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No. J-11015/24/2004-IA.II (M)
Government of India
Ministry of Environment, Forests & Climate Change
IA-II (Coal Mining) Division

Indira Paryavaran Bhawan,
Jorbagh Road,
New Delhi-110003

Dated: 30th January, 2015

To,

Director (Planning & Projects),
M/s The Singareni Collieries Company Limited,
Kothagudem Collieries -(PO),
Khammam District - 507101
Telangana.

Email: dpp@scclmines.com

Sub.: Expansion under 7(ii) of EIA Notification, 2006 of Adriyala Shaft Underground Coal Mining Expansion project (from 2.144 MTPA to 3.14 MTPA in an existing ML area of 340 Ha + 23.90 Ha outside ML area; latitude 18° 39' 03" to 18° 40' 34" N and longitude 79° 34' 28" to 79° 35' 55" E of M/s The Singareni Collieries Company Limited, located in Adriyala Village, Manthini Mandal, Karimnagar District of Telangana- Environmental Clearance - reg.

Sir,

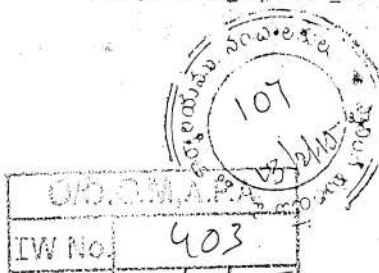
This is with reference to letter no. CRP/ENV/A/452/515 dated 16.10.2014 with the application and subsequent letters no. dated 06.11.2014 and 08.01.2015 for Environmental Clearance for Expansion under 7(ii) of EIA Notification 2006 for the above-mentioned project.

2. The Ministry of Environment, Forests & Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance for Expansion under 7(ii) of EIA Notification, 2006 of Adriyala Shaft Underground Coal Mining Expansion project (from 2.144 MTPA to 3.14 MTPA in an existing ML area of 340 Ha + 23.90 Ha outside ML area; latitude 18° 39' 03" to 18° 40' 34" N and longitude 79° 34' 28" to 79° 35' 55" E of M/s The Singareni Collieries Company Limited, located in Adriyala Village, Manthini Mandal, Karimnagar District of Telangana. The proposal was considered in 25th EAC meeting held on 13th - 14th November, 2014. The proponent has informed that:

- i. The project was accorded EC vide letter no. J-11016/24/2004-IA.II(M) dated 11.10.2004 for 2.144 MTPA. Now, project proponent has applied for Expansion from 2.144 MTPA to 3.14 MTPA. Now project proponent has applied for 50% expansion under 7(ii) of EIA Notification 2006 in line with the MOEF O.M. No. J-11015/30/2004-IA.II (M) dated 07.01.2014.
- ii. The latitude and longitude of the project are 18° 39' 03" to 18° 40' 34" N and 79° 34' 28" to 79° 35' 55" E respectively.
- iii. Joint Venture: No joint venture.
- iv. Coal Linkage : NTPC and TSGENCO.
- v. The land usage of the project will be as follows:

Adriyala Shaft Expansion_UGP_EC

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Gm (ALP)

PO ALP
Dy ALP
SEC (ENV) - PL
BROKER

Pre-Mining:

Land Use Pattern	Area in Ha.
Land diverted from Forest	39.40
SCCL Acquired land	300.60
Mine Take Area	340.00
Area outside the mine boundary	23.90
Total area required for project	363.90

Post- Mining:

Land Use Pattern	Area in Ha.
Plantation area	345.33 Ha
Water Body (Nalla Diversion area)	4.67 Ha
Total	340.00 Ha

Core area:

Description	Within mine boundary	Outside Mine boundary	Total
Pit head infrastructure	1.48	7.47	8.95
Approach Roads	0.23	5.01	5.24
Plantation Existing	-	-1	-
For conveyor	-	0.88	0.88
For diversion of bokkalavagu	4.67	10.54	15.21
Total	6.38	23.90	30.28

