs/muffs.
- (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 19th May 1993 and 31st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.
- (viii) Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.
- (ix) Environmental laboratory shall be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.
- (x) Personnel working in dusty areas shall 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 shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof.
- (xi) A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.

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- (xii) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bangalore.
 - (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 Regional Office by furnishing the requisite data/information/monitoring reports.
 - (xiv) A copy of the will be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.
 - (xv) State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.
 - (xvi) The Project authorities shall 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>.

3. The Ministry or any other competent authority may stipulate 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.

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.


(Dr.T.Chandini)
Director

Copy to:

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Andhra Pradesh, Secretariat, Hyderabad.
3. Chief Conservator of Forests; Regional office (SZ), Ministry of Environment & Forests, 4th Floor, F-Wing, Kenriya Sadan Block, Kormangala, Bangalore - 560034.
4. Chairman, Andhra Pradesh State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanatnagar, Hyderabad - 500038.
5. Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi -110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
7. District Collector, Khammam, Government of Andhra Pradesh.
8. Monitoring File 9. Guard File 10. Record File

(21)

ANNEXURE-IV



TELANGANA STATE POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, A - 3, INDUSTRIAL ESTATE,
SANATHNAGAR, HYDERABAD - 500 018

Phone: 23887500

Fax: 040-23815631

CONSENT ORDER FOR CFO RENEWAL - RED CATEGORY

CONSENT ORDER NO. 16082281186

DATED: 03/10/2016

(Consent Order for Existing/New or altered discharge of sewage and/or trade effluents/outlet under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and amendments thereof, Operation of the plant under section 21/22 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof.) Rules 2008 & Amendments thereof)

CONSENT is hereby granted under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, under section 21/22 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof; (hereinafter referred to as 'the Acts', 'the Rules') and amendments thereof and the rules and orders made there under to M/s. Singareni Collieries Company Limited, JVR OC - I Expansion Project, Ayyagaripet (V), Sathupalli (M), Khammam District (hereinafter referred to as 'the Applicant /Industry') and the industry is authorized to operate the industrial plant to discharge the Effluents from the outlets and the quantity of Emissions per hour from the chimneys, by operating pollution control equipment, as detailed below,

i) Out lets for discharge of Effluents :

| Outlet No. | Description of Outlet | Max Daily Discharge in KLD | Point of Disposal |
|------------|-----------------------------|----------------------------|--|
| 1. | Excess mine discharge water | 1348 | After treatment in Settling ponds shall be used for Dust suppression and excess shall be discharged after meeting the standards at Schedule-B. |
| 2. | Washings of HEMM | 800 | After treatment in Oil & Grease trap, shall be used for onland for gardening, duly complying to the standards stipulated in Schedule-B |
| 3. | Domestic | 417 | Septic tanks followed by soak pits. |

This consent order is valid for Mining of Coal in Mine lease area of 923.27 Hectare for the following capacity:

| Products | Capacity |
|-------------------------|--|
| Coal (Open cast mining) | 2.5 Million Tons per annum (Peak production) |

This order is subject to the provision of 'the Acts' and amendments made thereunder and further subject to the terms and conditions incorporated in the schedule A and B enclosed to this order.

This combined order of consents is valid for a period upto June 30, 2021

Sd/-
MEMBER SECRETARY

To
M/s. Singareni Collieries Company Limited,
JVR OC- I Expansion Project, Ayyagaripet (V),
Sathupalli (M), Khammam District
Pin: 507303

Copy to:

1. The JCEE, Zonal Office Hyderabad for information and necessary action.
2. The SEE, Cess.Cell, TSPCB Head Office, Hyderabad for information and necessary action.
3. The EE, Regional Office, Kothagudem for information and necessary action.

///T.C.F.B.O///

SENIOR ENVIRONMENTAL ENGINEER (UH-I)

SCHEDULE - A

1. The applicant shall make applications through online for renewal of Consent (under Water & Air Acts) at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts for obtaining Consent of the Board. The applicant can also apply for Auto Renewal of the CFO atleast 30 days before the expiry of this order as per the procedure and eligibility stipulated in the Board Circular dt:19.11.2015 & 08.12.2015 (available in Board's Website: <http://tspcb.egg.gov.in/Pages/Circulars.aspx>).
2. This order is issued in line with Board's CFO order dated 09.04.2015. Concealing the factual data or submission of false information/ fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts. The industry shall comply with earlier CFO order dated 09.04.2015 still applicable.
3. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981.
4. The facility may explore the possibility of tapping the solar energy for their energy requirements.
5. All other conditions stipulated in the Schedule - A of the earlier CFO order remains same. The industry should ensure consistent compliance of the condition of Schedule-A.
6. The Board reserves its right to modify above conditions or stipulate any further conditions and to take action including revoke of this order in the interest of protection of public health and environment.

SCHEDULE - B

1. Total Water Consumption shall not exceed : 2252.00 KLD

| S.No. | Purpose | Quantity |
|-------|---|----------|
| 1 | Others Process & Wash (Dust suppression, Plantation and washings of HEMM) | 1730 |
| 2 | Domestic | 522 |

2. The Treated Effluent Discharged/pre-treated effluent sent to CETB shall not exceed the following prescribed standards

| Outlet No. | Parameter | Limiting Standard |
|------------|------------------------------|-------------------|
| 1 | pH | 5.5 - 9.0 |
| | Total Suspended Solids (TSS) | 100 mg/l |
| | Total Suspended Solids (TSS) | 100 mg/l |
| | Oil & Grease | 10 mg/l |

| | | |
|---|---------------------------------|-----------|
| | Biochemical Oxygen Demand (BOD) | 30 mg/l |
| | Total Dissolved Solids (TDS) | 2100 mg/l |
| | Chemical Oxygen Demand (COD) | 250 mg/l |
| 2 | pH | 5.5 - 9.0 |
| | Total Suspended Solids (TSS) | 200 mg/l |
| | Biochemical Oxygen Demand (BOD) | 100 mg/l |
| | Total Dissolved Solids (TDS) | 2100 mg/l |

3. The Emission shall not exceed the following prescribed standards

| Chimney No. | Parameter | Emission Standards |
|-------------|-----------|--------------------|
| | | NIL |

4. The industry should ensure segregation of Acid Mine Discharges (AMD) from abandoned mines, coal stocks, coal handling facilities, washeries & coal waste tips etc. and should adopt adequate treatment to achieve prescribed standards for the AMD as stipulated at S.No.2 prior to disposal. The plan of action for segregation of AMD, technology of the proposed treatment and mode of disposal should be submitted to Board.

5. The industry should not produce beyond the permitted capacity as mentioned in this order, without obtaining prior CFE & CFO of the Board. The mining capacity of the coal also should not be increased more than IBM approved capacity.

6. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board. The industry shall provide separate water meters with necessary pipeline for assessing the quantity of water used for each of the purposes as per Cess Form-I.

7. The industry should comply with the ambient air quality standards of PM10 (Particulate Matter size less than 10um) - 100 ug/ m³; PM2.5 (Particulate Matter size less than 2.5 um) - 60 ug/ m³; SO₂ - 80 ug/ m³; NO_x - 80 ug/m³, outside the factory premises at the periphery of the industry.

Standards of other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.

Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A)
 Night time (10 PM to 6 AM) - 70 dB (A)

8. The project shall maintain separate water meters for recording water consumption for various purposes and also maintain daily records.
9. The project shall maintain the water spraying system properly by adopting preventive maintenance schedule to avoid fugitive dust emissions.
10. The project shall carryout water spraying on haul roads to avoid fugitive dust emissions due to vehicular movement.
11. The project shall develop and maintain greenbelt as per norms.
12. The project shall connect the CAAQM station data the PCB server and install additional CAAQM stations as per EC.
13. The project shall submit monthly AAQM data to RO, Kothagudem.
14. The industry shall use atleast 25% of fly ash on volume to volume basis of the total materials used for external dump of overburden and same percentage in upper benches of back filling of open cast mines, as per Fly Ash Notification.
15. The industry shall comply with MOE&F Notification No.GSR.02 (E), dt. 02.01.2014 for supply of coal with Ash content not exceeding 34% to coal based Thermal Power plants.
16. The personnel working in dusty areas should wear protective / respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
17. The industry should reuse the treated effluents generated from workshop for dust separation and for raising plantation.
18. Blasting should be sequential in such a manner as to achieve minimum vibration.
19. The industry should comply with the following for controlling air pollution.
 - a) To avoid the dust generation from the drilling operations, wet-drilling should be done.
 - b) Use of appropriate explosives for controlled blasting and avoid overcharging the blast holes.
 - c) The volume of dust rising from dumps by the action of wind should be controlled significantly by planting grasses on slopes and plants on dumps soon after their formation.
 - d) To overcome the problems of dust generation from mine haul roads, the following steps should be adopted.
 - i) Black topping of permanent roads like routes to coal handling plant, permanent internal roads etc.
 - ii) Water spraying on haul roads and permanent transport routes at required frequencies. Provision should be-made for procurement of six water sprinklers for this purpose.
 - iii) Avenue plantation along roads should be adopted.

e) Effective dust suppression measures are proposed to be taken up at pit head coal handling plant (CHP). The crusher house should be enclosed to the extent possible and dust suppression arrangement should be provided at suitable locations in the CHP. All the conveyors, screens, crusher etc., should be provided with covers to avoid fugitive dust during operation. Some of the measures proposed to be adopted at CHP in order to control dust emission include:

- i) Height of fall to be minimized at all coal transfer points.
- ii) Internal lining of chutes and bins should be done to take care of abrasion & dust.

20. Dumping of overburden, if done, should use the retreating pyramid bench formation with concurrent, physical and biological reclamation. Dumps should be contoured and provided with relief control and stabilized. Dump tops should be compacted, leveled and be properly drained.

21. Soil binding and nitrogen fixing plants should plant in the Mining Lease Area. Biological reclamation should be done in two phase the first phase should be plant appropriate quick growing grass and shrubs and the second phase should grow slower native shrubs and trees.

22. Ground water table levels should be monitored every season. Any lowering of the ground water table in comparison to the previous season should be reported to the Board immediately. Discarded pits should be allowed to fill with water.

23. Vehicles should be well maintained and engine idling should be minimized. Vehicle cabs should be made dust-proof.

24. The applicant should submit Environment statement in Form V before 30th September of every year as per Rule No. 14 of E(P) Rules, 1986 & amendments thereof.

25. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991, should be followed.

26. The conditions stipulated in this order are without any prejudice to rights and contentions of this Board in any Hon'ble court of Law.

Sd/-
MEMBER SECRETARY

To
M/s. Singareni Collieries Company Limited,
JVR OC - I Expansion Project, Ayyagaripet (V),
Sathupalli (M), Khammam District
Pin: 507303

///T.C.F.B.O///

SENIOR ENVIRONMENTAL ENGINEER (UH-I)



TELANGANA STATE POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, A - 3, INDUSTRIAL ESTATE,
SANATHNAGAR, HYDERABAD - 500 018

Phone: 23887500
 Fax: 040 - 23815631
 Website : www.appecb.ap.nic.in

REGD.POST WITH ACK.DUE

CONSENT ORDER FOR ESTABLISHMENT

Order No. 5/PCB/CFE/RO-KGM/HO/2015 570

Dt. 26.06.2015

Sub: PCB - CFE - M/s. Singareni Collieries Company Ltd (SCCL), Jalagam Vengalrao Opencast Project - II (JVR OC-II), Kommepalli (V), Sathupalli (M), Khammam District - Consent for Establishment of the Board under Sec.25 of Water (Prevention & Control of Pollution) Act, 1974 and Under Sec.21 of Air (Prevention & Control of Pollution) Act, 1981 - Issued - Reg.

Ref: 1) Public Hearing conducted on 21.05.2009.
 2) Environmental Clearance dt. 28.03.2010 issued by MOE&F, GOI.
 3) Industry's application received on 05.05.2015.
 4) R.O's inspection report dt. 03.06.2015.
 5) CFE Committee meeting held on 12.06.2015.

1. In the reference 3rd cited, an application was submitted to the Board seeking Consent for Establishment (CFE) for opening a new open cast mine - Jalagam Vengalrao Open Cast Coal Mine - II Project to produce the following products with installed capacities as mentioned below, with a project cost of Rs. 447.06 Crores.

| S.No | Products / Activity | Proposed capacity |
|------|---------------------|---|
| 1. | Coal (Mining) | 4 Million Tons per Annum (MTPA) (Normative) with a peak production of 5 MTPA. |

2. As per the application, the above activity is to be located at Jalagam Vengalrao Opencast Project - II (JVR OC-II), Kommepalli (V), Sathupalli (M), Khammam District in an area of 1409.81 Ha. The mining is by open cast method involving Drilling, blasting, Excavation and loading, waste rock, coal extraction and loading, sizing / crushing and loading into trucks. The proponent submitted Environmental Clearance (EC) dated 28.03.2010 obtained from MoEF, GoI vide ref 2nd cited.
3. In the reference 3rd cited, the Regional Officer submitted verification report stating that the above site was inspected by Asst. Environmental Engineer, Regional office, Kothagudem, Telangana State Pollution Control Board on 03.06.2015 and observed that the site is surrounded by

North : JVR OC- I
South : Private land & Rejarla village
East : Private lands & Sathupalli - Vijayawada State high way.
West : Forest land

Office of the
 PO, JVR OC I
 Inw. No. 13926
 Date 6/2/15

4. The Board, after careful scrutiny of the application along with verification report of Regional Officer, EC dt: 28.03.2010 issued by MoEF, GoI and after examining the issue in CFE Committee meeting held on 12.06.2015, hereby issues **CONSENT FOR ESTABLISHMENT** to your activity under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to the activity as mentioned at para (1) only.**
5. This Consent order now issued is subject to the conditions mentioned in Schedule 'A' and Schedule 'B'.
6. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.

