

## No.J-11015/135/2005-JA-II(M) Government of India Ministry of Environment & Forests

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

Dated: 24th May 2005

To Chief General Manager (Civil/Env./Forest), M/s South Eastern Coalfields Ltd., Bilaspur, Chhattisgarh.

Sub: Rajnagar UG Project of M/s South Eastern Coalfields Ltd. (SECL), in village Rajnagar, Tehsil Kotma, District Shahdol, Madhya Pradesh —application for environmental clearance—reg.

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This has reference to Ministry of Coal's Letter No. 43011/15/2002-CPAM dated 24.03.2003 and M/s South Eastern Coalfields Ltd.'s letter No. SECL/BSP/Envt//2005/EMP dated 16.03.2005, on the above-mentioned subject. The Ministry of Environment and Forests has considered the application of SECL for the expansion in production level of coal production from 0.72 MTPA to 0.85 MTPA in their existing Rajnagar UG project. It is noted that the total mining lease area covers an area of 1848.112 ha of which 791.07 ha is forestland, 1004.691 ha of tenancy land and 52.851 ha of Government land. There are no National Parks, Wildlife Sanctuary, Biosphere Reserves located within the 10 km buffer zone. However, the Malga RF is located within the core zone. Forestry dearance has been obtained. Displacement of population is not involved. A township of 1863 dwelling units exists at a distance of 2 km from ML. Average water requirement is 3520 m3 per day which will be met from mine sump water. The total mineable reserves is 5.46 MT. The life of the mine at the rated capacity is 10 years. NOC from the M.P. Pollution Control Board obtained on 19.11,2043. Public hearing was held on 26.08.2003.

2. The EIA-EMP Report prepared by CMPDIL, Bilaspur shows that the significant impact due tot showing mining operations has been on the groundwater table, which is showing a declining trend over the years. The other environmental and ecological factors such as ambient air quality, water quality, noise levels etc, have been maintained by SECL within the prescribed limits. Therefore, based on the recommendations of the Expert Committee, the Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned Rajandra UG Coal mine project of M/s SECL for enhancement of production from 0.625 MTFA to 0.78 MTFA involving a lease area of 1848.112 ha under the provisions of Environmental Impact Assessment Notification, 1994 and subsequent amendments thereto subject to the conservation and recharge of groundwater and strict compliance of the terms and conditions mentioned below:

## A. Specific Conditions

(I) Regular monitoring of subsidence movement on the surface over working area and impact on water bodies/vegetation/structures/surroundings 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 any loss of life and material. Cracks should be effectively observed with hallast and clavey soil/suitable material.

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- The proponent should take all precautionary measures for protection of surface features by leaving developed coal pillars below them. Further, the protective coal pillars within the subsidence influence area should not be disturbed to avoid danger of inundation.
- The project authorities should check the possibility of existence of fault(s) before deciding about the thickness of safe barrier to be maintained between the working face and the river in consultation with the Director General Mines Safety (DGMS). De-pillaring should also be carried out after taking prior approval of the DGMS.
- (iv) Coal handing plant should be provided with adequate number of high efficiency dust extraction system. Loading an unloading area including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (V) Green belt should be raised by planting the local species along the mine boundary, ore stock pile, if any, ventilation fans, roads, and in selected open areas in consultation with local DFO/Agriculture Department, Density of trees should be at least 2000 plants per ha.
- Z(vi) Study report on subsidence and stage-wise development plan starting from 5th year of operation till end of the mine at an interval of 5 years should be submitted to the Ministry within six months.
- (vii) The proponent should implement suitable conservation measures to augment water resources in the area in consultation with the Regional Director, Central Ground Water Board, Chhattisgarh Region. The propoent should meet water requirement of nearby village(s) in case the village wells go dry due to de-watering of the mine.
- (VIII) NOC from Central Ground Water Board/Authority for abstraction of requite quantity of groundwater for the project as may be applicable shall be obtained before starting work on the project.
- Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new piezometers. 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 the Central Ground Water Board, Regional Office quarterly within one month of monitoring.
- Adequate safety measures shall be provided for storage, handling and use of explosives during the project period.
  - (XI) Sewage treatment plant should be installed in the existing colony. ETP should also be provided for workshop and CHP wastewater.
  - (xii) Consent to Operate shall be obtained from the SPCB before starting mining activities.
- / (XIII) Vehicular emissions shall be kept under control and regularly monitored.
- (XIV) The project proponent shall effectively implement measures outlined in the conservation plan for conservation of schedule-I fauna such as the sloth bear and python in consultation with Forest Department. The effectiveness of the conservation measures shall be monitored with inputs obtained from Forest Department and report furnished to this Ministry and its Regional Office.
- Digital processing of the entire lease area using remote sensing techniques should be done regularly once in 3 years for monitoring land use pattern and report submitted to MOEF and its Regional Office at Bhopal.

(xvi) A Final Mine Closura 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 RPM, SPM, SO<sub>2</sub>, NO<sub>2</sub>, 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) Data on ambient air quality (RPM, SPM, SO<sub>2</sub>,NO<sub>x</sub>) should be regularly submitted to the Ministry including its Regional Office at Bhopal and the State Pollution Control Board and the 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, wagon loading, dump trucks (loading & unloading) points should be provided and properly maintained.
- (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, operations 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 19<sup>th</sup> May 1993 and 31<sup>st</sup>. December 1993 or as amended from time to time. 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 devises 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
  - periodically to observe any contractions due to exposure to dust and 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 the Ministry and its Regional Office located at Bhopal.
- (xiii) The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- (xiv) A copy of the clearance letter will be marked to concerned Panchayat/local NGO, if any, from whom and 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 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 & Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>.
- 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 action under 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) Additional Director

## Copy to:

- Secretary, Ministry of Coal & Mines, Department of Coal, Govt. of India, Shastri
   Bhawan,
- 2. Secretary, Department of Environment & Forests, Govt of Chhattisgarh, Secretariat,
- 3. Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, E-2/240 Arera Colony, Bhopia-452 016.
- Chairman, Central Pollution Control Board, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 5. Chairman, Chattisgarh Environment Conservation Board, 14/3 Park Street, Choubey Colony,
- Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001
- Shri M.K. Shukla, CGM, Coal India Limited, SCOPE Minar, Core-I, 4<sup>th</sup> Floor, Vikas Marg, Laxminagar, New Delhi.
- 8. EI Division, Ministry of Environment & Forests, EI Division, New Delhi.
- 7. Monitoring File. 11. Guard File. 12. Record File.