- vi. The total geological reserve is 109.594MT. The mineable reserve 41.84MT, extractable reserve is 41.84 MT. The per cent of extraction would be 100 %.
- vii. The coal grade is G-5, G-7 & G-9. The average Gradient is 1 in 6 to 1 in 7.8. There will be 7 seams with thickness ranging from 1.20 m to 11.27 m.
- viii. The total estimated water requirement is 1500 m3/day. The level of ground water ranges between 2.09 m to 4.66 m.
- ix. The method of mining would be underground.
- x. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- xi. The life of mine is 22 Years.
- xii. Transportation: Coal transportation in pit by Belt Conveyor, Surface to Siding by Belt Conveyor and loading to the wagon by silo.
- xiii. There is R & R involved. There are 750 PAFs.
- xiv. Cost: Total capital cost of the project is Rs. 1228.39 Crores. CSR Cost Rs. 5 per Tonne. R&R Cost 136.25. Environmental Management Cost (capital cost Rs. 12.07 crores, and revenue cost Rs 8.39/Ton).
- xv. Water body: SRSP canal and Bokkalavagu are flowing over the mine take area which are proposed for diversion.
- xvi. Approvals: Board's approval obtained on 27.08.2014. Mining plan has been approved on 08.08.1989. Mine closure plan is an integral part of mining plan.
- xvii. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.

- xviii. **Forestry issues:** Total forest area involved 39.40 Ha for mining, which is covered in the 412.40 Ha of Forest land already diverted to SCCL vide FC letter of MOEF No. 8-109/2005-FC dated 02/05.05.2008 as per the details below.

Sl. No.	Purpose	Underground (Ha.)	Surface (Ha.)
1	GDK-9 Inc	50	35.00
2	GDK-10&10A	286.77	193.70
3	Adriyal Shaft Block (Longwall)	39.40	
4	Jallaram Shaft Block	36.23	
5	OCP-I(Expasnon)		12.00
6	Roads & HT Lines		6.30
	Total	412.40	247.00

- xix. Total afforestation plan shall be implemented covering an area of not applicable as it is underground mine. Green Belt over an area of 335.33 ha. Density of tree plantation 2500 trees/ ha of plants.
- xx. There are no court cases/violation pending with the project proponent.
- xxi. **Public Hearing** was held on 20.11.2003.

3. **EC Compliance report:** The Compliance Monitoring Report of the MoEF, Regional Office, Bangalore vide letter no. EP/12.1/53,56 & 287/AP, dated 07.08.2013 was deliberated in the EAC meeting. The Committee noted the Action taken for compliance, which inter-alia are as follows:

- The annual rated capacity of production of coal shall remain 2.144 MTPA.
- The surface structures shall cover only 30.28 Ha not fall in forest land; Forestland (surface) shall not be disturbed by the mining operations.
- Diversion of Bokkala Vagu will be done only after obtaining the clearance;
- Measures for continuous supply of fresh air into the mine;
- Catch drains and siltation ponds be constructed to arrest silt;
- Garland drains should be constructed around the mine;
- Pumps of adequate power and capacity shall be used for dewatering;
- Regular monitoring of ground water level and quality to be carried out & should meet water requirement of nearby villages(s);
- A green belt should be raised for suppression of dust; Subsidence prediction model to be monitored and validated;
- STP shall be installed in colony. ETP be provided for workshop & CHP;
- Digital processing of the entire lease area should be done;
- A final mine closure plan should be submitted to MoEFCC.