Encl: Schedule 'A'
Schedule 'B'

To,
M/s. Singareni Collieries Company Ltd (SCCL),
Jalagam Vengalrao Opencast Project - II (JVR OC-II),
Kommepalli (V), Sathupalli (M),
Khammam District

Sd/-
MEMBER SECRETARY

// T.C.F.B.O//

Senior Environmental Engineer
(Unit - I)

4/9

DGM (SMM)

SCHEDULE – A

1. Progress on implementation of the project shall be reported to the concerned Regional Office, T.S. Pollution Control Board once in six months.
2. Separate energy meters shall be provided for Sewage Treatment Plant (STP) and Air pollution Control equipment to record energy consumed.
3. The proponent shall obtain Consents for Operation (CFO) from TSPCB, as required under Sec.25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under sec. 21/22 of the Air (Prevention & Control of Pollution) Act, 1981, before commencement of the activity.
4. Notwithstanding anything contained in this consent order, the Board hereby reserves its right and power under Sec.27(2) of Water (Prevention and Control of Pollution) Act, 1974 and under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to review any or all the conditions imposed herein and to make such alternation as deemed fit and stipulate any additional conditions by the Board.
5. The consent of the Board shall be exhibited in the factory premises at a conspicuous place for the information of the inspecting officers of the concerned departments.
6. Compensation, is to be paid for any environmental damage caused by it, as fixed by the Collector and District Magistrate as civil liability.
7. The industry shall maintain a good housekeeping.
8. Rain Water Harvesting (RWH) structure (s) shall be established at appropriate locations in the premises / colony.
9. The rules and regulations notified by Ministry of Law and Justice, GOI, regarding the Public Liability Insurance Act, 1991 shall be followed.
10. This order is valid for period of 5 years from the date of issue.

SCHEDULE – B

Water:

1. The source of water is mine seepages.

| S. No. | Purpose | Quantity (KLD) |
|--------|------------------|-----------------|
| 1. | Process & wash | -- |
| 2. | Dust suppression | 2160 KLD |
| 3. | Washing of HEMM | 50 KLD |
| 4. | Plantation | 60 KLD |
| 5. | Domestic | 70 KLD |
| | Total | 2340 KLD |

2. The maximum Waste Water Generation shall not exceed the following:

| S. No | Source | Quantity (KLD) |
|-------|-----------------|----------------|
| 1. | Washing of HEMM | 90KLD |
| 2. | Domestic | 70KLD |
| | Total | 160KLD |

3. Treatment & Disposal : The proponent shall comply with the following:

| S. No | Effluent | Treatment | Mode of final disposal |
|-------|------------------|-----------------------------------|------------------------------------|
| 1. | Washings of HEMM | Oil & Grease Trap & settling tank | Plantation |
| 2. | Domestic | STP* | Plantation. |
| 3. | Mine seepages | Settling tanks | Natural drains / Irrigation tanks. |

4. *The Proponent shall provide STP for the proposed colony. The Proponent shall submit detailed plan in this regard within two months.
5. Mine discharge water (28,450 m³/day) during peak monsoon shall be treated in three stage sedimentation tank along with coagulants, if required and shall meet standards described especially with respect to pH, As, F & total suspended solids (TSS) before discharge into natural water courses / agriculture.
6. Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned below.
- Spraying in mine pits
 - Domestic purposes.
 - Processing, whereby water gets polluted and pollutants are easily bio-degradable.
 - Processing, whereby water gets polluted and the pollutants are not easily bio-degradable.
7. The proponent shall take following mitigation measures as proposed to control water pollution:
- Garland drains to be provided all along the quarry surface area to prevent inrush of surface/ dump yard rain water into quarry.
 - Water accumulated due to rain as well as seepage to be led to the main sump of the pit for removal of suspended solids and to be subsequently pumped to the surface. The mine water to be utilized for dust suppression, vehicle washing, plantation etc.
 - Check dams/ rock fill dams to be constructed wherever necessary to facilitate water retention and reduce siltation of nearby water bodies.

- iv) Provision of oil and grease traps in Heavy Earth Moving Machinery (HEMM) workshop for treatment of effluent generated from washing of HEMM and treated water to be recycled/ reused.

Air:

8. The fugitive emissions generated from blasting, OB removal, coal extraction area, coal handling plant, transportation in the haul roads, loading & unloading points and HEMM equipment movement shall be controlled by adopting the following mitigation measures:
- i) Water spraying of haul roads and other transport routes at regular intervals.
 - ii) Continuous dust suppression arrangements at conveyer belts and coal transfer points at Coal Handling Plant (CHP). Effective dust suppression measures shall be taken up at pit head CHP.
 - iii) The crusher house shall be enclosed to the extent possible and dust suppression arrangement shall be provided at suitable locations in the CHP.
 - iv) All the conveyors, screens, crusher etc shall be provided with covers to avoid fugitive dust during operation.
 - v) Following measures shall be adopted at CHP to control dust emission:
 - Height of fall to be minimized at all coal transfer points.
 - Internal lining of chutes and bins to be done to take care of abrasion and dust.
 - Continuous water spraying arrangement to be made for dust suppression.
 - vi) Wet drilling shall be carried out for minimizing dust generation.
 - vii) Volume of dust rising from dumps by the action of winds shall be control by planting grass on slopes and plants on dumps soon after their formation.
 - viii) Black topping of coal transport roads like routes to coal handling plant, permanent internal roads etc., shall be taken up.
 - ix) Avenue plantation shall be developed along the roads.
 - x) Periodical maintenance of Heavy Earth Moving Machinery shall be carried out.
 - xi) Avoiding overloading of coal carrying trucks during transportation of coal and covering with tarpaulin to avoid coal spillage / fugitive emissions.
 - xii) Green belt development in the mining and surrounding areas.
 - xiii) Reclamation and plantation on the overburden dumps, green belt along the roads, around quarry and external overburden dump. Plantation shall be taken up in three rows which will serve as barrier to prevent dispersion of dust.

9. The mechanical equipment and vehicles shall be periodically maintained to reduce noise pollution.
10. Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the Regional Office of Telangana State Pollution Control Board.
11. The proponent shall ensure compliance of the National Ambient Air quality standards notified by MOE&F,GOI vide notification No. GSR 826(E), dated. 18.11.2009 during construction and regular operational phase of the project.
12. 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 shall be provided with ear plugs/muffs.
13. The industry shall take following mitigation measures as proposed to control noise pollution:
 - i) Controlled blasting technique with optimum explosive charge shall be scientifically designed for controlling noise and vibrations.
 - ii) Periodical maintenance and tuning of machinery to be ensured.
 - iii) Effective mufflers to be maintained on all HEMM.
 - iv) Green belt to be provided around the quarry, service buildings and dump yard, to screen the noise, as well as for arresting dust.

Solid Waste:

14. The solid waste generation from the proposed project is over burden material (OB) of 1045.65 Mm³ during entire life of the project. The over burden and top soil excavated from the quarry shall be dumped separately at pre-determined place. The top soil shall be utilized in spreading over external dumps and back filled areas as a part of reclamation.
15. The following rules and regulations notified by the MoE&F, GoI shall be implemented.
 - a) Municipal Solid Waste (Management and Handling) Rules, 2000.
 - b) Hazardous waste (Management, Handling and Transboundary Movement) Rules, 2008 and amendments thereof.
 - c) Batteries (Management & Handling) Amendment Rules, 2010.
 - d) E-Waste (Management & Handling) Rules, 2011

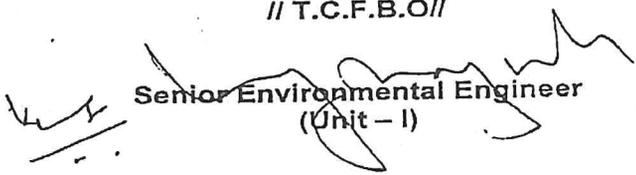
Other Conditions:

16. A separate environmental management cell with suitable qualified personnel shall be set up.
17. Measures for prevention and control of soil erosion and management of silt shall be undertaken.
18. The recommendations / commitments made during the Public Hearing held on 21.05.2009 shall explicitly be followed from pollution control point of view.
19. The proponent shall comply with all the directions issued by the Board from time to time.
20. Concealing the factual data or submission / fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts.
21. The Board reserves its right to modify above conditions or stipulate any further conditions in the interest of environment protection.

Sd/-
MEMBER SECRETARY

To,
M/s. Singareni Collieries Company Ltd (SCCL),
Jalagam Vengalrao Opencast Project – II (JVR OC-II),
Kommepalli (V), Sathupalli (M),
Khammam District.

// T.C.F.B.O//


Senior Environmental Engineer
(Unit – I)

5/9

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ANNEXURE-V



TELANGANA STATE POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, A - 3, INDUSTRIAL ESTATE,
SANATHNAGAR, HYDERABAD - 500 018

Phone: 23887500

Fax: 040-23815631

CONSENT FOR OPERATION (FRESH)

CONSENT ORDER NO. 170421033095

DATED: 03/01/2018.

(Consent Order for Existing/New or altered discharge of sewage and/or trade effluents/outlet under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and amendments thereof, Operation of the plant under section 21/22 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof

CONSENT is hereby granted under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, under section 21/22 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof, and the rules and orders made there under to M/s. Singareni Collieries Company Ltd, Jalagam Vengalrao Opencast Project - II (JVR OC - II), Kommepalli(V), Sathupalli (M), Khammam District(hereinafter referred to as 'the Applicant /Industry') and the industry is authorized to operate the industrial plant to discharge the Effluents from the outlets and the quantity of Emissions per hour from the chimneys, by operating pollution control equipment, as detailed below,

i) Out lets for discharge of Effluents :

| Outlet No | Description of Outlet | Max Daily Discharge in KLD | Point of Disposal |
|-----------|-----------------------|----------------------------|---|
| 1. | Washings of HEMM | 90 | After treatment in Oil & Grease trap, shall be used for onland for gardening duly complying to the standards stipulated in Schedule -B. |
| 2. | Domestic effluents | 70 | After treatment in STP, shall be used for greenbelt duly complying to the standards stipulated in Schedule -B. |

This consent order is valid for Opencast coal mining in Mine lease area of 1409.81Hectare for the following capacity:

| S.No. | Name of the Product | Capacity |
|-------|-------------------------|---|
| 1 | Coal (Open cast mining) | 4 MTPA (normative) with a peak production of 5 MTPA |

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This order is subject to the provision of 'the Acts' and the Rules and amendments made thereunder and further subject to the terms and conditions incorporated in the schedule A, B and C enclosed to this order.

This combined order of Consents and Authorization is valid for a period ending with the .October 31, 2022

Sd/-
MEMBER SECRETARY

To
The Project officer,
M/s. Singareni Collieries Company Ltd,
Jalagam Vengalrao Opencast Project - II (JVR OC - II),
Kommepalli(V), Sathupalli (M), Khammam District.
Pin: 507303

///T.C.F.B.O///


SENIOR ENVIRONMENTAL ENGINEER (FAC)
(Unit-I)

SCHEDULE – A

1. The applicant shall make applications through online for renewal of Consent (under Water & Air Acts) and Authorisation under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts for obtaining Consent & HW Authorisation of the Board. The applicant can also apply for Auto Renewal of the CFO atleast 30 days before the expiry of this order as per the procedure and eligibility stipulated in the Board Circular dt.19.11.2015 & 08.12.2015 (available in Board's Website: <http://tspcb.cgg.gov.in/Pages/Circulars.aspx>).
2. This order is issued in line with Board's CFE order dated 26.06.2015. Concealing the factual data or submission of false information/ fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts. The industry shall comply with earlier CFE order dated 26.06.2015.still applicable.
3. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to such authority (hereinafter referred to as the Appellate Authority) as constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution)Act,1981.
4. The industry shall immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions etc.
5. a) All the fugitive emissions shall be controlled with proper measures.
b)The applicant shall also install the equipment such as wind speed recorder, wind direction recorder.
6. The applicant shall not change or alter either the quality or the quantity or the rate of the discharge or the route of discharge and shall not change or alter either the prescribed quality or the rate of emission without the previous written permission of the Board.
7. The applicant shall, not later than 30 days from the date of issue of this consent order, certify in writing to the Board that the applicant has installed or provided for an alternative electric power source sufficient to operate all facilities installed by the applicant, to comply with the terms and conditions of this consent. In absence of alternative electric power source sufficient to operate all facilities installed by the applicant, to comply with the terms and conditions of this consent, production shall be stopped.
8. Any up-set condition in any plant/plants of the industry, which result in, increased effluent discharge and/ or violation of standards stipulated in this order or the emission of any Air Pollutant into the environment in excess of the standards laid down by the Board, occurs or is apprehended to occur due to accident, or other unforeseen act or event, the person-in-charge of the premises, from where such discharge / emission occurs or is apprehended to occur shall forthwith intimate the fact of such occurrence or the apprehension of such occurrence to this Board, by fax / email under intimation to the Collector and District Magistrate.
9. In case of such episodal discharges / emissions mentioned in item 6 above, the industry shall take immediate action to bring down the discharge / emission below the limits prescribed in this order.
10. A good house keeping shall be maintained both within the factory and in the premises. All hoods, pipes, valves, sewers and drains shall be leak proof. Floor washings shall be admitted into the effluent collection system only and shall not be allowed to find their way into storm drains or open areas.
11. a)The industry shall carryout analysis of waste water discharges or emissions through chimneys, for the parameters mentioned in Schedule – B of this order at regular intervals.
b)The industry shall maintain following records to accessible to the Board, whenever required.
 - i. Analysis reports of waste water/ emissions.
 - ii. Log book for operation of pollution control systems.
 - iii. Inspection book

12. The applicant shall set up FOUR Ambient Air Quality Monitoring Stations for continuous recording of relevant critical parameters mentioned in Schedule – B as per the CPCB guidelines and submit monthly reports.
13. Separate power connection with energy meter shall be provided for the Pollution Control Equipments and record of power consumption and chemicals consumption for the operation of pollution control equipment shall be maintained separately.
14. The applicant shall comply with the directives/orders issued by the Board in this order and at all subsequent times without any negligence on his part. The applicant shall be liable for such legal action against him as per provisions of the Law/Act in case if non-compliance of any order/directive issued at any time and/or violation of the terms and conditions of this consent order.
15. The applicant shall furnish to the visiting officer and / or the Board any information regarding the construction, installation or operation of the effluent treatment system / air pollution control equipment / secured storage area of Hazardous Waste and such other particulars as may be pertinent for preventing and controlling pollution.
16. The industry is liable to pay compensation for any environmental damage caused by it, as fixed by the Collector and District Magistrate as Civil liability.
17. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 shall be followed.
18. Any unauthorized change in personnel, equipment as working condition as mentioned in the application by the person authorized shall constitute a breach of his authorization.
19. The applicant shall comply with the provisions of Batteries (Management & Handling) Rules, 2001.
20. The applicant shall put up two sign boards (6x4 ft. each) at publicly visible places at the main gate. The first sign board shall provide information on specific conditions of CFO. The second sign board shall display online data on quantity and nature of hazardous chemicals being used in the plant, as well as water, air emissions and solid waste generated within the premises.
21. The applicant may explore the possibility of tapping the solar energy for their energy requirements.
22. The applicant shall exhibit the Consent order of the Board in the premises at a prominent place for the information of the inspecting officers of the different departments.
23. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves the right and powers under Section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and its amendments thereof and under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and its amendments thereof to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.

