

No.J-11015/229/2005-IA-II(M)  
Government of India  
Ministry of Environment & Forests

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

Dated: 3<sup>rd</sup> March 2006

To  
Head of Department (Env./ CE (Civil),  
Environment Department,  
**M/s Western Coalfields Ltd.,**  
Coal Estate, civil Lines,  
NAGPUR - 440001.

**Sub: Vishnupuri-II Underground Expansion Project (0.26 MTPA) of M/s Western Coalfields Ltd. (WCL), in village Kukurmunda, Tehsil Parasia, District Chhindwara, Madhya Pradesh – application for environmental clearance –reg.**

Sir,

This has reference to Ministry of Coal's letter No. 43011/7/2003-CPAM dated 16.06.2005 forwarding your application and your letters dated 01.12.2005 and 02.12.2005 on the above-mentioned subject. The Ministry of Environment and Forests has considered the application. It has been noted that the proposal is for expansion in production of **Vishnupuri-II Underground Coal Mine**. The total mine lease area is **321.985 ha** which consists of 172.092 ha of agricultural land, 125.753 ha of forestland, and 24.14 ha of Government land. Forestry clearance has been obtained on 16.02.1999. Of the total lease area of 321.985 h , 13.888 ha will be for infrastructure and 308.097 ha of surface area is undisturbed (for underground mining). The project does not involve R&R. Mining will be underground by semi-mechanised method. Drilling and blasting are involved. Expansion of rated capacity of the mine is **to 0.26 MTPA of coal production**. Mineral transportation of **790 tonnes per day (TPD)** of coal shall be by use of trucks to railway siding located at a distance of 15km. Ultimate working depth of mine is 283 m below ground level (bgl). Water table is in the range of 8-13 m bgl in the core zone and 7-14m bgl in the buffer zone. An estimated 80 m<sup>3</sup>/d of water will used for the project requirements is met from mine sump/pit water. Life of mine at the rated capacity of 0.26 MTPA is 39 years. Public Hearing was held on 30.05.2003. NOC from State Pollution Control Board was obtained on 10.09.2003. The project has been approved by M/s WCL on 28.01.1991. The capital cost of the project is **Rs. 1582.63 lakhs**.

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Vishnupuri-II Underground Expansion Coal Project** of M/s WCL for expansion in production to **0.26 MTPA of coal** in a total lease area of **321.985 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) Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structures, roads, surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures should be taken to avoid loss of life and material. Cracks should be effectively plugged with ballast and clayey soil/ suitable material.

- (ii) Garland drains (size, gradient & length) around the safety areas such as mineshaft and low-lying areas and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mines site. Sump capacity should also provide adequate retention period to allow proper settling of silt material.
- (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) Controlled blasting should be practiced with the use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.
- (vi) A progressive afforestation plan shall be prepared and implemented for the undisturbed area and shall include 3 ha brought under green belt development, areas along roads, along ML boundary, township outside the lease area, etc by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.
- (vii) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. 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.
- (viii) 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 water levels should be done at least 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.
- (ix) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. 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.
- (x) 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.
- (xi) 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.
- (xii) A Consent to Operate shall be obtained before expansion of mining operations within the lease area.

#### **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>x</sub>, and 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 Chhattisgarh State Environment Conservation 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 from the lease 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, Environment Department, Government of Maharashtra, 15<sup>th</sup> Floor, New Admn. Bldg., Madam Cama Road, MUMBAI-400032.
3. Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, E-2/240 Arera Colony, Bhopal-462 016.
4. Chairman, Central Pollution Control Board, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
5. Chairman, Maharashtra State Pollution Control Board, Kalapataru Point, 3<sup>rd</sup> & 4<sup>th</sup> Floor, Sion Matunga Scheme Road No.8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai - 400002.
6. Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001
7. Shri M.K. Shukla, CGM, Coal India Limited, SCOPE Minar, Core-I, 4<sup>th</sup> Floor, Vikas Marg, Laxminagar, New Delhi.
8. District Collector, Chhindwara, Government of Maharashtra.
9. EI Division, Ministry of Environment & Forests, EI Division, New Delhi.
10. Monitoring File. 11. Guard File. 12. Record File.