4. The proposal was considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 25th EAC meeting held on 13th – 14th November, 2014 for granting Environmental Clearance. The Ministry of Environment, Forests & Climate Change hereby accords environmental clearance for the above-mentioned Expansion under 7(ii) of EIA Notification, 2006 of Adriyala Shaft Underground Coal Mining Expansion project (from 2.144 MTPA to 3.14 MTPA in an existing ML area of 340 Ha + 23.90 Ha outside ML area; latitude 18° 39' 03" to 18° 40' 34" N and longitude 79° 34' 28" to 79° 35' 55" E of M/s The Singareni Collieries Company Limited, located in Adriyala Village, Manthini Mandal, Karimnagar District of Telangana under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms and conditions mentioned below:

A. Specific Conditions:

- i. The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC.
- ii. The validity of the EC is for the life of the Mine or as specified in the EIA Notification, 2006, whichever is earlier.
- iii. All safety measures shall be taken as per Coal Mining Regulation Act, 1957 & related Circulars.
- iv. The environmental clearance is subject to obtaining prior clearance from wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as applicable.
- v. Grant of environmental clearance does not necessarily implies that the wildlife clearance shall be granted to the project and that their proposals for wildlife clearance shall be considered by the respective authorities on their merits and decision taken.
- vi. The investment made in the project, if any, based on environmental clearance so granted, in anticipation of the clearance from wildlife angle shall be entirely at the cost and risk of the project proponent and Ministry of Environment, Forests & Climate Change shall not be responsible in this regard in any manner.
- vii. Coal transportation in pit by Belt Conveyor, Surface to Siding by Belt Conveyor and loading to the wagon by silo.
- viii. The production shall be within the same Mining Lease area.
- ix. A separate team for subsidence monitoring and surface mitigation measures be constituted and continuous monitoring and mitigation measures be carried out.
- x. Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures shall be taken to avoid loss of life and material. Cracks shall be effectively plugged with ballast and clay soil/suitable material.
- xi. If subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement of the landowners.
- xii. Mining shall be carried out as per statuette at a safe distance from river/nalla following within adjacent to the lease boundary at the time of depillaring, protective bunds and garland drains shall be provided so that no water from the surface enters the subsidence area and the shaft.
- xiii. Sufficient coal pillars shall be left unextracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.
- xiv. Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the roads.
- xv. Diversion of Land shall be done with approval of the Competent Authorities.
- xvi. Coal Extraction shall be optimised in areas where agricultural production is continuing. Some pillars shall be left below the agricultural land. No depillaring & coal extraction should be carried out below habitation, H.T. Lines & beneath road, water bodies, railway track.
- xvii. The mined out land should be used for agriculture purpose.
- xviii. Safety measures and health issues need to be addressed for workers and surrounding villagers.
- xix. Proponent shall implement all the related safety measures with safety equipments.
- xx. The CSR cost should be Rs 5 per Tonnes of Coal produced which should be adjusted as per the annual inflation.
- xxi. At the time of establishing the CHP, it is proposed to establish mist spray arrangements and also enclosing the ground level bunkers up to the level of gantry.
- xxii. An afforestation plan to be prepared for implementation after stabilization of subsidence.
- xxiii. Water spraying arrangements at loading points and mist spray arrangements are to be provided.
- xxiv. No additional land, manpower and equipment and water shall be used for the expansion project.
- xxv. Mine closures activities include sealing of incline mouth dismantling of haulage system, clearing and afforestation of coal stock area, plantation on barren land and old abandoned mine.
- xxvi. 3-tier plantation should be developed 2 km stretch of road from the mine using native species