SCHEDULE - B

1. Total Water Consumption shall not exceed : 2340.00 KLD.

| S.No | Purpose | Quantity in KLD |
|------|------------------|-----------------|
| 1 | Dust suppression | 2160 |
| 2 | Washings of HEMM | 50 |
| 3 | Domestic | 70 |
| 4 | Greenbelt | 60 |

2. The Treated Effluent Discharged shall not exceed the following prescribed standards

| Outlet No. | Parameter No. | Limiting Standards |
|------------|-----------------------------------|--------------------|
| 1 & 2 | pH | 5.5 – 9.0 |
| | Total Suspended Solids (TSS) | 100 mg/l |
| | Oil & Grease | 10 mg/l |
| | BOD (3 days at 27 ^o C) | 30 mg/l |
| | Total Dissolved Solids (TDS) | 2100 mg/l |
| | Chemical Oxygen Demand (COD) | 250 mg/l |

3. The industry should not produce beyond the permitted capacity as mentioned in this order, without obtaining prior CFE & CFO of the Board. The mining capacity of the coal also should not be increased more than IBM approved capacity.
4. The industry should comply with the ambient air quality standards of PM₁₀(Particulate Matter size less than 10um) - 100 ug/ m³; PM_{2.5}(Particulate Matter size less than 2.5 um) - 60 ug/ m³; SO₂ - 80 ug/ m³; NO_x - 80 ug/m³, outside the mine premises at the periphery of the mine.
5. Standards of other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.
 - i. Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A)
 - ii. Night time (10 PM to 6 AM) - 70 dB (A).
6. The project shall submit the details of additional load takenup in JVR – OC-I, within a month.
7. The project shall maintain separate water meters for recording water consumption for various purposes and also maintain daily records.
8. The project shall provide STP to treat 70 KLD Domestic wastewater generated from colony, etc., within 6 months. They shall submit time bound action plant to the Board within a month.
9. The project shall maintain the water spraying system properly by adopting preventive maintenance schedule to avoid fugitive dust emissions.
10. The project shall carryout water spraying on haul roads to avoid fugitive dust emissions due to vehicular movement. The project shall provide permanent water sprinkling system along the haul roads.
11. The project shall install 3 fixed AAQM stations and one CAAQM station in core area for monitoring of ambient air and connect the CAAQM data to TSPCB server. They shall submit monthly AAQM data to RO, Kothagudem.
12. The project shall develop and maintain greenbelt as per norms.
13. The industry shall take effective measures such as covering coal transport vehicles with tarpaulins, mechanical sweeping of roads, etc to avoid fugitive emissions.
14. The industry shall maintain water mist sprayers at coal bunkers to control fugitive emissions.
15. The industry shall supply coal with ash content not exceeding 34% to Thermal Power plants as per the MOE&F,GOI notification GSR.02(E), dt.02.01.2014.
16. The vehicular emissions should be kept under control and regularly monitored. Vehicles used for transporting the mineral should be covered with tarpaulins and optimally loaded.

17. The personnel working in dusty areas should wear protective / respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
18. The industry should reuse the treated effluents generated from workshop for dust separation and for raising plantation.
19. Blasting should be sequential in such a manner to achieve minimum vibration.
20. The industry should comply with the following for controlling air pollution.
 - To avoid the dust generation from the drilling operations, wet-drilling should be done.
 - Use of appropriate explosives for controlled blasting and avoid overcharging the blast holes.
 - The volume of dust rising from dumps by the action of wind should be controlled significantly by planting grasses on slopes and plants on dumps soon after their formation.
 - To overcome the problems of dust generation from mine haul roads, the following steps should be adopted.
 - Black topping of permanent roads like routes to coal handling plant, permanent internal roads etc.
 - Water spraying on haul roads and permanent transport routes at required frequencies. Provision should be made for procurement of six water sprinklers for this purpose.
 - Avenue plantation along roads should be adopted.
 - Effective dust suppression measures should be taken up at pit head coal handling plant (CHP). The crusher house should be enclosed to the extent possible and dust suppression arrangement should be provided at suitable locations in the CHP. All the conveyors, screens, crusher etc., should be provided with covers to avoid fugitive dust during operation. Some of the measures proposed to be adopted at CHP in order to control dust emission include:
 - Height of fall to be minimized at all coal transfer points.
 - Internal lining of chutes and bins should be done to take care of abrasion & dust.
21. Dumping of overburden, if done, should use the retreating pyramid bench formation with concurrent, physical and biological reclamation. Dumps should be contoured and provided with relief control and stabilized. Dump tops should be compacted, leveled and be properly drained.
22. Soil binding and nitrogen fixing plants should be planted in the Mining Lease Area. Biological reclamation should be done in two phases. The first phase should be plant appropriate quick growing grass and shrubs and the second phase should grow slower native shrubs and trees.
23. Ground water table levels should be monitored every season. Any lowering of the ground water table in comparison to the previous season should be reported to the Board immediately. Discarded pits should be allowed to be filled with water.
24. Vehicles should be well maintained and engine idling should be minimized. Vehicle cabs should be made dust-proof.
25. The applicant should submit Environment statement in Form V before 30th September of every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.

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26. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991, should be followed.
27. The conditions stipulated in this order are without any prejudice to rights and contentions of this Board in any Hon'ble court of Law.

Sd/-
MEMBER SECRETARY

To
The Project officer,
M/s. Singareni Collieries Company Ltd,
Jalagam Vengalrao Opencast Project - II (JVR OC - II),
Kommepalli(V), Sathupalli (M), Khammam District.
Pin: 507303

///T.C.F.B.O///


SENIOR ENVIRONMENTAL ENGINEER (FAC)
(Unit-I)

(41)

ANNEXURE-VI

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|---|--|
|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

Form IV
 Report by the State Board Analyst
 (See rule 14)

Sample Codes. ZLWGL20-123215 & 123216
 Dated the 22nd December, 2020

I hereby certify that I, Smt. R. Parvathi, State Board Analyst, Zonal Laboratory duly appointed under sub-section (3) of section 53 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) received the day of 10.12.2020 from the Regional office, Kothagudem, effluent samples of M/s. Singareni Collieries Company Limited, JVR OC-I & II Expansion Project, Ayyagaripet (V), Sathupalli (M), Khammam District collected on 09.12.2020. The sample was in a condition fit for analysis reported below:

| Sample code | Sample source |
|----------------|--|
| ZLWGL20-123215 | Inlet of ETP (Before workshop) |
| ZLWGL20-123216 | Outlet of ETP before utilization for on-land gardening within mine area (Base workshop). |

I further certify that I have analyzed the aforementioned samples from 10.12.2020 to 22.12.2020 and declare the result of the analysis to be as follows: -

| S. No. | Parameter | Method (*) | Unit | Sample Code | | CFO Standards |
|--------|------------------------------|----------------|------|-------------|--------|---------------|
| | | | | 123215 | 123216 | |
| | | | | Values | | |
| 1 | pH at 25°C | 4500-B | - | 8.01 | 8.37 | 5.5-9.0 |
| 2 | Total Suspended Solids | 2540-D | mg/l | 19 | 7 | 100 |
| 3 | Total Dissolved Solids | 2540-C | mg/l | 819 | 761 | 2100 |
| 4 | COD | 5220-B | mg/l | 32 | 20 | 250 |
| 5 | BOD ₅ at 27 deg.C | IS-3025 (1993) | mg/l | - | 2 | 30 |
| 6 | Oil & grease | 5520 A | mg/l | - | NIL | 10 |

The condition of the seals, fastening and containers on receipt was intact.

Signed this on 22nd December, 2020

Note: • *Standard methods of APHA, 23rd Edition.
 • Results related to sample as received.

Units: • All values are expressed in mg/l, except pH.

Address:
 R. Parvathi
 Senior Environmental Scientist (FAC),
 T.S. Pollution control Board,
 Zonal Laboratory, Warangal.



Board Analyst

BOARD ANALYST

T.S. Pollution Control Board
 Zonal Laboratory Hyderabad Zone
 Warangal-506 001.

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|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

Form IV
Report by the State Board Analyst
(See rule 14)

Sample Codes. ZLWGL20-123217 to 123219
Dated the 22nd December, 2020

I hereby certify that I, Smt. R. Parvathi, State Board Analyst, Zonal Laboratory duly appointed under sub-section (3) of section 53 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) received the day of 10.12.2020 from the Regional office, Kothagudem, effluent samples of M/s. Singareni Collieries Company Limited, JVR OC-I & II Expansion Project, Sathupalli, Khammam District collected on 09.12.2020. The sample was in a condition fit for analysis reported below:

| Sample code | Sample source |
|----------------|---|
| ZLWGL20-123217 | Water sample collected from stagnated water in earthen tank near CHP area. |
| ZLWGL20-123218 | Water sample collected from drain before joining into Kistaram Cheruvu. |
| ZLWGL20-123219 | Water sample collected from drain connected to Chillavagu which is passing through reserve forest area. |

I further certify that I have analyzed the aforementioned samples from 10.12.2020 to 22.12.2020 and declare the result of the analysis to be as follows: -

| S. No. | Parameter | Method (*) | Unit | Sample Code | | | CFO Standards |
|--------|------------------------------|----------------|------|-------------|--------|--------|---------------|
| | | | | 123217 | 123218 | 123219 | |
| | | | | Values | | | |
| 1 | pH at 25°C | 4500-B | - | 7.61 | 7.84 | 7.40 | 5.5-9.0 |
| 2 | Total Suspended Solids | 2540-D | mg/l | 9 | 70 | 4 | 100 |
| 3 | Total Dissolved Solids | 2540-C | mg/l | 1025 | 726 | 792 | 2100 |
| 4 | COD | 5220-B | mg/l | 24 | 8 | 32 | 250 |
| 5 | BOD ₅ at 27 deg.C | IS-3025 (1993) | mg/l | 2 | 0.4 | 3 | 30 |
| 6 | Oil & grease | 5520 A | mg/l | NIL | NIL | NIL | 10 |

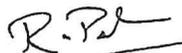
The condition of the seals, fastening and containers on receipt was intact.

Signed this on 22nd December, 2020

- Note: • *Standard methods of APHA, 23rd Edition.
• Results related to sample as received.

Units: • All values are expressed in mg/l, except pH.

Address:
Smt. R. Parvathi
Senior Environmental Scientist (FAC),
T.S. Pollution control Board,
Zonal Laboratory, Warangal.


 Board Analyst
BOARD ANALYST
 T.S. Pollution Control Board
 Zonal Laboratory Hyderabad Zone
 Warangal-506 001.

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|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

ANALYSIS REPORT

| | |
|---------------------------------|---|
| Sample Code | : ZLWGL20-123220 |
| Sample description | : Complaint filed by Residents of Rejerla Village against M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam District. |
| Date of Collection | : 08.12.2020 |
| Date of submission | : 10.12.2020 |
| Sample Collected & Submitted by | : Zonal laboratory, Warangal |
| Point of Sample | |
| 123220 | Water sample collected from bore well in the premises of Sri Sri Kali Matha temple, Rejerla Road, Sathupalli, Khammam District. |

| S. No. | Parameters | Result | IS 10500 : 2012 Drinking Water Standards | |
|--------|--|--------|--|-------------------|
| | | 123220 | Acceptable Limit | Permissible Limit |
| 1. | pH at 25°C | 6.54 | 6.5-8.5 | No Relaxation |
| 2. | Electrical Conductivity | 1215 | - | - |
| 3. | Total Suspended Solids | 32 | - | - |
| 4. | Total Dissolved Solids (TDS) | 763 | 500 | 2000 |
| 5. | Chemical Oxygen Demand | 9 | - | - |
| 6. | Chlorides as Cl ⁻ | 48 | 250 | 1000 |
| 7. | Sulphates as SO ₄ ⁻² | 240 | 200 | 400 |
| 8. | Total Alkalinity as CaCO ₃ | 328 | 200 | 600 |
| 9. | Total Hardness as CaCO ₃ | 565 | 200 | 600 |
| 10. | Calcium as Ca+2 | 142 | 75 | 200 |
| 11. | Magnesium as Mg+2 | 51 | 30 | 100 |
| 12. | Sodium | 38 | - | - |
| 13. | Potassium | 5 | - | - |
| 14. | Fluoride | 0.52 | 1.0 | 1.5 |
| 15. | Nitrates | 3.5 | 45 | No Relaxation |
| 16. | Phosphates | 0.001 | - | - |
| 17. | Boron | BDL | 0.5 | 1.0 |
| 18. | % Sodium | 12.6 | - | - |
| 19. | SAR | 0.5 | - | - |
| 20. | Copper as Cu | BDL | 0.5 | 1.5 |
| 21. | Iron as Fe | 9.24 | 0.3 | No Relaxation |
| 22. | Zinc as Zn | 20.58 | 5 | 15 |
| Note: | Results related to sample as received. BDL: Below detectable limit. | | | |

R. Pal

SENIOR ENVIRONMENTAL SCIENTIST (FAC)
 Senior Environmental Scientist
 T.S. Pollution Control Board,
 Zonal Laboratory Hyderabad Zone
 WARANGAL-506 001.

