

No.J-11015/43/2004-IA-II(M)
Government of India
Ministry of Environment & Forests

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

Dated: 20th June 2005

To
Shri D.K.Roy,
General Manager (Env./WBP),
M/s Western Coalfields Ltd.,
Coal Estate, Civil Lines,
Nagpur - 440001.

Sub: Bhanegaon Opencast Project of M/s Western Coalfields Ltd. (WCL), in village Bina, Tehsil Kamptee, District Nagpur, Maharashtra -application for environmental clearance -reg.

Sir,

This has reference to M/s Coal India Ltd.'s letter No. CIL/DLI/ENV/2004/28 dated 03.08.2004 forwarding your application and subsequent letters dated 29.09.2004, 08.11.2004, 09.11.2004, 13.06.2005 and 14.06.2005 on the above-mentioned subject. The Ministry of Environment and Forests has considered the application. It has been noted that the project is for opening a new **Bhanegaon Opencast Coal mine** of 0.60 MTPA production capacity. The total mining lease area is **348.13 ha** of which 329.16 ha is agricultural land, and 18.97 ha is Govt. land. No forestland is involved. Of the total lease area, area for excavation is 88.15 ha, 153.45 ha is for ext. OB dump, 2.0 ha is for infrastructure, 3.50 ha is for roads, 40 ha is for safety zone, 20.96 ha is for rationalisation, and 40.07 ha is for future exploration. There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 10 km buffer zone. The riverbank is located about 125m from ML boundary. The project involves rehabilitation of land oustees. Site clearance was accorded on 20.08.2004. Mining will be opencast by semi-mechanised method. Drilling and blasting are involved. Rated capacity of the mine is **0.60 million tonnes per annum (MTPA) of coal production**. Mineral transportation of **1818 TPD** of coal shall be by use of 300 tipper trucks per day. Ultimate working depth of mine is 155 m below ground level (bgl). Water table is in the range of 2-18.0 m bgl (pre-monsoon) and 0-14 m bgl (post-monsoon). Peak water requirement is 246 m³/d of which, 57 m³/d is met from groundwater and 189 m³/d is met from mine sump water. An estimated 67.05 Mm³ of water will be generated over life of mine of which 9.25 Mm³ of ZOB will be backfilled, 57 Mm³ will be dumped in ext. OB dumps, and 0.80 Mm³ will be used for construction of embankment along ML. Backfilling is proposed from 20th year onwards. Public Hearing was held on 26.11.2001. Consent to Establish from Maharashtra State Pollution Control Board has been obtained on 19.08.2002. Life of the mine at the rated capacity of 0.6 MTPA is 26 years. The project has been approved by M/s WCL on 13.11.2003. The capital cost of the project is **Rs. 3043.81 lakhs.**

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned proposed **Bhanegaon Opencast Expansion Coal project** of M/s WCL for production of coal of **0.60 MTPA rated capacity** in a total lease area of **348.13 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) The Embankment constructed for the part of mine lease boundary adjacent to the river should be of sufficient height over the HFL and width to protect the mine from inundation from peak flow from river.

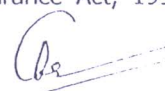
- (ii) Top soil should be stacked properly with proper slope at earmarked site(s) and should not be kept active and shall be used for reclamation and development of greenbelt.
- (iii) OB should be stacked at earmarked external OB dumpsites only and shall be a maximum height of 90 m only and consist of three benches of 30m each. The ultimate slope of the dump shall not exceed 28°. The rehandling of the OB for backfilling will begin from 20th year onwards. Monitoring and management of rehabilitated dump sites should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhopal on yearly basis.
- (iv) Catch drains and siltation ponds of appropriate site should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilised for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly.
Garland drains (size, gradient & length) 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.
- (v) Pumps of adequate number and capacity should be provided which drain the mine water even during maximum rainfall.
- (vi) Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.
- (vii) Drills should be wet operated or with dust extractors.
- (viii) Controlled blasting should be practiced with the use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.
- (ix) Afforestation shall cover a total of 223.45 ha which includes an area of 50 ha along the ML boundary, external OB dump of 155.20 ha, roads of 1.5 ha, 16.25 ha along embankment and in 0.5 ha of township outside the lease area 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.
- (x) A Progressive Mine Closure Plan shall be implemented from 20th year onwards 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.
- (xi) The proponent shall submit a water table configuration map with direction of groundwater flow, demarcation of discharge and recharge areas within three months for CGWA approval.
- (xii) The proponent should ensure proper treatment of mine discharge water o safeguard its use for drinking and agricultural purposes.
- (xiii) Necessary approved from State Landuse Department, Government of Maharsashtra will be obtained for diversion of agricultural land for mining before starting activities on this project.
- (xiv) 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 for minimum 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.

- (xv) 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.
- (xvi) Sewage treatment plant should be installed in the existing colony.
- (xvii) 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.
- (xviii) 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.
- (xix) Consent to Operate should be obtained from the SPCB before expansion in production.

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 before discharge. 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, Environment Department, Government of Maharashtra, 15th 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, 3rd & 4th 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, 4th Floor, Vikas Marg, Laxminagar, New Delhi.
8. District Collector, Nagpur, Government of Maharashtra.
9. EI Division, Ministry of Environment & Forests, EI Division, New Delhi.
10. Monitoring File. 11. Guard File. 12. Record File.