

No. J-11015/97/2004-IA.II (M)
Government of India
Ministry of Environment and Forests

Paryavaran Bhavan
C.G.O.Complex,
Lodi Road, New Delhi-110 003

Date the 24th January 2006

To,

Director (Planning & Project)
M/s Singareni Collieries Company Ltd.,
Kothagudem Collieries-P.O.
Khammam District-507101
Andhra Pradesh

Subject: Shantikhani longwall underground coal mining project M/s Singareni Coalfields Limited located in Village Akenipalli, Tehsil (Mandal) Bellampalli, District Adilabad in Andhra Pradesh- environmental clearance regarding

Sir,

This has reference Ministry of Coal letter No. 43011/8/2004-CPAM dated 21.12.2004 and your letter No. CRP/PP/A/487/90 dated 22.02.2005 and subsequent letters dated 26.04.2005, 27.05.2005, 22.08.2005 and 25.10.2005 on the subject mentioned above. It has been noted that the proposal is for enhancement of the production capacity of the mine from 0.08 MTPA to 1.167 MTPA and increase in lease area from 211.441 ha to 681.23 ha. The mine was initially opened on 19.12.1954. Total mining lease area of the project is 681.23 ha. out of which 118.20 ha is an agricultural land, 484.94 ha is forestland, 30.0 ha is grazing land and 48.09 ha wasteland. Forestry clearance for diversion of 285.89 ha of forestland obtained on 22.08.2004. Area proposed for mining is 681.23 ha. An area of 7.07 ha is required for setting up surface infrastructure such as office, workshop, approach road etc. out of which 2.16 ha of land is already under the possession of SCCL and falls outside the mining lease area and remaining 4.91 ha land falls within the mine take area. No ecologically sensitive area such as national park/sanctuary/biosphere reserve etc. reported within 10 km radius of the project. Working is carried out underground by mechanized method. Maximum depth of mining reported as 596.31 meters. The envisaged rated capacity of the mine is 1.167MTPA. There is no population in the core zone therefore no R&R and displacement of population is involved. Water table is in the range of 1.2 m-2.5 m bgl (pre- monsoon) to 0.2 m-11.4 m bgl (post-monsoon). Working will intersect ground water table and the average mine discharge is 5220 m³/day. Average water requirement is 550 m³/day which will be met from mine discharge water. A total of 25000 m³ of OB will be generated throughout the mine life which will be used for filling low lying areas. NOC from the State Pollution Control Board obtained on 17.11.2004 for production capacity of 1.167 MTPA involving 7.07 ha land for the project on surface and 681 ha mine take area. Public hearing held on 31.07.2004. Department of Coal, Government of India approved mining plan on 30.11.1999. Capital cost of the project is Rs.30784 lakhs.

2. The Ministry of Environment & Forests hereby accords environmental clearance to the above mentioned underground coal mining project M/s Singareni Coalfields

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Limited for annual production capacity of 1.167 million tones of coal involving total mining lease area of 681.23 ha under the provisions of the EIA Notification 1994 and its subsequent amendments issued under Environment (Protection) Act, 1986 subject to implementation of the following conditions/safeguards.