(44)

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|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

ANALYSIS REPORT

| | |
|---------------------------------|---|
| Sample Code | : ZLWGL20-123221 to 123223 |
| Sample description | : Complaint filed by Sri-Nandhu Naik and others, Residents of NTR nagar, Against M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam District. |
| Date of Collection | : 08.12.2020 |
| Date of submission | : 10.12.2020 |
| Sample Collected & Submitted by | : Zonal laboratory, Warangal. |
| Point of Sample: | |
| 123221 | Water sample collected from bore well in the premises of house of Sri MD. Muzebur Rehman, S/o Amed, H.No. 13-108, 8 th Ward, NRT Nagar, Sathupalli, Khammam Dist. |
| 123222 | Water sample collected from the Municipal Bore well located in front of House of Sri Sesh kumar Kommalla, S/o Satyamurthy, H.No. 14-132, 8 th Ward, NRT Nagar, Sathupalli, Khammam Dist. |
| 123223 | Water sample collected from the Municipal Bore well located in front of House of Sri M. Laxman, S/o Venkataiah, H.No. 10-184, Main Road, JVR Nagar, Sathupalli, Khammam Dist. |

| S. No. | Parameters | Result | | | IS 10500 : 2012 Drinking Water Standards | |
|--------|--|--------|--------|--------|--|-------------------|
| | | 123221 | 123222 | 123223 | Acceptable Limit | Permissible Limit |
| 1. | pH at 25°C | 6.75 | 7.40 | 7.64 | 6.5-8.5 | No Relaxation |
| 2. | Electrical Conductivity | 1253 | 699 | 1074 | - | - |
| 3. | Total Suspended Solids | 70 | 26 | 3 | - | - |
| 4. | Total Dissolved Solids (TDS) | 804 | 428 | 646 | 500 | 2000 |
| 5. | Chemical Oxygen Demand | 12 | 5 | 8 | - | - |
| 6. | Chlorides as Cl ⁻ | 128 | 58 | 122 | 250 | 1000 |
| 7. | Sulphates as SO ₄ ⁻² | 102 | 42 | 54 | 200 | 400 |
| 8. | Total Alkalinity as CaCO ₃ | 315 | 252 | 325 | 200 | 600 |
| 9. | Total Hardness as CaCO ₃ | 390 | 285 | 360 | 200 | 600 |
| 10. | Calcium as Ca+2 | 96 | 72 | 92 | 75 | 200 |
| 11. | Magnesium as Mg+2 | 37 | 26 | 32 | 30 | 100 |
| 12. | Sodium | 102 | 44 | 92 | - | - |
| 13. | Potassium | 7 | 3 | 6 | - | - |
| 14. | Fluoride | 0.12 | 0.39 | 0.23 | 1.0 | 1.5 |
| 15. | Nitrates | 6.8 | 5.0 | 1.2 | 45 | No Relaxation |
| 16. | Phosphates | 0.004 | BDL | BDL | - | - |
| 17. | Boron | BDL | BDL | BDL | 0.5 | 1.0 |
| 18. | % Sodium | 35.7 | 24.9 | 35.2 | - | - |
| 19. | SAR | 1.6 | 0.8 | 1.5 | - | - |
| 20. | Copper as Cu | BDL | BDL | ND | 0.5 | 1.5 |
| 21. | Iron as Fe | 0.16 | 4.99 | 0.20 | 0.3 | No Relaxation |
| 22. | Zinc as Zn | 0.19 | 0.67 | BDL | 5 | 15 |

Note: Results related to sample as received.
BDL: Below detectable limit, ND: Not Detected.

R. P. J.

SENIOR ENVIRONMENTAL SCIENTIST (FAC)
 Senior Environmental Scientist
 T.S. Pollution Control Board,
 Zonal Laboratory Hyderabad Zone
 WARANGAL-506 001.

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|  తెలంగాణ ప్రదేశ్ Telangana State | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |
|---|---|

ANALYSIS REPORT

| | |
|---------------------------------|--|
| Sample Code | : ZLWGL20-123224 |
| Sample description | : Complait filed by Residents of Rejerla Village, Sathupalli, Against M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam Dist. |
| Date of Collection | : 08.12.2020 |
| Date of submission | : 10.12.2020 |
| Sample Collected & Submitted by | : Zonal Laboratory, Warangal. |
| Point of Sample | : 123224-Water sample collected from Jeenugupalli Cheruvu, Rejerla, Sathupalli, Khammam Dist. |

| Sl. No. | Parameter | Sample No. | CPCB Water Quality Criteria | | | | |
|---------------|--|------------|-----------------------------|---------|---------|---------|----------|
| | | 123224 | Class-A | Class-B | Class-C | Class-D | Class-E |
| | | Values | | | | | |
| 1. | pH | 6.80 | 6.5-8.5 | 6.5-8.5 | 6.0-9.0 | 6.5-8.5 | 6.0-8.5 |
| 2. | Electrical Conductivity (µS/cm) | 166 | - | - | - | - | 2250 Max |
| 3. | Dissolved Oxygen | 7.5 | ≥6.0 | ≥5.0 | ≥4.0 | ≥4.0 | - |
| 4. | Chemical Oxygen Demand (COD) | 8 | - | - | - | - | - |
| 5. | BOD 3days at 27°C | 0.4 | ≤2.0 | ≤3.0 | ≤3.0 | - | - |
| 6. | Total Coliform | 78 | ≤50 | ≤500 | ≤5000 | - | - |
| 7. | Fecal Coliform | NIL | - | - | - | - | - |
| 8. | Free Ammonia | BDL | - | - | - | ≤1.2 | - |
| 9. | Boron as B | BDL | - | - | - | - | 2 Max |
| 10. | Sodium Absorption Ratio | 0.2 | - | - | - | - | 26 Max |
| 11. | Cadmium as Cd | ND | - | - | - | - | - |
| 12. | Lead as Pb | ND | - | - | - | - | - |
| 13. | Nickel as Ni | ND | - | - | - | - | - |
| 14. | Total Chroium as Cr | ND | - | - | - | - | - |
| 15. | Iorn as Fe | 0.4 | - | - | - | - | - |
| 16. | Zinc as Zn | BDL | - | - | - | - | - |
| 17. | Copper as Cu | ND | - | - | - | - | - |
| Units: | All values are expressed in mg/l except pH, Electrical Conductivity, Total Coliform, Fecal Coliform and Sodium Absorption Ratio. | | | | | | |
| Note: | ND-Not Detected. BDL-Below Detectable Limit. | | | | | | |

Class of Water use:

Class-A: Drinking Water Source without conventional treatment but after disinfection.

Class-B: Outdoor bathing (Organised).

Class-C: Drinking water source after conventional treatment and disinfection.

Class-D: Propagation of Wild life and Fisheries.

Class-E: Irrigation, Industrial Cooling, Controlled Waste disposal.

Below Class E: Not meeting A, B, C, D and E criteria.

R.P.L

SENIOR ENVIRONMENTAL SCIENTIST (FAC)

Senior Environmental Scientist

T.S. Pollution Control Board,

Zonal Laboratory Hyderabad Zone

WARANGAL-506 001.

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|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

ANALYSIS REPORT

| | |
|---------------------------------|--|
| Sample Code | : ZLWGL20-123225 |
| Sample description | : M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam Dist. |
| Date of Collection | : 09.12.2020 |
| Date of submission | : 10.12.2020 |
| Sample Collected & Submitted by | : Zonal Laboratory, Warangal. |
| Point of Sample | : 123225-Water sample collected from Kistaram Cheruvu, Kistaram, Sathupalli, Khammam Dist. |

| Sl. No. | Parameter | Sample No. | CPCB Water Quality Criteria | | | | |
|---------|--|------------|-----------------------------|---------|---------|---------|----------|
| | | 123225 | Class-A | Class-B | Class-C | Class-D | Class-E |
| | | Values | | | | | |
| 1. | pH | 7.94 | 6.5-8.5 | 6.5-8.5 | 6.0-9.0 | 6.5-8.5 | 6.0-8.5 |
| 2. | Electrical Conductivity (µS/cm) | 702 | - | - | - | - | 2250 Max |
| 3. | Dissolved Oxygen | 7.1 | ≥6.0 | ≥5.0 | ≥4.0 | ≥4.0 | - |
| 4. | Chemical Oxygen Demand (COD) | 9 | - | - | - | - | - |
| 5. | BOD 3days at 27°C | 0.5 | ≤2.0 | ≤3.0 | ≤3.0 | - | - |
| 6. | Total Coliform | 124 | ≤50 | ≤500 | ≤5000 | - | - |
| 7. | Fecal Coliform | NIL | - | - | - | - | - |
| 8. | Free Ammonia | BDL | - | - | - | ≤1.2 | - |
| 9. | Boron as B | BDL | - | - | - | - | 2 Max |
| 10. | Sodium Absorption Ratio | 0.8 | - | - | - | - | 26 Max |
| 11. | Cadmium as Cd | BDL | - | - | - | - | - |
| 12. | Lead as Pb | ND | - | - | - | - | - |
| 13. | Nickel as Ni | ND | - | - | - | - | - |
| 14. | Total Chromium as Cr | ND | - | - | - | - | - |
| 15. | Iron as Fe | 0.17 | - | - | - | - | - |
| 16. | Zinc as Zn | BDL | - | - | - | - | - |
| 17. | Copper as Cu | ND | - | - | - | - | - |
| Units: | All values are expressed in mg/l except pH, Electrical Conductivity, Total Coliform, Fecal Coliform and Sodium Absorption Ratio. | | | | | | |
| Note: | ND-Not Detected. BDL-Below Detectable Limits. | | | | | | |

Class of Water use:

- Class-A: Drinking Water Source without conventional treatment but after disinfection.
- Class-B: Outdoor bathing (Organised).
- Class-C: Drinking water source after conventional treatment and disinfection.
- Class-D: Propagation of Wild life and Fisheries.
- Class-E: Irrigation, Industrial Cooling, Controlled Waste disposal.
- Below Class E: Not meeting A, B, C, D and E criteria.

R. P. S.

SENIOR ENVIRONMENTAL SCIENTIST (FAC)

Senior Environmental Scientist
 T.S. Pollution Control Board,
 Zonal Laboratory Hyderabad Zone
 WARANGAL-506 001.

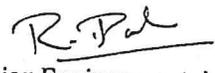
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|  తెలంగాణ రాష్ట్రం Telangana State | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

ANALYSIS REPORT

| | |
|--|---|
| Sample Code | : ZLWGL20-123226 |
| Sample description | : Complaint filed by Residents of Rejerla Village, Sathupalli, Against M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam Dist. |
| Date of Collection | : 08.12.2020 |
| Date of submission | : 10.12.2020 |
| Sample Collected & Sample submitted by | : Zonal Laboratory, Warangal. |
| Point of Sample | : 123226-Soil sample collected from Jeenugupalli Cheruvu, Rejerla, Sathupalli, Khammam Dist. |

| Parameter (s) | Results | Standards as per CRIT and TCLP Standards as per Schedule – II of HWM Rules 2016 |
|-------------------------------------|--|---|
| | 123226 | |
| Colour | Brown | - |
| State | Solid | - |
| pH (1:5) | 6.68 | ≤2 (Hazardous) ≥12.5 (Hazardous) |
| Electrical Conductivity μs/cm (1:5) | 126 | - |
| TCLP Copper (mg/l) | BDL | 25 |
| TCLP Zinc (mg/l) | 0.34 | 250 |
| TCLP Cadmium (mg/l) | ND | 1.0 |
| TCLP Lead (mg/l) | BDL | 5.0 |
| TCLP Nickel (mg/l) | BDL | 20 |
| TCLP Total Chromium (mg/l) | BDL | 5.0 |
| TCLP Arsenic (mg/l) | ND | 5.0 |
| TCLP Mercury (mg/l) | ND | 0.2 |
| NOTE: | Results related to sample as received. | |
| | BDL-Below Detectable Limit. | |
| | ND-Not Detected. | |


 Senior Environmental Scientist (FAC)
 Senior Environmental Scientist
 T.S. Pollution Control Board,
 Zonal Laboratory Hyderabad Zone
 WARANGAL-506 001.

