

[LOGO]



*Ministry of Environment & Forests (MOEF)*

BY SPEED POST

No.J-11015/47/2009-IA.II (M)

Paryavaran Bhawan,  
C.G.O.Complex,  
New Delhi -110510.

To

Dated: 22<sup>nd</sup> February 2011

General Manager (E&F),  
**M/s South Eastern Coalfields Ltd.,**  
Bilaspur, Chhattisgarh.

**Sub:** Sheetaldhara-Kurja and Kapildhara Group of Underground Mines (1.12 MTPA to 3 MTPA in 1152.485ha) of M/s South Eastern Coalfields Ltd, located in village Daldal, Tehsil Kotma, district Annuppur, Madhya Pradesh –Environment Clearance –reg.  
Sir,

This has reference to letter No 43011/9/2009-CPAM dated 11.02.2009 of Ministry of Coal forwarding your application for Terms of Reference (TOR), which was granted vide MOEF letter dated 20.03.2009 and your application for environmental clearance vide letter No. SECL/BSP/Env./SKK UG Grp./2184 dated 02.08.2010 and 18.02.2010 on the above-mentioned subject. It is noted that the present proposal is for **2 underground coal mines-Sheetaldhara-Kurja (0.88 MTPA) and Kapildhara (0.24 MTPA)** on a cluster approach **for expansion in production from a combined production capacity of 1.12 million tonnes per annum (MTPA) to 2 MTPA (3 MTPA peak) in a combined project area of 1152.485 ha, which includes an ML area of 1064.054 ha and a combined colony outside the ML of 88.431 ha.** The boundaries of the two mines are common and they have a common colony. It is further noted that Sheetaldhara Kurja was granted EC on 05.10.2004 for 0.88 MTPA and Kapildhara UG on 24.11.1998 for 0.24 MTPA. A number of Reserve forests such as Sonhari RF and Haldibari RF, protected forests and CJJ/BJJ land are located in the study area. Notable endangered species includes Sloth Bear. The core zone of the group of mines consists of Nandlal Patera RF and Malga RF. The major drainage of the area is River Hasdeo. Forestry clearance has been obtained on 23.05.2003 for 126.372 ha of forestland in Sheetaldhara Kurja UG mine and on 06.05.2002 for forestland in Kapiladhara UG mine as per table below. The surface rights for Sheetaldhara-Kurja is 47.18 ha of which 17.779 ha is Govt. land and 26.913 ha is tenancy land and 273.872 ha for Kapildhara UGP. The total combined mining rights for the 2 mines is 1064.054 ha.

Particulars	Sheetaldhara Kurja UGP	Kapildhara UGP
Combined Project area including colony (ha)	1152.485	- Forestland 342.519

	- Grazing land 103.281 - Agr./tenancy land 697.705 - Surface water bodies 1.0 - Settlements 8.0	
ML area (ha)	<b>448.054</b> - Forestland 126.372 - Govt. land 47.81 - Agr./tenancy land 273.872	<b>616</b> - Forestland 216.47 - Govt. land 64.451 - Agr./tenancy 423.833
Forest Surface Rights	Nil	15.246 + 9.286 + 4.96
Forest Mining Rights	126.372	216.147
Combined Colony (ha)	<b>88.431</b> - Govt. land 22.486 - Tenancy land 65.486	
Combined Mining Rights (ha)	1064.054	
Combined Surface Rights (ha)	Mineral Storage - 2.91 Infrastructure - 38.968 ETP - 1.25 Green belt - 2.0 Safety zone - 11	
Production (MTPA)	0.88 MTPA to 1.12 MTPA (1.40 MTPA peak)	0.24 MTPA to 0.51 MTPA
Combined water req. (m3/d)	2220 - Mine use 770, drinking 50 - Domestic 1400	
Mine water discharge (m3/d)	11,029	
Coal Grade	B-C	
Water table (m bgl)	5.37m-9.27 bgl during pre-monsoon 2.96m-3.86m bgl during post-monsoon	
Ultimate working Depth (m bgl)	165	
Life of mine (years)	9	
Combined R&R	177 PAPs from 5 villages – Kurja, Daldal, Padripani, Parsapani, Bijuri of which 141 have been given employment	