A. Specific Conditions

- (i) The environmental clearance is subject to approval of the State Landuse Department, Government of Andhra Pradesh for diversion of agricultural land for non-agricultural use.
- (ii) The environmental clearance is subject to grant of forestry clearance for diversion of forestland.
- (iii) Regular monitoring of subsidence movement on the surface over working area and impact on water bodies/vegetation/structures/surrounding should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate measures should be taken to avoid loss of life and material. Cracks should be effectively plugged with ballast and clayey soil/suitable material.
- (iv) The project authorities should check the possibility of existence of fault(s) before deciding about the thickness of safe barrier required to be maintained between the working face and the water body in consultation with the Director General Mines & Safety (DGMS). De-pillaring should also be carried out after taking prior approval of the DGMS.
- (v) Study report on subsidence and stage wise development plan starting from 5th year of operation till the end of the mine at an interval of 5 years should be submitted to the Ministry within six months.
- (vi) Top soil should be stacked with proper slope at earmarked site(s) only with adequate measures and should be used for reclamation and rehabilitation of area.
- (vii) All the mine entries should be above the highest flood level to avoid any anticipated flooding of mine from surface water during rainy season.
- (viii) In areas where subsidence is anticipated in shallow coal occurrence, such areas be identified and provided with garland drains to ensure draining of water and avoid ingress of the same in to the UG mine.
- (ix) Green belt should be raised in an area of 4.36 ha by planting the native species around the ML area, Coal Handling Plant, roads etc. in consultation with the local DFO/Agriculture Department. The density of the trees should be around 1500 plants per ha.
- (x) The project authorities should meet the water requirement of nearby village(s) in case the village wells go dry due to de-watering of the mine.

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- (xi) The project authority should implement suitable water conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (xii) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out four times in a year - pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director Central Ground Water Board.
- (xiii) Permission from the competent authority should be obtained for drawal of water for drinking/domestic use.
- (xiv) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, CGWB.
- (xv) Coal handling plant should be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (xvi) Sewage treatment plant should be installed for the colony. ETP should also be provided for wastewater from workshop and CHP.
- (xvii) Consent to operate should be obtained from SPCB before starting enhanced production from the mine.
- (xviii) Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to MOEF and its Regional Office.
- (xix) Vehicular emissions should be kept under control and regularly monitored. Overloading of trucks be avoided to stop spillage. The loaded trucks be covered with tarpaulin sheets to prevent spillage of coal.
- (xx) 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 & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral coal and waste should be made.
- (iii) Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest department and experts.

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- (iv) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO₂, Nox & CO 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.

Data on ambient air quality (RPM, SPM, SO₂, Nox & CO) should be regularly submitted to the Ministry including its Regional office at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months.

- (v) Fugitive dust emissions from all the sources should be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, loading & unloading points should be provided and properly maintained.
- (vi) Drills should either be operated with dust extractors or should be equipped with water injection system.
- (vii) Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operation of HEMM, etc should be provided with ear plugs/muffs.
- (viii) Measures for safety should be provided for storage, handling and use of explosives during the project period.
- (ix) Acid mine water, if any, has to be treated and disposed of after conforming to the standard prescribed by the competent authority
- (x) Industrial waste water (workshop and waste water 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. Oil and grease trap should be installed before discharge of workshop effluents.
- (xi) 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 take corrective measures, if needed.

- (xii) ~~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 Organization.~~
- (xiii) 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 the Ministry and its Regional Office located at Bangalore.

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- (xiv) The Regional Office of this Ministry located at Bangalore 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.
- (xv) A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom and suggestion / representation has been received while processing the proposal.
- (xvi) 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.
- (xvii) 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 7 days of the issue 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 web site of the Ministry of Environment and Forests at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bangalore.

3. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

4. 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.

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.



(SATISH C. GARKOTI)
Additional Director (S)

Copy to:

- (i) Secretary, Ministry of Coal, Government of India, Shastri Bhawan, New Delhi.
- (ii) Secretary, Department of Mines & Geology, Government of Andhra Pradesh, Secretariat, Hyderabad.
- (iii) Secretary, Department of Environment, Government of Andhra Pradesh, Secretariat, Hyderabad.
- (iv) Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, I Block, Koranmangala Bangalore-560 034

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- (v) Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
- (vi) Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- (vii) Chairman, Andhra Pradesh State Pollution Control Board, 2nd Floor, HUDA Complex, Maitrivaram, S. R. Nagar, Amarpet, Opp. Sarathi Studio, Hyderabad - 500038.
- (viii) Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- (ix) District Collector, Adilabad District, Andhra Pradesh.
- (x) EI Division, Ministry of Environment and Forests, Paryavaran Bhavan , C. G. O. Complex, Lodi Road, New Delhi-110 003 .
- (xi) Monitoring File.
- (xii) Guard File.
- (xiii) Record File.