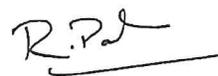
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|  తెలంగాణ రాష్ట్రం Telangana State | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

ANALYSIS REPORT

| | |
|--|--|
| Sample Code | : ZLWGL20-123227 |
| Sample description | : M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam Dist. |
| Date of Collection | : 09.12.2020 |
| Date of submission | : 10.12.2020 |
| Sample Collected & Sample submitted by | : Zonal Laboratory, Warangal. |
| Point of Sample | : 123227-Soil sample collected from Kistaram Cheruvu, Kistaram, Sathupalli, Khammam Dist. |

| Parameter (s) | Results | Standards as per CRIT and TCLP Standards as per Schedule – II of HWM Rules 2016 |
|-------------------------------------|---|---|
| | 123227 | |
| Colour | Light Brown | - |
| State | Semi Solid | - |
| pH (1:5) | 7.38 | ≤2 (Hazardous) ≥12.5 (Hazardous) |
| Electrical Conductivity μs/cm (1:5) | 213 | - |
| TCLP Copper (mg/l) | BDL | 25 |
| TCLP Zinc (mg/l) | 0.11 | 250 |
| TCLP Cadmium (mg/l) | ND | 1.0 |
| TCLP Lead (mg/l) | BDL | 5.0 |
| TCLP Nickel (mg/l) | 0.3 | 20 |
| TCLP Total Chromium (mg/l) | ND | 5.0 |
| TCLP Arsenic (mg/l) | ND | 5.0 |
| TCLP Mercury (mg/l) | ND | 0.2 |
| NOTE: | Results related to sample as received. BDL-Below Detectable Limit. ND-Not Detected. | |



Senior Environmental Scientist (FAC)
Senior Environmental Scientist
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Zonal Laboratory Hyderabad Zone
WARANGAL-506 001.

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|  తెలంగాణ రాష్ట్రం Telangana State | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

Ambient Level Noise Monitoring Report

| | | |
|------------------------------------|--|-----------------------|
| Name of the Noise Source : | Complaint filed by Sri Banothu Nandhu Naik and Others Residents of NTR Nagar, against M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam Dist. | |
| Date of Monitoring: | 07.12.2020 | |
| Time of Monitoring: | 03:42 pm to 04:20 pm (Day time) | |
| Report No. | ZLWGL20-123228 | |
| Samples Collected & Submitted by : | Sri. P. Narsimha Assistant Scientist, Zonal laboratory, Warangal. | |
| Instrument make: | 3M Sound Scanner USA | Model No.: SE40110501 |

| Monitoring location | Observed Noise Level dB(A) Leq |
|--|--------------------------------|
| (*) Back ground noise level conducted at Residence of Sri Racharla Mohan Rao, S/o Vishwanatham, H.No. 13-167, NTR Nagar, Sathupalli, Khammam Dist. (03:42 pm to 03:49 pm). | 55.00 |
| (**) Noise level conducted at Residence of Sri Racharla Mohan Rao, S/o Vishwanatham, H.No. 13-167, NTR Nagar, Sathupalli, Khammam Dist. (03:50 pm to 04:20 pm). | 56.11 |

Actual ambient sound pressure levels are calculated as per the formula :

$$L_{\text{pressure}} = 10 \cdot \log(10^{pw} L_p/10 - 10^{pw} \text{background } L_p/10)$$

The reported values are calculated as per the above formula.

*Standards: National Ambient Air Quality Standards in respect of Noise, [(Schedule III) (Rule 3)] of E (P), Act, 1986.

Note: All values are corrected to back ground noise.

Ambient Noise Standards* Schedule-III (Rule-3) of E(P) Act, 1986.

| Area Code | Category of Area / Zone | Day time dB(A) Leq | Night time dB(A) Leq |
|-----------|-------------------------|--------------------|----------------------|
| A | Industrial area | 75 | 70 |
| B | Commercial area | 65 | 55 |
| C | Residential area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

1. Day time shall mean from 6.00 am to 10.00 pm.

2. Night time shall mean from 10.00 pm to 6.00 am.

| | |
|-------|---|
| Note: | (*) Back ground Noise levels (Ambient Noise level) are measured during Blasting was not in operation. |
| | (**) Noise levels (Ambient Noise level) are measured during Blasting was in operation. |

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Senior Environmental Scientist
T.S. Pollution Control Board,
Zonal Laboratory Hyderabad Zone
WARANGAL-506 001.

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|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

Ambient Level Noise Monitoring Report

| | |
|---------------------------------------|--|
| Name of the Noise Source : | M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam Dist. |
| Date of Monitoring: | 09.12.2020 |
| Time of Monitoring: | 03:17 pm to 04:00 pm (Day time) |
| Report No. | ZLWGL20-123229 |
| Samples Collected & Submitted by : | Sri. P. Narsimha Assistant Scientist, Zonal laboratory, Warangal. |
| Instrument make: 3M Sound Scanner USA | Model No.: SE40110501 |

| Monitoring location | Observed Noise Level dB(A) Leq |
|--|--------------------------------------|
| (*) Back ground noise level conducted at terrace of Project office. (03:17 pm to 03:22 pm). | 60.21 |
| (**) Noise level conducted at terrace of Project office. (03:30 pm to 04:00 pm). | 75.78 |

Actual ambient sound pressure levels are calculated as per the formula :

$$L_{pressure} = 10 \cdot \log(10^{pw} L_p/10 - 10^{pw} \text{background } L_p/10)$$

The reported values are calculated as per the above formula.

*Standards: National Ambient Air Quality Standards in respect of Noise, [(Schedule III) (Rule 3)] of E (P), Act, 1986.

Note: All values are corrected to back ground noise.

Ambient Noise Standards* Schedule-III (Rule-3) of E(P) Act, 1986.

| Area Code | Category of Area / Zone | Day time dB(A) Leq | Night time dB(A) Leq |
|--------------|-------------------------|--------------------|----------------------|
| A | Industrial area | 75 | 70 |
| B | Commercial area | 65 | 55 |
| C | Residential area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

1. Day time shall mean from 6.00 am to 10.00 pm.

2. Night time shall mean from 10.00 pm to 6.00 am.

Note: (*) Back ground Noise levels (Ambient Noise level) are measured during Blasting was not in operation.
 (**) Noise levels (Ambient Noise level) are measured during Blasting was in operation.

R.P.L

Senior Environmental Scientist (FAC)

Senior Environmental Scientist

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Zonal Laboratory Hyderabad Zone
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|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal - 506001 |
| | ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |

Ambient Air Quality Analysis Report

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|------------------------------------|--|
| Sample No. : | ZLWGL20-123202 |
| Name of the industry: | Complaint filed by Residents of Rejerla Village against M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam District. |
| Samples Collected & Submitted by : | Zonal laboratory, Warangal. |

| Sampling Location | Date of sampling | Time and duration of sampling | PM ₁₀ µg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m ³ |
|--|------------------|-------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| Ambient Air Quality Monitoring conducted on the terrace of house of Sri Maddikuntla. Venkatachenna Rammohan Rao, S/o Satyanarayana, BC Colony, Rejerla (V), Sathupalli (M), Khammam (D). | 07.12.2020 | 03:45pm to 11:45pm | 91 | 5 | 10 |
| | | | | 6 | 9 |
| Average | | | 91 | 6 | 10 |
| National Ambient Air Quality Standards (NAAQS) | | | 100 | 80 | 80 |

NAAQS, CPCB Notification, New Delhi Dt. 18.11.2009[(Schedule VII) (Rule 3(3B)] of E(P), Act,1986.
 PM₁₀ - Particle size less than 10 micrometers.


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|  తెలంగాణ పోల్యూషన్ కంట్రోల్ బోర్డు TELANGANA STATE POLLUTION CONTROL BOARD | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal - 506001 ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |
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Ambient Air Quality Analysis Reports

| | |
|------------------------------------|--|
| Sample No. : | ZLWGL20-123203 to 123205 |
| Name of the industry: | Complaint against M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam District. |
| Samples Collected & Submitted by : | Zonal laboratory, Warangal. |

| Sampling Location | Date of sampling | Time and duration of sampling | PM ₁₀ µg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m ³ | |
|---|---|-------------------------------|------------------------------------|-----------------------------------|-----------------------------------|----|
| Ambient Air Quality Monitoring conducted on the terrace of house of Sri Racharla. Mohan Rao, S/O Vishwanatham, H.No. 1-3-167, NTR Nagar, Sathupalli (V & M), Khammam (D). | 07.12.2020 & 08.12.2020 | 12:40 pm to 08:40 pm | 100 | 5 | 9 | |
| | | 08:40 pm to 04:40 am | 83 | 6 | 26 | |
| | 24 Hrs Average | 04:40 am to 12:40 pm | 56 | 5 | 17 | |
| | | | 80 | 9 | 13 | |
| | National Ambient Air Quality Standards (NAAQS) | | | 80 | 10 | 14 |
| | | | | 100 | 5 | 22 |
| | NAAQS, CPCB Notification, New Delhi Dt. 18.11.2009[(Schedule VII) (Rule 3(B)) of E(P), Act, 1986. | | | | 7 | 17 |
| | PM ₁₀ - Particle size less than 10 micrometers. | | | | 80 | 80 |


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|  తెలంగాణ TELANGANA | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal - 506001 ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |
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Ambient Air Quality Analysis Reports

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|------------------------------------|--|
| Sample No. : | ZLWGL20-123206 to 123208 |
| Name of the industry: | Complaint filed by Sri Banoth Nandhu Naik and others Residents of NTR Nagar against M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam District. |
| Samples Collected & Submitted by : | Zonal laboratory, Warangal. |

| Sampling Location | Date of sampling | Time and duration of sampling | PM ₁₀ µg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m ³ | |
|---|--|-------------------------------|------------------------------------|-----------------------------------|-----------------------------------|----|
| Ambient Air Quality Monitoring conducted on the terrace of house of Sri SK. Khurshida Bagum, H.No. 10-59, Road No. 4, JVR Nagar, Sathupalli (V & M), Khammam (D). | 08.12.2020 & 09.12.2020 | 10:00 am to 06:00 pm | 63 | 9 12 | 28 48 | |
| | | 06:00 pm to 02:00 am | 43 | 9 9 | 57 20 | |
| | 24 Hrs Average | 02:00 am to 10:00 am | 59 | 9 11 | 37 36 | |
| | | | 55 | 10 | 38 | |
| | National Ambient Air Quality Standards (NAAQS) | | | 100 | 80 | 80 |
| | NAAQS, CPCB Notification, New Delhi Dt. 18.11.2009[(Schedule VII) (Rule 3(3B)) of E(P), Act, 1986. | | | | | |
| | PM ₁₀ - Particle size less than 10 micrometers. | | | | | |

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 Zonal Laboratory Hyderabad Zone
 WARANGAL-506 001.



TELANGANA STATE POLLUTION CONTROL BOARD
ZONAL LABORATORY: HYDERABAD ZONE
 H.No : 1-8-269, Balasamudram, Warangal - 506001
ISO-9001 & OHSAS-18001 Certified Laboratory
 Certificate's No:- Q-180211 & 180204-S

Ambient Air Quality Analysis Reports

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|------------------------------------|--|
| Sample No. : | ZLWGL20-123209 to 123211 |
| Name of the industry: | M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam District. |
| Samples Collected & Submitted by : | Zonal laboratory, Warangal. |

| Sampling Location | Date of sampling | Time and duration of sampling | PM ₁₀ µg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m ³ |
|--|---|-------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| Ambient Air Quality Monitoring conducted South side of the CHP, near Substation of CHP area. | 07.12.2020 & 08.12.2020 | 02:15 pm to 10:15 pm | 186 | 10 | 25 |
| | | 10:15 pm to 06:15 am | 96 | 9 | 28 |
| | 06:15 am to 02:15 pm | 120 | 7 | 32 | |
| | 24 Hrs Average | | 134 | 9 | 36 |
| | NAAQS, CPCB Notification, New Delhi Dt. 18.11.2009[(Schedule VII) of E(P), Act, 1986. | | 250 | 120 | 27 |
| | PM ₁₀ - Particle size less than 10 micrometers. | | 120 | 120 | 29 |
| Filed observations: Internal vehicular movement was observed during monitoring. | | | | | |

R.P.L.

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 Zonal Laboratory Hyderabad

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|  తెలంగాణ TELANGANA | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal - 506001 ISO-9001 & OHSAS-18001 Certified Laboratory Certificate's No:- Q-180211 & 180204-S |
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Ambient Air Quality Analysis Reports

| | |
|------------------------------------|---|
| Sample No. : | ZLWGL20-123212 to 123214 |
| Name of the industry: | M/s. SCCL, JVR OC-I & II, Expansion, Sathupalli, Khammam District. |
| Samples Collected & Submitted by : | Zonal laboratory, Warangal. |

| Sampling Location | Date of sampling | Time and duration of sampling | PM ₁₀ µg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m ³ |
|--|---|-------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| Ambient Air Quality Monitoring conducted on the terrace of Project Office. | 08.12.2020 & 09.12.2020 | 01:15 pm to 09:15 pm | 106 | 6 | 34 |
| | | 09:15 pm to 11:15 am | 71 | 10 | 30 |
| | 05:15 am to 01:15 pm | 77 | 7 | 24 | |
| | | 77 | 9 | 37 | |
| | 24 Hrs Average | | 85 | 8 | 32 |
| | Ambient Air Quality Standards (AAQS) for Coal Mines | | 250 | 120 | 120 |
| NAAQS, CPCB Notification, New Delhi Dt. 18.11.2009[(Schedule VII) (Rule 3(3B))] of E(P), Act,1986. | | | | | |
| PM ₁₀ - Particle size less than 10 micrometers. | | | | | |
| Filed observations: | Internal vehicular movement was observed during monitoring. | | | | |

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 Senior Environmental Scientist
 T.S. Pollution Control Board,
 Zonal Laboratory Hyderabad Zone
 WARANGAL-506 001.