Underground mining will be by continuous miner with LHD/SDL. Coal transportation of 1000 TPD is through covered trucks. Of the total water requirement of 2220 m3/d, 1900 m3/d would be met from mine water, and 320 m3/d from tube wells. Balance life of mine is 9 years. A combined Public Hearing held on 10.02.2010. Kapildhara project has been approved by SECL for a capital costs of Rs 29.305 crores and for Sheetal dhara-Kurja for Rs 98.98 crores.

2. The Ministry of Environment & forests hereby accords environmental clearance for the above-mentioned **Sheetaldhara, Kurja and Kapildhara UG Group of Mines of M/s South Eastern Coalfields Ltd. for expansion of combined production from 1.2 MTPA to 2 MTPA normative and 3 MTPA (peak) rated capacity** under section 7(ii) of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and circulars thereunder subject to the compliance of the terms and conditions mentioned below:

**A. Specific Conditions**

- (i) No mining shall be undertaken in forestland for which forestry clearance has not been obtained under the provisions of the FC Act 1980.
- (ii) Mining shall be carried out as per statuette at a safe distance from the river/nallah flowing adjacent to the lease boundary.
- (iii) High root density tree species shall be selected and planted over areas likely to be affected by subsidence.
- (iv) Coal Extraction shall also be optimised in areas where agricultural production is continuing. Subsidence shall be monitored closely and if subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement with the landowners.

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

- (vi) 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 and corrective measures taken immediately. Cracks shall be effectively plugged with ballast and clayey soil/suitable material.
- (vii) 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 an 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.
- (viii) 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.
- (ix) A afforestation plan shall be prepared and implemented over the mine lease area acquired and shall include green belt development, roads, infrastructure, along ML boundary and township etc, by planting native species in consultation with the local DFO/Agriculture Department.
- (x) Regular monitoring of groundwater level and quality shall be carried out by establishing a network of exiting 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.

- (xi) 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.
- (xii) Activities under CSR undertaken for the neighbouring villages shall be for not less than Rs 5 per tonne of coal and the progress made thereon shall be uploaded on the company website at least once in a year on the company website.
- (xiii) 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.

## **B. General Conditions**

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

No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.

Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. 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

Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bhopal 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 EP Rules, 1986 shall be furnished as part of the compliance report.

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.

Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, and treated so as to conform to the standards including for heavy metals before discharge 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 shall be installed before discharge of workshop effluents.

Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation

of the mineral shall be covered with tarpaulins and optimally loaded.

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 EP Rules, 1986.

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.

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.

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 Bhopal.

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>

A copy of the environmental clearance letter shall be marked to concerned 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 the company's website.

A copy of the clearance letter shall 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 Centre and Collector's Office/Tehsildar's Office for 30 days.

The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC 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 the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as SPM, RPM, SO<sub>2</sub> and NO<sub>x</sub> (ambient and stack if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.

The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and the SPCB.

The Regional Office of this Ministry located at Bhopal 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.

The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is mandated to be submitted by the project proponent to 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 MOEF by E-mail.

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. 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.

(Dr. T.Chandini)  
Director

**Copy to:**

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Madhya Pradesh, Secretariat, Bhopal.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, E-2/240 Arera Colony, Bhopal – 462016.
4. Chairman, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal – 462016.
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. Dr.R.K.Garg, Advisor, Coal India Limited, SCOPE Minar, Core-I, 4th Floor, Vikas Marg, Laxminagar, New Delhi.
8. District Collector, Annupur, Government of Madhya Pradesh.
9. Monitoring File      10. Guard File      11. Record File.

(Dr. T.Chandini)  
Director