

No.J-11015/64/2005-IA-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: Rajendra UG Project of M/s South Eastern Coalfields Ltd. (SECL), in village Khairaha, Tehsil Burhar, District Shahdol, Madhya Pradesh -application for environmental clearance -reg.

Sir,

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/Envnt//2005/EMP dated 02.03.2005, 17/18.03.2005, 19.03.2005, and 31.03.2005 on the above-mentioned subject. The Ministry of Environment and Forests has considered the application of SECL for the enhancement in production level of coal to 0.625 MTPA. It has been noted that the total mining lease area approved for the project 590 ha of which 385.815 ha is government and tenancy land and 204.15 ha is forestland. There are no National Parks, Wildlife Sanctuary, Biosphere Reserves located within the core zone and 10 km buffer zone. Township is located outside the mine lease in an area of 18.5 ha at a distance of 2-3 km from the mine site and comprises 685 dwelling units. Displacement of population is not involved however, compensation will be provided to land oustees for acquisition of tenancy land as per State Government norms. Blasting is involved. Water requirement is 130 m³ per day. NOC from the M.P. Pollution Control Board obtained on 25.11.2003. Public hearing was held on 30.08.2003. The main concerns expressed during public hearing were drinking water arrangements in the nearby project areas, prevention of over loading of coal through dumpers, water sprinkling of roads, plantation work, etc. SECL has undertaken to address all the issues raised during the public hearing.

2. The Ministry of Environment & Forests after duly considering the application, EIA-EMP Report submitted by the SECL and the public hearing proceedings hereby accords environmental clearance for the above-mentioned **Rajendra UG Coal mine project** of M/s SECL for enhancement of production of 0.625 MTPA involving a lease area of 590 ha under the provisions of Environmental Impact Assessment Notification, 1994 and subsequent amendments thereto subject to the compliance of the terms and conditions mentioned below:

A. Specific Conditions

- (i) Control of subsidence movements: The proponent shall take all measures for subsidence management enumerated in the EIA-EMP in a time-bound manner as under:
 - (a) A subsidence map showing original surface topography, surface features and super out shall be prepared before expansion is undertaken. A copy of this map shall be furnished to CCF, Bhopal, Regional Office, MOF, Bhopal.

- (b) Garland drains and protective bunds shall be made before start of actual extraction to prevent entry of water into the workings and avoid inundation in the mine.
 - (c) For the purpose of subsidence monitoring, stations in the form of pillars, located in a grid of 30 m x 30m upto 50m beyond the panel boundaries will be fixed. Monitoring of the subsidence shall be done on a monthly basis upto 3 years after completion of extraction.
 - (d) A qualified and competent person shall be engaged for periodic inspection of subsidence zone. He will report to the company on the visual impacts of subsidence such as formation of subsidence troughs, change in drainage pattern, etc.
 - (e) Cracks resulting from subsidence should be effectively plugged with clay soil immediately. Cracks of more than 3 feet width should be treated with special attention as explained in the EIA-EMP.
 - (f) Final restoration of land should be taken up after one year of completion of extraction.
 - (g) Copies of all monitoring and compliance reports shall be simultaneously furnished to the CCF, Bhopal. Regional Office, MOEF, Bhopal.
- (ii) The project authorities shall check the possibility of existence of fault(s) before deciding about the thickness of the safe barrier required to be maintained between the working face and the nallah/tributary of Son river in consultation with the Director General Mines Safety (DGMS). Depillaring should also be carried out after taking prior approval of DGMS.
 - (iii) Crushers at the CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, haulage roads, transfer points, etc.
 - (iv) Drills should be wet operated or with dust extractors and operated only during daytime.
 - (v) A green belt of adequate width shall be raised by planting local species along the mine lease boundary, ore stock pile, if any, ventilation fans, colony, roads and in selected open areas in consultation with local DFO/Agriculture Dept. Density of trees shall be at least 2500 plants/ha.
 - (vi) The project authority shall implement suitable conservation measures to augment groundwater resources in the area in consultation with the Regional Director, Ground Water Board, Chhattisgarh Region. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to de-watering of the mine.
 - (vii) 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.
 - (viii) Adequate safety measures shall be provided for storage, handling and use of explosives during the project period.
 - (ix) Sewage treatment plant should be installed in the existing colony. ETP should also be provided for workshop and CHP wastewater.
 - (x) Consent to Operate shall be obtained from the SPCB before starting mining activities.

- (xi) Vehicular emissions shall be kept under control and regularly monitored.
- (xii) Land oustees shall be compensated as per State Government norms and Coal India Policy.
- (xiii) The project proponent shall effectively implement measures outlined in the conservation plan for schedule-I fauna such as the sloth bear and python in consultation with the concerned forest officials. 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.
- (xiv) 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.
- (xv) 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.

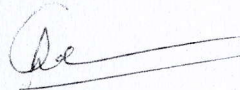
B. General conditions

- (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 RPM, SPM, SO₂, 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) Data on ambient air quality (RPM, SPM, SO₂, NO_x) 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 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.
- (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 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 <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 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:

1. Secretary, Ministry of Coal & Mines, Department of Coal, Govt. of India, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Govt. of Chattisgarh, Secretariat, Raipur.