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ANNEXURE - VI



F.No. 23-77/2018-IA (III)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan,
Jorbagh Road, N Delhi - 3
Email: lk.bokolia@nic.in Tel: 01124695301

Dated: 1st February, 2021

To,

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

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

Sir,

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

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

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

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

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

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

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

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

(xxvi) Green belt created in ha. :318.90

(xxvii) Details of Land usage

Pre-mining

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

Post- Mining

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

Core Area (Present Land Use)

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

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- (xxviii) Details of Forest issues :
- o Total forest area involved (in ha) for mining lease 380.52; Total broken forest area: 380.52
 - o Extent of forest land in the project (including safety zone and all types of forest land) (in ha) 380.52
 - o Balance forest land for which Stage-I FC is not available (give area in Ha : Nil
 - o Status of Forest Clearance and extent of forest land diverted in ha. Total forest area of 380.52 ha was diverted.
 - 244.02 ha vide Lr.No.8-129/2003-FC dt.02-02-2005
 - 136.50 ha vide Lr.No.8-56/2008-FC dt.03-07-2012.
- (xxix) No National Park, eco-sensitive Zones lies within 10 km radius.
- (xxx) A Wildlife Conservation & Mitigation Plan for Schedule-I species has been prepared for an amount of Rs. 2.57 Crores. Wildlife Conservation plan is yet to be approved by CWLW wherein PP has submitted budget for Rs. 2.57 Crores.
- (xxxi) Costs of the project : Total capital Cost: ₹106.76 Crores; Cost of Production: ₹ 554 per Tonne; Sale Price: ₹1851 per Tonne; CSR cost: As per Companies Act, 2013 and Companies (Corporate Social Responsibility Policy) Rules - 2014, SCCL is spending 2% of its average annual net profit calculated in accordance with the provisions of Section 198 of the Act made during three immediately preceding financial years in pursuance of its CSR policy on CSR activities each financial year. In addition, an amount of Rs. 84.31 crores (from February 2016 – April 2019) was deposited with District Collector, Bhadradi Kothagudem, as District Mineral Fund (DMF) for taking up CSR works; R&R Cost: Nil; Cost for implementing EMP Capital: ₹ 9.50 Crores; Recurring: ₹ 2.87 Crores per Annum
- (xxxii) Details of villages/habitation in mine lease area: Inside the lease : Nil; Surrender by lease: Nil; Extent of cropland acquired/ being acquired in ha. : 101.93
- (xxxiii) Details of transportation of coal: In pit : Dumpers; Surface to siding: Conveyor; Siding to loading: From JVR OC – I Exp. to RCHP by Road and from there to end users by Rail. Quantity being transported by Road/Rail/conveyer /ropeway: 5 Mtpa; Proposed change in transportation means if any, give details: Proposed to change the road transport from the project to end users by rail mode.
- (xxxiv) Details of reclamation: Reclaimed external OB dump in ha : 112.37; Internal Dump in ha : 143.60; Green belt in ha: 46.39; Density of the tree plantation (in no.): 2500 per hectare; Void (ha) at a depth of (m) proposed to be converted into water body : 164.86 ha at a depth of 150 m; Other in ha (such as excavation area along ML boundary, along roads and infrastructure, embankment area and in township located outside the lease etc..
- (xxxv) Legal Issues : As per the ToR, State Govt/SPCB has to take action against the Project Proponent under the Provisions of the E(P) Act, 1986. State Govt. directed SPCB to take action in this regard. Action from SPCB is awaited.

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

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

- (i) EAC recommended for an amount of Rs 2667.00 lakhs towards Remediation plan and Natural and Community Resource Augmentation plan to be spent within a span of three years. The details of Remediation plan, Natural resource Augmentation plan and Community Resource Augmentation plan with budgetary provision are mention below:
- (ii) Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is Rs. 2667.00 lakhs. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rs. 2667.00 lakhs towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.
- (iii) Remediation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee will be released after successful implementation of the remediation plan and Natural and Community Resource Augmentation Plan, and after the recommendation by regional office of the Ministry, Expert Appraisal Committee and approval of the Regulatory Authority.
- (iv) Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- (v) Wild life Conservation plan as approved by the Competent Authority shall be implemented.
- (vi) The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

Remediation plan along with budgetary provision

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

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|--------|--|--|--|--|--------------------------------------|----------------|---------------------|---------------|---------------|---------------|
| | | | nearby village. | | | | | | | |
| 1 b | Noise Envi ronm ent and Ecol ogy | Avenu e Plantat ion / Plantat ion | Plantatio n of total 4900 No.s native plants at Rs.1000 per sapling, includin g mainten ance for 3 years and 35 ha of block plantatio n around mine boundar y. | 1. Satupalli 2. Rejarla 3. Cheruku- -palli 4. Kothuru 5. Kommugude m 6. Kistaram 7. Mine boundary | 1,000 + 1,00. 000 per ha | 4,900 | 75.00 .000 | 25,00 .000 | 25,00 .000 | 25,00. 000 |
| 2 a | Wate r Envir on ment | Constr uction and annual maint enanc e of 100 Nos. Rain Water Harve sting struct ures in nearb y villag | Construc tion of RWH- 100 No. sand 11 No.s of roof top rain water harvestin g facility (includin g raw material, labour, construct ion and maintena | 1. Sathupalli 2. Kistaram 3. Cherukupa lli 4. Rejarla 5. Kommugu dem | 2,55, 000 + 2,00, 000 | 100 + 11 | 2,77, 00,00 0 | 95,00 .000 | 95,00 .000 | 87,00. 000 |

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

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Natural Resource Augmentation plan with budgetary provision

| S. No | Component | Activity Proposed | Description | Locations | Rate | Total Qty. | Total Cost (Rs.) | Year I (Rs.) | Year II (Rs.) | Year III (Rs.) |
|-------|------------------------------------|--|---|--|----------|------------|------------------|--------------|---------------|----------------|
| 1a | Natural Resource Augmentation Plan | Energy Conservation by adapting Green Energy technology. | Providing 1 KW Capacity Solar Lighting system (includes panels, inverters, wiring, structure, connectors, junction boxes, etc.) | 1. Sathupalli 2. Kistaram 3. Rejarla 4. Ayyagari 5. Kommugudem | 50.000 | 200 | 1,00,000 | 40,000 | 30,000 | 30,000 |
| 1b | | | Solar water pump sets of 5 HP capacity for agriculture (including panels, inverters, wiring, structure, connectors, junction boxes, etc.) | 1. Kistaram 2. Rejarla 3. Kothuru 4. Kommugudem | 3,00,000 | 130 | 3,90,000 | 1,30,000 | 1,30,000 | 1,30,000 |
| 1c | | Improvement | Providing Bio | Sathupalli town | 1,60,000 | 10 | 16,00,000 | 6,00,000 | 5,00,000 | 5,00,000 |

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|------------|--|--------------------------------|-----------------------------------|--|--|--|-----------------|-----------------|-----------------|-----------------|
| | | of Public Sanitati on | toilets in Sathupalli town. | | | | | | | |
| Total (Rs) | | | | | | | 5,06,0 0,000 | 1,76,0 0,000 | 1,65,0 0,000 | 1,65,0 0,000 |

Community Resource Augmentation plan with budgetary provision

| S. n o | Com ponent | Activi ty Proposed | Description | Locations | Rate | Total Qty. | Total Cost (Rs.) | Year I | Year II | Year III | |
|--------|---|-----------------------------|--|--|------------|------------|------------------|-------------|-------------|-------------|--|
| 1 | Com muni ty Resource Aug mentation Plan | Devel opment of Infrac ture | Construction of CC Roads and drains (2 km in each village) and bore wells. | 1. Kistara | 1,00,00,00 | 3 | 3,00,00,00 | 1,00,00,00 | 1,00,00,00 | 1,00,00,00 | |
| | | | | 2. Rejarla | | | | | | | |
| | | | | 3. Kothuru | | | | | | | |
| | | | | | | | | | | | |
| 1 | b | | Construction of Godown for storage of the agriculture products (Dimensions 20 m x 8 m x 6 m) | 1. Rejarla 2. Kothuru | 50,00,000 | 2 | 1,00,00,000 | 40,00,000 | 30,00,000 | 30,00,000 | |
| 1 | c. | | Repair of road and road widening as requested in the Public Hearing. | V.M.Banjar to sathupalli town (20 km) and widening of y-junction near Kistaram village | LS | LS | 5,67,00,000 | 2,00,00,000 | 2,00,00,000 | 1,67,00,000 | |
| 1 | d | | Construction of Community halls / Community | 1. Kistaram 2. Rejarla 3. Kothuru | 75,00,000 | 3 | 2,25,00,000 | 75,00,000 | 75,00,000 | 75,00,000 | |

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|------------|--|---|----------------------------------|-----------|---|--------------|-------------|-------------|-------------|
| | | health centres (300 Sq. m. each) | | | | | | | |
| l | | Land for dump yard (about 8 acres) used for treatment of solid waste for generation of compost. | Sathupalli | 25,00,000 | 8 | 2,00,00,000 | 2,00,00,000 | - | - |
| f | | Development of New Urban park | 1. Sathupalli town 2. Kothuru | LS | 2 | 50,00,000 | 20,00,000 | 20.00 | 10,00,000 |
| Total (Rs) | | | | | | 14,42,00,000 | 6,35,00,000 | 4,25,00,000 | 3,82,00,000 |

Summary

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

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

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Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

- (xi) As mine lease is valid till 22nd March 2025 and balance extractable reserve is only 1.30 Mt therefore validity of Environment Clearance shall be upto 22nd March 2025 and all activities proposed under RP, CRA and NRA shall be completed within three years of the grant of EC.

Standard Conditions

(a) Statutory compliance

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

(b) Air quality monitoring and preservation

- (i) Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality

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monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.

- (ii) The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- (iii) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM₁₀/PM_{2.5}) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- (iv) The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- (v) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- (vi) Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- (vii) Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.
- (c) **Water quality monitoring and preservation**
 - (i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.
 - (ii) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th

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May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.

- (iii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- (iv) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
- (v) Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- (vi) Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.
- (vii) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
- (viii) Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act. 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.
- (ix) The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development *etc.* The drains shall be regularly desilted particularly after monsoon and maintained properly.

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- (x) The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc. shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.
- (xi) The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A rivarine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.
- (d) **Noise and Vibration monitoring and prevention**
 - (i) Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
 - (ii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS. 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**

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



- (i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
- (ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.
- (h) **Public hearing and Human health issues**
- (i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six-monthly basis.
- (ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
- (iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- (iv) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- (v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
- (i) **Corporate Environment Responsibility**
- (i) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions.

The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.

- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- (j) **Miscellaneous**
 - (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
 - (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
 - (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same
 - (iv) The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
 - (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
 - (vi) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

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



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

7. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
8. The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2nd August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.
9. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.
10. This environmental clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.


(Lalit Bokolia)
Director

Copy to: -

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


(Lalit Bokolia)
Director



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-III, Industrial Estate, Sanathnagar, Hyderabad-500 018
Phones : 040-23887500 Fax: 040 - 23887519

BY REGD. POST WITH ACK. DUE

Order No. MHB-19/TSPCB/U-I/TF/2021-1822

Dt.22.02.2021

Sub : M/s Singareni Collieries Company Limited, Jalagam Vengal Rao Open Cast (JVR OC) Coal Mining Project, Sathupalli area, Khammam District – Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and Control of Pollution) Amendment Act, 1987 - **DIRECTIONS - ISSUED** - Reg.



1. O.A. No. 174 of 2020 in Hon'ble NGT, Chennai
2. Complaints filed by residents of Rejerla (V), Sathupalli (M), Khammam District.
3. Inspection of your industry by the Board officials on 07.12.2020 to 09.12.2020.
4. Hearing held on 06.02.2021 at Board office.

1. WHEREAS, Singareni Collieries Company Ltd is having two coal mines projects in the name of Jalagam Vengal Rao Open Cast – I Expansion (JVR OC –I Expansion) and Jalagam Vengal Rao Open Cast -II (JVR OC-II) Coal Projects located in Sathupalli, Khammam District.
2. WHEREAS, JVR OC –I expansion was started in 2005 & 2007 with mining capacity of 2.5 Million TPA (Peak production) in mine lease area of 547.08 Ha. (including Forest land of 380.52 Ha.). You have obtained EC from MoEF&CC and also obtained CFE & CFO from the TSPCB. CFO is valid upto 30.06.2021.
3. WHEREAS, the Board has received complaints from residents of Rejerla (V), Sathupalli (M), Khammam District regarding air, water and noise pollution due to Singareni mines.
4. WHEREAS, O.A. No. 174 of 2020 was filed before Hon'ble NGT, Chennai against your open cast (JVR OC) Coal Mining Project, Sathupalli area, Khammam District regarding sound, air and soil pollution caused due to operation of Open Cast Coal Mining activity.
5. WHEREAS, the Board has received complaints on 21.05.2020 & 30.05.2020 alleging that your industry is discharging the mine discharge water into the Jenugupalli Cheruvu and causing pollution problem to the surrounding environment.
6. WHEREAS, the Board officials inspected your industry on 30.05.2020 and following observations were made:
 - i. The canal which is connecting the JVR OC – I to Jinugupalli cheruvu is in wet condition which is showing that industry is discharged the mine discharge water into the Jinugupalli cheruvu and some quantity of water is also observed in the tank.
 - ii. Water from JVR OC-I F4 sump is partly pumping to Kistaram cheruvu after mixing of lime (in pipeline).
 - iii. Water from JVR OC – I sump is pumping to adjacent JVR OC-II sump. The industry representative informed that presently, JVR OC-II sump is using for storage of mine discharge water and the same water is using for sprinkling purpose to arrest dust emissions.
 - iv. The soil in the Jinugupalli cheruvu is in orange/ golden yellow colour.
 - v. This office officials directed the industry to stop discharging the mine discharge water outside the industry and also within the industry premises immediately.
 - vi. During inspection, water and soil samples were collected from following locations and submitted to Zonal Laboratory, Warangal for analysis:
 - Soil & water samples collected from mine sump within mine area of JVR OC-I open cast coal mine project.
 - Soil & water samples collected from drain within the mine area of JVR OC-1.
 - JVR OC-1 mine F4 sump Soil & water samples collected before discharging into drain leading to Kistaram cheruvu.
 - JVROC-1 mine Soil & water samples collected from stagnated water in earthen tank(near CHP) connected to Kistaram Cheruvu.

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- Soil & water samples collected from Kistaram Cheruvu .
- Soil & water samples collected from Jenugupally cheruvu.
- Soil & water samples collected from drain leading to Jenugupally cheruvu.