- xxvii. Garland drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas 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 sites. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.
- xxviii. Water sprinkling system shall be provided to check fugitive emissions from loading operations, conveyor system, haulage roads, transfer points, etc. Major approach roads shall be black topped and properly maintained.
- xxix. A progressive afforestation plan shall be prepared and implemented over the mine lease area acquired and shall include areas under green belt development, areas along roads, infrastructure, along ML boundary and township etc., by planting native species in consultation with the local DFO/Agriculture Department.
- xxx. 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 & Climate Change and to the Central Pollution Control Board quarterly within one month of monitoring.
- xxxi. Acid Water Treatment Plant, volume of water to be treated and disposal of brine should be provided.
- xxxii. High root density tree species shall be selected and planted over areas likely to be affected by subsidence.
- xxxiii. Monitoring of drinking water should be carried out regularly.
- xxxiv. Sewage treatment plant shall be installed in the township. ETP shall also be provided for treating workshop and CHP effluents.
- xxxv. 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&CC and its Regional office at Bangalore.
- xxxvi. If the water quality parameters such as F, pH, heavy metals, etc. exceed the prescribed limits, suitable measures by the proponent be taken to ensure that the local communities are provided alternate source of water for their livelihood.
- xxxvii. Medical camps should be organized in the area for regular check-up of workers/ villagers/population. Detailed prevalent disease pattern in the area should be documented and details of medical facilities provided for the same be made available to the MoEF&CC.
- xxxviii. Mine discharge water outside the ML shall be monitored, particularly for TDS and treated to conform to prescribed levels before discharge into the natural environment.
- xxxix. The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource, in case water table shows a declining trend. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- xl. 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, Ahmadabad within a period of one year and the results reported to this Ministry and to DGMS.
- xli. The mining in the existing mines should be phased out after expiry of the current mining lease and after reclamation of mined over area. The operating mines may be analysed and monitored for compliance of conditions, bearing with movement of wildlife and until such time they are closed/phased out.
- xlii. Project specific CSR for an amount of Rs5/Tonne of coal production, as adjusted as per the annual inflation, should be provided for the CSR activities undertaken and the progress made thereon shall be uploaded annually on the company website. Monitoring of the impacts of activities under CSR shall be carried out periodically.

- xlili. A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forests & Climate Change 5 years in advance of final mine closure for approval.
- xliv. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent
- xliv. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent.
- xlvi. Corporate Environment Responsibility:
 - a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
 - b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
 - d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

B. General Conditions

- i. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment, Forests & Climate Change.
- ii. No change in the calendar plan of production for quantum of mineral coal 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, PM_{2.5}, SO₂ and NO_x monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.
- iv. Data on ambient air quality (PM₁₀, PM_{2.5}, SO₂ and NO_x) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EPA rules, 1986 shall be furnished as part of compliance report.
- v. 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.
- vi. 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.
- vii. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.
- viii. Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EPA Rules, 1986.
- ix. 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.
- x. 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. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.
- 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.
 - 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 concerned Regional Office.
 - xiii. 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 & Climate Change at <http://envfor.nic.in>.
 - xiv. A copy of the environmental clearance letter shall be marked to concern Panchayat/Zila Parishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.
 - xv. A copy of the environmental clearance letter shall be shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.
 - xvi. The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM₁₀, PM_{2.5}, SO₂ and NO_x (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.
 - xvii. The project proponent shall submit six monthly compliance reports on status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the Ministry, respective Zonal Office's of CPCB and the SPCB.
 - xviii. The Regional Office of this Ministry located in the Region 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.
 - xix. The Environmental statement for each financial year ending 31 March in For -V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEFCC by e-mail.

5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.

6. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent

7. The proponent is required to obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

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

9. The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.

10. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

11. 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 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. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.

12. 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.

13. This EC supersedes the earlier EC, vide letter no. J-11015/24/2004-LA.II (M) dated 11.10.2004 for 2.144 MTPA.


(Dr. Manoranjan Hota)
Director

Copy to:

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Telangana, Secretariat, Hyderabad.
3. Chief Conservator of Forests, Regional office (SZ), Ministry of Environment, Forests and Climate Change, 4th Floor, F-Wing, Kendriya Sadan Block, Kormangala, Bangalore - 560034.
4. Principal Conservator of Forests, Govt. of Telangana, Aranya Bhawan, Saifabad, Hyderabad.
5. Member Secretary, Telangana State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanatnagar, Hyderabad - 500038.
6. Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi -110032.
7. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
8. District Collector, Khammam, Government of Telangana.
9. IG (Wild Life), Ministry of Ministry of Environment, Forests and Climate Change, New Delhi
10. Monitoring File 11. Guard File 12. Record File 13. Notice Board


(Dr. Manoranjan Hota)
Director