Complainants allegations & requests are as follows:

- They informed that the industry has discharged the water into Jenugupalli cheruvu.
 - They also informed that the industry has stopped the discharge of mine discharge water into the Jenugupalli cheruvu after the inspection of the Tahsildar, Sathupally(M).
 - They requested Singareni to allow water from mines to Jeenugupalli Cheruvu after proper treatment only for irrigation purpose.
- vii. As per the Analysis reports of the soil and water samples collected on 01.05.2020, the values of pH, TDS, Iron, Sulphate and COD values are exceeding the Boards prescribed standards. The details are furnished as below:

| S. No. | Date of collection | Sample description | Parameter exceeded |
|--------|--------------------|---|-----------------------------|
| 1 | 01.05.2020 | Water sample collected from settling ponds of over burden bench of JVR OC-II Open Cast Coal mine discharge water. | pH, TDS |
| 2 | 01.05.2020 | Mine water sample collected from mine sump within mine area of JVR OC-I Open Cast Coal mine project. | pH, TDS, Iron |
| 3 | 01.05.2020 | Soil sample collected from Jilugupalli cheruvu, Rejerla. | pH |
| 4 | 01.05.2020 | Soil sample collected from stagnated water from old NTR canal connected to Jilugupalli cheruvu. | pH |
| 5 | 01.05.2020 | Soil sample collected from settling ponds of overburden bench of JVR OC-II Open Cast coal mine discharge water. | pH |
| 6 | 01.05.2020 | Soil sample collected from mine sump within mine area of JVR OC-II Open cast coal mine project | pH |
| 7 | 01.05.2020 | Water sample (rain water collected from Jinugupalli cheruvu, Rejerla. | pH, Electrical conductivity |
| 8 | 01.05.2020 | Stagnated rain water sample collected from old NTR canal connected to Jinugupalli cheruvu. | pH |
| 9 | 01.05.2020 | Ground water sample collected from Bore well located in Vemula Prasad poultry form. | Sulphates, COD |

viii. AS. Zonal Laboratory, Warangal & AEE.I, AES & AS of RO-Kothagudem have inspected and conducted monitoring of the JVR Open Cast Coal mining projects (I & II) from 07.12.2020 to 09.12.2020. The details are submitted as below:

- Singareni Collieries Company Ltd is having two coal mines projects in the name of Jalagam Vengal Rao Open Cast – I Expansion (JVR OC –I Expansion) and Jalagam Vengal Rao Open Cast -II (JVR OC-II) Coal Projects located in Sathupalli, Khammam District.
- JVR OC –I Expansion was started in 2005 & 2007 with mining capacity of 2.5 Million TPA (Peak production) in mine lease area of 547.08 Ha. (including Forest land of 380.52 Ha.). They obtained EC from MoEF&CC and also obtained CFE & CFO from the TSPCB. CFO is valid upto 30.06.2021.
- Subsequently they increased the production from 2.5 Million TPA to 5 Million TPA as per the coal demand to meet power requirement by the State Government for which they have not obtained EC and Consent of the TSPCB. Later, they approached the MoEF&CC for violation of the EC on increase of production capacity and MoEF&CC directed to go for EC procedure and they obtained ToR (Terms of Reference) in which credible action is to be initiated is one of the condition. The industry also requested the State Government to initiated Credible action against them and State Government has forwarded the same to the TSPCB for taking necessary action. As per the directions of the Head office, TSPCB, Hyderabad the Regional office, Kothagudem has filed a complaint against Singareni Collieries Company Ltd for initiating credible action regarding increase of production.

JVR OC- I is nearing to closing as coal reserves have exhausted. They may close the mine by March 2021 as per the information of the Singareni.

JVR OC -II was started in 2017 with mining capacity of 4.0 Million TPA (5.0 Million TPA Peak production). They obtained EC from MoEF&CC and also obtained CFE & CFO from the TSPCB. CFO is valid upto 31.10.2022.

Wastewater Treatment systems:

- The industry is pumping mine water from mine to earthen ponds for settling and utilized for water sprinkling, domestic purpose. The excess mine water is discharged into nearby water tanks / streams and the same are utilized by the farmers for their irrigation purpose.
- The industry has provided separate earthen ponds (2Nos.) for JVR OC-I & JVR OC-II.
- The industry provided vehicular servicing units in some mine areas and provided treatment systems to treat the wastewater.
- Domestic effluents are discharged into individual septic tanks in the mine area and office buildings.

Air pollution sources and its control measures:

- Excavation, drilling & blasting and loading & vehicular movement within the mine area. Fugitive dust emissions are generated during these operations.
- The industry is carrying water sprinkling / spraying at dust generating sources and on haul roads through mobile water tankers to control fugitive dust emissions.
- The industry has provided water spraying system at coal loading bunkers, coal transfer points in the mines and coal crusher.

Blasting operations: The industry reported that they adopted control blasting technique using delay detonators, nonels to reduce the fly rock, vibrations & noise to the surroundings.

7. During the inspection, following observations were made :

- The industry has stopped the discharge of mine water from JVR OC-I and earthen ponds and drainage system for the discharge of mine water is empty and dry. Presently, they are discharging mine water from JVR OC-II mine into earthen ponds and then to Kistaram tank and chilla vagu through earthen drain. The industry reported that they are carrying neutralization of the mine water with lime before its discharge. But, there is no provision / system was provided for lime dosing as observed during inspection. Water samples of mine discharge water were collected during inspection.
- The industry is carrying water sprinkling / spraying at dust generating sources and on haul roads through mobile water tankers to control fugitive dust emissions.
- The industry has provided water spraying system at coal loading bunkers, coal transfer points in the mines and coal crusher.
- During blasting operations, noise monitoring was conducted in NTR Nagar on 07.12.2020 (3.15 PM to 3.30 PM) and at PO office, in the premises of Singareni on 09.12.2020 (3.20 PM to 3.40 PM). No noise and vibrations were sensed in NTR Nagar. In NTR Nagar colony, the complainant and others have informed that sound due to blasting operations are not sensing presently due to mine location was shifted far away from their colony i.e. NTR Nagar.
- But, noise and vibrations were sensed in Jalagam Vengal Rao Nagar and this may be due to mine area is nearer to this place.
- House cracks were observed in complainant house and also other surrounding houses. This may be due to type of construction and also continuous exposure to vibrations due to blasting operations. The residential houses are affecting in form of cracks to walls of the houses. The industry has to carry the study in surrounding areas and provide proper compensation to the affected peoples to renovate the

- vii. No dust emissions were observed in NTR Nagar.
- viii. The Zonal Laboratory has conducted AAQ and Noise monitoring, collected water samples from Bore wells in NTR Nagar and Jalagam Vengal Rao Nagar and also mine discharge water from JVR OC-II. The reports are enclosed.
- ix. During inspection, the complainant and others of NTR Nagar were contacted and they expressed as below:
- They informed that sounds due to blasting operations are not sensing presently due to mine location was shifted far away from their colony i.e. NTR Nagar.
 - Earlier, they suffered from blasting operations thereby their houses were affected badly and requested for compensation to repair their houses by Singareni.
 - They also requested the Singareni to construct new houses in place of existing houses as their houses are damaged due to blasting operations since long period.
 - They also suffered from dust pollution during blasting operations and vehicular movement.
 - They requested to spend CSR funds for their habitation and surrounding villages.
 - They requested to establish full-fledged hospital in their area.
 - They requested to provide employment in Singareni.
 - They requested to provide mineral water plants in their colonies and surrounding villages.
8. WHEREAS, the Board has reviewed the status in the Task Force Committee meeting held on 06.02.2021. Your industry representative and complainant attended the meeting.

The Committee noted that, complaints were received from residents of Rejerla (V), Sathupalli (M), Khammam District regarding air, water and noise pollution due to Singareni mines and O.A. No. 174 of 2020 was filed by Sri Banothu Nandu Nayak before Hon'ble NGT, Chennai against the industry regarding sound, air and soil pollution caused due to operation of Open Cast Coal Mining activity. Complaints were also received alleging that industry is discharging the mine discharge water into the Jenugupalli Cheruvu and causing pollution problem to the surrounding environment.

The Complainant informed that your industry is causing air and water into pollution in the surrounding areas and further informed that blasting operations were being carried out, thus causing noise pollution and causing damage to the nearby houses. The industry is discharging the untreated mine water into the nearby water bodies which are acidic in nature.

The Committee noted that, your industry was discharging excess mine water into nearby water tanks / streams and the same are utilized by the farmers for their irrigation purpose, Fugitive dust emissions are generated during the operations, noise and vibrations were sensed in Jalagam Vengal Rao Nagar and this may be due to mine area.

The Regional Officer, Khammam informed that, they received complaints regarding burning of bushes and observed various non-compliances and issued notice to the industry on 14.12.2020. The industry was carrying out blastings due to which the nearby houses are damaged. The industry was discharging the mine discharge water into the nearby water bodies i.e., without treatment due to which, the pH values of the mine discharges were acidic in nature and are in Golden colour.

Your industry representative informed that, the unit have stopped discharging the mine water into nearby water bodies and the mining was stopped, taken-up neutralization with time in settling tank, regarding blasting they have taken measures.

After detailed discussion, the Committee recommended to issue certain directions to the industry to comply with.

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9. After careful consideration of material facts of the case, the Board hereby issues following directions to your facility:

- i. The mine shall comply with all the CFO & HWA conditions issued by the Board.
- ii. The industry shall treat the mine water and the treated mine water shall be reused in the premises and excess treated water shall only be discharged into nearby water bodies.
- iii. The industry shall stop open burning of the bushes and other wastes. The industry shall carryout composting / vermin composting of the organic waste.
- iv. The industry shall carryout limited blasting and ensure that there shall not be any vibration to the surrounding areas.
- v. The mine shall provide water meters to measure the actual water consumption and waste water discharge and maintain a log register to record the readings.
- vi. The mine shall construct garland drain and siltation ponds of appropriate size at working area to arrest flow of silt and sediment. The water collected should be utilized for watering the mine area, roads, greenbelt development etc., after treatment.
- vii. The mine shall regularly carryout sprinkling of water at raw material loading and at transfer points to control dust emissions.

10. These directions are issued under Sec.33 (A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Sec. 31 (A) of Air (Prevention and Control of Pollution) Amendment Act, 1987.

11. The above mentioned directives shall be implemented by the industry, failing which legal action will be initiated against your industry under Sec.33 (A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Sec. 31 (A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 directing closure of the industry in the interest of Public Health and Environment.

Sd/-
MEMBER SECRETARY

To
M/s Singareni Collieries Company Limited,
Jalagam Vengal Rao Open Cast (JVR OC)
Coal Mining Project,
Sathupalli area,
Khammam District

Copy to:

1. The JCEE., Z.O., Hyderabad for information and necessary action.
2. The EE, RO. Kothagudem for information and necessary action.
3. Concerned file.

// T.C.F.B.O //


Senior Environmental Engineer (FAC)
(UH - V)

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ANNEXURE - IX

| | |
|---|--|
|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO Certified Laboratory ISO 9001:2015 (Q-180211R) & ISO-45001:2018 (S-180204R) |

ANALYSIS REPORT

| | |
|---------------------------------|--|
| Sample Code | : ZLWGL21- 07334 & 07335 |
| Sample description | : M/s. Singareni Collieries Company Limited, Jalgam Vengal Rao Open Cast I&II Expansion Project, Kommepalli (V), Sathupalli (M), Khammam District. |
| Date of Collection | : 15.07.2021 |
| Date of submission | : 16.07.2021 |
| Sample Collected & Submitted by | : AEE-I & AES Regional office – Kothagudam. |
| Point of Sample: | |
| 07334 | Ground water sample collected from bore well in the premises of Sri V. V. L. Prasad palm garden, Rejerla road, Sathupalli (M), Khammam District. |
| 07335 | Ground water sample collected from bore well in the premises of Anganavadi School, Rejerla (V), Rejerla road, Sathupalli (M), Khammam District. |

| S. No. | Parameters | Result | | IS 10500 : 2012 Drinking Water Standards | |
|-----------------|--|--------|-------|--|-------------------|
| | | 07334 | 07335 | Acceptable Limit | Permissible Limit |
| 1. | pH at 25 ^o C | 7.24 | 7.28 | 6.5-8.5 | No Relaxation |
| 2. | Total Suspended Solids | 82 | 8 | - | - |
| 3. | Total Dissolved Solids (TDS) | 1494 | 966 | 500 | 2000 |
| 4. | Chemical Oxygen Demand | 12 | 24 | - | - |
| 5. | Total Hardness as CaCO ₃ | 540 | 210 | 200 | 600 |
| 6. | Oil & Grease | 1.0 | 1.2 | - | - |
| Note: | Results related to sample as received. BDL: Below detectable limit, ND: Not Detected. | | | | |
| Remarks: | Trace Metal analysis is under process. | | | | |


SENIOR ENVIRONMENTAL SCIENTIST

Senior Environmental Scientist
 T.S. Pollution Control Board,
 Zonal Laboratory Hyderabad Zone
 WARANGAL-506 001.

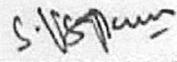
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|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No 1-8-269, Balasamudram, Warangal - 506001 |
| | ISO Certified Laboratory ISO 9001:2015 (Q-180211R) & ISO-45001:2018 (S-180204R) |

ANALYSIS REPORT

| | |
|---------------------------------|--|
| Sample Code | : ZLWGL21- 07331 to 07333 |
| Sample description | : M/s. Singareni Collieries Company Limited, Jalgam Vengal Rao Open Cast I&II Expansion Project, Kommepalli (V), Sathupalli (M), Khammam District. |
| Date of Collection | : 15.07.2021 |
| Date of submission | : 16.07.2021 |
| Sample Collected & Submitted by | : AES, Regional office, Regional office- Kothagudem. |
| Point of Sample: | |
| 07331 | : Mine discharge water sample collected from stagnated in earthen tank, near CHP connected to Kistaram cheruvu. |
| 07332 | : Mine discharge water sample collected from Drain connected to chillavagu, which is passing through reserve forest area. |
| 07333 | : Mine discharge water sample collected from Drain before joining into Kistaram Cheruvu. |

| Sl. No. | Parameter | Sample No. | | | Limiting Standards (CFO) |
|---------|--|------------|-------|-------|--------------------------|
| | | 07331 | 07332 | 07333 | |
| | | Values | | | |
| 1. | pH | 7.60 | 6.56 | 7.43 | 5.5-9.0 |
| 2. | Total Suspended Solids | 5 | 7 | 98 | 100 mg/l |
| 3. | Total Dissolved Solids | 1263 | 1173 | 843 | 2100 |
| 4. | Chemical Oxygen Demand (COD) | 16 | 16 | 20 | 250 |
| 5. | Biological Oxygen Demand (BOD) | 4 | 4 | 6 | 30 mg/l |
| 6. | Nitrates as NO ₃ | 2.0 | 6.0 | 9.0 | - |
| 7. | Total Hardness | 485 | 465 | 265 | - |
| 8. | Oil & grease | 1.2 | 1.6 | 1.0 | 10 mg/l |
| Units: | All values are expressed in mg/l, except pH. | | | | |
| Note: | Results related to samples as received. | | | | |


SENIOR ENVIRONMENTAL SCIENTIST
 Senior Environmental Scientist
 T.S. Pollution Control Board,
 Zonal Laboratory Hyderabad Zone
 WARANGAL-506 001.

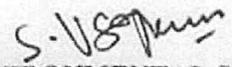
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|  | TELANGANA STATE POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No : 1-8-269, Balasamudram, Warangal – 506001 |
| | ISO Certified Laboratory ISO 9001:2015 (Q-180211R) & ISO-45001:2018 (S-180204R) |

ANALYSIS REPORT
(Part)

| | |
|---------------------------------|--|
| Sample Code | : ZLWGL21- 07336 & 07337 |
| Sample description | : M/s. Singareni Collieries Company Limited, Jalgam Vengal Rao Open Cast I&II Expansion Project, Kommepalli (V), Sathupalli (M), Khammam District. |
| Date of Collection | : 15.07.2021 |
| Date of submission | : 16.07.2021 |
| Sample Collected & Submitted by | : AEE-I & AES Regional office – Kothagudam. |
| Point of Sample: | |
| 07336 | Ground water sample collected from the Municipal Bore well located in front of house of Sri M. Laxman, S/O Venkataiah, H.No. 10-184, Main road JVR nagar, Sathupalli (M), Khammam Dist. |
| 07337 | Ground water sample collected from the Municipal Bore well located in front of house of Sri MD. Muzebur Rehaman, S/O Amed, H.No. 13-108, 8th ward NTR nagar, Sathupalli (M), Khammam District. |

| S. No. | Parameters | Result | | IS 10500 : 2012 Drinking Water Standards | |
|-----------------|--|--------|-------|--|-------------------|
| | | 07336 | 07337 | Acceptable Limit | Permissible Limit |
| 1. | pH at 25°C | 6.98 | 6.90 | 6.5-8.5 | No Relaxation |
| 2. | Total Suspended Solids | 8 | 6 | - | - |
| 3. | Total Dissolved Solids (TDS) | 820 | 950 | 500 | 2000 |
| 4. | Chemical Oxygen Demand | 103 | 149 | - | - |
| 5. | Total Hardness as CaCO ₃ | 410 | 425 | 200 | 600 |
| 6. | Oil & Grease | BDL | BDL | - | - |
| 7. | Nitrates as NO ₃ | 13 | 18 | 45 | No Relaxation |
| 8. | Sulphate as SO ₄ | 31 | 52 | 200 | 400 |
| 9. | Fluoride as F | 1.2 | 1.2 | 1.0 | 1.5 |
| Note: | Results related to sample as received. BDL: Below detectable limit, ND: Not Detected. | | | | |
| Remarks: | Trace Metal analysis is under process. | | | | |


SENIOR ENVIRONMENTAL SCIENTIST

Senior Environmental Scientist
T.S. Pollution Control Board,
Zonal Laboratory Hyderabad Zone
WARANGAL-506 001.

| | |
|---|--|
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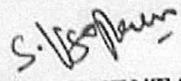
ANALYSIS REPORT

| | |
|---------------------------------|--|
| Sample Code | : ZLWGL21-07338 |
| Sample description | : M/s. Singareni Collieries Company Limited, Jalgam Vengal Rao Open Cast I&II Expansion Project, Kommepalli (V), Sathupalli (M), Khammam District. |
| Date of Collection | : 15.07.2021 |
| Date of submission | : 16.07.2021 |
| Sample Collected & Submitted by | : AEE-I & AES Regional office – Kothagudam. |
| Point of Sample | : 07338-Water sample collected from Jeenugupalli cheruvu, Rejerla (V), Sathupalli (M), Khammam Dist. |

| Sl. No. | Parameter | Sample No. | CPCB Water Quality Criteria | | | | |
|---------|--|------------|-----------------------------|---------|---------|---------|---------|
| | | 07338 | Class-A | Class-B | Class-C | Class-D | Class-E |
| | | Values | | | | | |
| 1. | pH | 6.20 | 6.5-8.5 | 6.5-8.5 | 6.0-9.0 | 6.5-8.5 | 6.0-8.5 |
| 2. | Electrical Conductivity (µS/cm) | 1020 | - | - | - | - | 2250 |
| 3. | Dissolved Oxygen | 4.2 | ≥6.0 | ≥5.0 | ≥4.0 | ≥4.0 | - |
| 4. | Total Suspended Solids | 7 | - | - | - | - | - |
| 5. | Total Dissolved Solids | 613 | - | - | - | - | - |
| 6. | Chemical Oxygen Demand (COD) | 28 | - | - | - | - | - |
| 7. | BOD 3days at 27°C | 4 | ≤2.0 | ≤3.0 | ≤3.0 | - | - |
| 8. | Nitrates as NO ₃ ⁻ | 5 | - | - | - | - | - |
| 9. | Total Hardness as CaCO ₃ | 170 | - | - | - | - | - |

Units: All values are expressed in mg/l except pH, Electrical Conductivity.

- Class of Water use:**
 Class-A: Drinking Water Source without conventional treatment but after disinfection.
 Class-B: Outdoor bathing (Organised).
 Class-C: Drinking water source after conventional treatment and disinfection.
 Class-D: Propagation of Wild life and Fisheries.
 Class-E: Irrigation, Industrial Cooling, Controlled Waste disposal.
 Below Class E: Not meeting A, B, C, D and E criteria.


SENIOR ENVIRONMENTAL SCIENTIST
 Senior Environmental Scientist
 T.S. Pollution Control Board,
 Zonal Laboratory Hyderabad Zone
 WARANGAL-506 001.

Item No.02 & 03:

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 20 of 2021 (SZ)

(Through Video Conference)

IN THE MATTER OF

Oggu Srinivasa Reddy and another.

...Applicant(s)

Versus

Union of India and others.

...Respondent(s)

Original Application No. 174 of 2020 (SZ)

Banothu Nandu Nayak,
Khammam District,
Telangana

..Applicant(s)

Versus

The Singareni Collieries Company Ltd.,
Rep. by its Chief Executive Officer,
Bhadradri Kothagudem District,
Telangana and others.

...Respondent(s)

Date of hearing: 12.07.2021.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE MR. DR. K. SATYAGOPAL, EXPERT MEMBER

O.A. No. 20 of 2021 (SZ)

For Applicant(s):

Mr. Sravan Kumar

For Respondent(s):

Mrs. Me. Saraswathy for R1
Mr. Sanjeev Kumr, Spl. Govt. Pleader

along with Mrs. H. Yasmeen Ali for R3

O.A. No. 174 of 2020 (SZ)

For Applicant(s):

Mr. Sravan Kumar

For Respondent(s):

Mrs. Me. Saraswathy for R2
Mr. Sanjeev Kumr, Spl. Govt. Pleader
along with Mrs. H. Yasmeen Ali for R1
Mr. T. Sai Krishnan through
Ms. J. Dayana for R3
Mrs. H. Yasmeen Ali for R4 & R5

ORDER

1. When the matters came up for hearing today through Video Conference, Mr. Sravan Kumar represented the applicant in both the cases. Mrs. Me. Saraswathy represented 1st respondent in O.A. No. 20 of 2021 and 2nd respondent in O.A. No. 174 of 2020, Mr. Sanjeev Kumar, Special Government Pleader for State of Telangana along with Mrs. H. Yasmeen Ali represented counsel for 3rd respondent in O.A. No. 20 of 2021 and 1st respondent in O.A. No. 174 of 2020, Mrs. H. Yasmeen Ali represented respondents 4 & 5 in O.A. No. 174 of 2020 and Mr. T. Sai Krishnan through Ms. J. Dayana represented 3rd respondent in O.A. No. 174 of 2020.
2. We have received the combined joint committee report in respect of both the cases. The counsel appearing for the project proponent wanted to file their objections and the learned counsel appearing for the applicant submitted that

though the excess mining was detected by the joint committee they have not assessed the Environmental Compensation instead, they have directed to produce the Bank Guarantee of a particular amount as performance guarantee for implementing the Environment Management Plan in respect of Mine- I.

3. It may be mentioned here that providing Bank Guarantee as performance Guarantee for doing certain works is different from assessing environmental compensation for the violation of excess mining by the project proponents. Both stands on a different footing.
4. So under such circumstances, the observations made by the committee that since they have already directed them to produce the Bank Guarantee as performance guarantee to a tune of Rs. 26,67,00,000/- (Rupees Twenty-Six Crores and Sixty Seven Lakhs Only) towards implementation of remediation plan and natural community resource augmentation plan that to within a period of three years, further direct to pay environmental compensation will amount to double jeopardy.
5. Further, in the case of violation of doing mining without getting further environmental clearance for the expanded portion, they are liable to pay compensation for violation apart

from the royalty with penalty for excess mining as provided under the respective mining rules. This aspect also has not been considered by the committee as to whether such an amount was imposed and realised from them.

6. Though it was mentioned that in the 'Green Belt' survival rate is too good, they have not mentioned as to what is the percentage of the survival and in case it is less than the required percentage, what are the remedial measures taken by them to recoup the same by planting more saplings and fill the gaps. The committee is directed to revisit all these aspects and file a further report in this regard.
7. Except the 3rd respondent, the Pollution Control Board and the other respondents have not filed any statements so far. The 2nd respondent in O.A. No. 20 of 2021 and the 3rd respondent in O.A. No. 174 of 2020 have filed their counter statement. They have taken the Ambient Air Quality (AAQ) at the time when the mining operation was not in operation. They have not ascertained the same when the transport of coal is being done so as to ascertain as to whether the Ambient Air Quality (AAQ) is within the prescribed limit or not.
8. The Telangana Pollution Control Board (TSPCB) as well as the joint committee are also directed to file a further report in this

regard as well. It is also mentioned in the report of the Telangana State Pollution Control Board (TSPCB), due to the discharging of mine discharge water into the Jeenugurupally Tank in Rejarla Village, they found that the water quality is acidic in nature. But they found that there is no possibility of discharge of water from JVR OC - 1. But subsequently when the water analyses have done the values are within the Board's prescribed standards. But they have mentioned that it could be due to dilution of ground water due to monsoon season rains and also stoppage of discharge of mine water by the Singareni Collieries Company Limited. So there was a direction given to the industry not to discharge mine water from JVR OC - 1.

9. It is also mentioned in the counter statement that they have issued certain directions and if the directions are not complied with, then they will be compelled to issue closure order under the Water (Prevention and Control of Pollution), Act 1974 and Air (Prevention and Control of pollution), Act 1981. Whenever violations are found, the Telangana State Pollution Control Board (TSPCB) is also expected to take further action and as per the directions of the National Green Tribunal in case of violations of conditions, the Central Pollution Control Board (CPCB) has evolved a formula as to

how for compensation for violations of conditions, have to be assessed. But in spite of that the Pollution Control Board (PCB) had not taken any steps to assess the compensation on the basis of the directions issued by this Tribunal and also the guidelines given by the Central Pollution Control Board (CPCB) in this regard, though they found that they have increased the production capacity beyond the permitted capacity, which is double the quantity permitted. So they are also directed to file a further action taken report on the basis of the observations made apart from co-operating with the committee for assessing the environmental compensation as directed by this Tribunal.

10. The committee as well the Telangana State Pollution Control Board (TSPCB) are also directed to ascertain as to whether the recommendations made by the committee are being complied with by the project proponent and if not, what is the nature of action taken by them in this regard.
11. The project proponent is also directed to submit the compliance report regarding the recommendations given along with their objections to the committee report if any, regarding the observations. Till the environmental clearance is granted for the expanded quantity, the project proponent is directed to not to do any mining operation exceeding the permitted limit.

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They shall mine only the quantities for which permission has been accorded as on date.

12. The Respondents are directed to file their objections/further reports as directed, on or before **12.08.2021** by e-filing in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF along with necessary hardcopies to be produced as per rules and also the other official respondents are directed to file their independent statements regarding the allegations made and complete the pleadings also before the next hearing date.
13. The Registry is directed to communicate this order to the members of the committee and also to the above official respondents including the project proponent immediately through e-mail so as to enable them to comply with the direction.
14. For consideration of further reports and also for completion of pleadings, post on **12.08.2021**.

Sd--

.....J.M.
(Justice K. Ramakrishnan)

Sd/--

.....E.M.
(Dr. K. Satyagopal)

O.A. No. 20/2021 &
O.A. No. 174 of 2020 (SZ)
12.07.2021. Sr.