

No.J-11015/306/2008-IA.II(M)
Government of India
Ministry of Environment & Forests

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

Dated: 19th May 2009

To
M/s Western Coalfields Ltd.,
Coal Estate, Civil Lines,
NAGPUR - 440001.

Sub: New Majri II (A) Opencast Coal Mine Expansion Project (production from 2.0 MTPA to 2.50 MTPA and ML area from 432.02 ha to 774.538) of M/s Western Coalfields Ltd. (WCL), located in village Majri, Tehsil Bhadrawati, District Chandrapur, Maharashtra - environmental clearance - reg.

Sir,

This has reference to letter No. 43011/48/2008-CPAM dated 08.07.2008 of Ministry of Coal forwarding the application for environmental clearance u/s 7 (ii) of the EIA Notification 2006 and letters dated 07.01.2009 and 20.02.2009 of M/s WCL on the above-mentioned subject. The Ministry of Environment & Forests has considered the application. The application is for environmental clearance under section 7 (ii) of the EIA Notification 2006 for **expansion in production in New Majri II (A) Opencast Coal Mine Expansion Project (production from 2.0 million tonnes per annum (MTPA) to 2.50 MTPA and ML area from 432.02 ha to 774.538**. EC was granted on 19.05.2005 for 2 MTPA in 432.05 ha. Of the total lease area of **774.538 ha**, 742.518 ha consists of agricultural land and 32.02 ha is Govt. wasteland. No forestland is involved. There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 15 km buffer zone. Of the total lease area, area for excavation is 537.50 ha, 177.90 ha is for ext. OB dumps, 42.138 ha is for infrastructure and 17 ha is area for rationalisation. The drainage of the area is controlled by River Wardha flowing at a distance of 1.5 km. The project does not involve modification of the natural drainage. Mining will be opencast by mechanised method involving shovel-dumper. Ultimate working depth remains 80m bgl. Mineral transportation of coal is by road. Water table is in the range of 10-12 m bgl during pre-monsoon and 8-10m bgl during post-monsoon. Peak water requirement of 750 m³/d is to be met from River Wardha. Total OB generation from the mine is estimated to be 269.538 Mm³ over the life of which 114.838 Mm³ of OB has been excavated of which 73.913 Mm³ of OB has been stored in two ext. OB dumps of 83 ha and 40.925 Mm³ has been backfilled and the balance 154.70 Mm³ to be excavated would be concurrently backfilled. The project does not involve R&R. Balance life of the project is about 15 years. Public Hearing was held on 27.07.2004 for 2 MTPA project. The project has been approved by M/s WCL on 05.11.2008. Capital cost of the project is **Rs. 115.86 crores**.

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **New Majri II (A) Opencast Expansion Coal Mine Project of M/s WCL for expansion in production of coal from 2.0 MTPA to 2.50 MTPA rated capacity and expansion in total lease area from 432.02 ha to 774.538 ha** under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and Circulars there under and subject to conditions specified below:

A. Specific Conditions

- (i) No additional land, manpower and equipment shall be used for the expansion project.
- (ii) No OB from the expansion project shall be dumped on existing external OB or no new ext. OB dumps shall be created. The OB generated from the balance life of the project shall be concurrently backfilled into the decoaled void. The existing dumps shall also be biologically

reclaimed using a mix of native species and ultimate slope of the dumps shall not exceed 28°. Monitoring and management of reclaimed dumpsite shall continue until the vegetation in all the dumps becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional office located at Bhopal on an yearly basis.

- (iii) Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilised for watering the mine area, roads, green belt development, etc. The drains shall be regularly desilted and maintained properly.
Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity shall also provided adequate retention period to allow proper settling of silt material.
- (iv) Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.
- (v) Drills shall be wet operated only.
- (vi) Controlled blasting shall be practiced with use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.
- (vii) High efficiency bag filters/water sprinkling system to check fugitive emissions from crushing operations, conveyor system/ropeway, haulage roads, transfer points, etc. shall be installed and operated effectively at all times of operation.
- (viii) An area not less than 581.025 ha shall be brought under afforestation which includes reclaimed external OB dump (177.90 ha), backfilled area (403.125 ha), along ML boundary, along roads & infrastructure, green belt, and area for rationalisation area within the lease and within the in township by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.
- (ix) A Progressive Mine Closure Plan shall be implemented by reclamation of quarry area of 537.50 ha of which 403.125 ha shall be backfilled and afforested by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.
- (x) Additional water requirement if any shall be met from mine water discharge.
- (xi) Groundwater shall not be used for mining operations.
- (xii) The company shall identify sites for construction of water harvesting structures for augmentation of groundwater resource in case decline in water table is observed over the project life.
- (xiii) ETP of sufficient capacity shall be provided for workshop and CHP wastewater and maintained and operated properly. An STP of adequate capacity shall also be provided to treat the domestic effluents and recycle the treated water for green belt development. Mine water discharged from the mine shall be treated to conform to prescribed standards.
- (xiv) Besides carrying out regular periodic health check up of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check up for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmedabad within a period of two years and the results reported to this Ministry and to DGMS.

- (xv) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted for approval to the Ministry of Environment & Forests RO, Bhopal 5 years before closure of mine.
- (xvi) For monitoring land use pattern and for post mining land use, a time series of landuse maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bhopal.
- (xvii) The socio-economic development of the villages covered under CSR shall be monitored over the life of the project using UNDP Human Development Indices and reported as part of the Report submitted to MOEF RO, Bhopal.

B. General Conditions

- (i) No change in mining technology and scope of working shall 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 shall be made.
- (iii) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring SPM, RPM, SO₂, NO_x and heavy metals such as Hg, Pb, Cr, As, etc. 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.
- (iv) Fugitive dust emissions (SPM and RSPM and heavy metals such as Hg, Pb, Cr, As, etc) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, dump trucks (loading and unloading) points shall be provided and properly maintained.
- (v) Data on ambient air quality (SPM, RSPM, SO₂, NO_x and heavy metals such as Hg, Pb, Cr, As, etc) 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.
- (vi) 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.
- (vii) Industrial wastewater (workshop and wastewater from the mine) shall 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 shall be installed before discharge of workshop effluents.
- (viii) Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.
- (ix) Environmental laboratory shall 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 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 effects due to exposure to dust and to take corrective measures, if needed.

- (xi) 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.
- (xii) 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.
- (xiii) 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.
- (xiv) A copy of the will be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.
- (xv) State Pollution Control Board shall 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 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>. The compliance status shall also be uploaded by the project authorities in their website and regularly updated at least once in six months so as to bring the same in the public domain. The data shall also be displayed at the entrance of the project premises and mines office and in corporate office.

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 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, New Delhi.
2. Secretary, Department of Environment, Government of Maharashtra, 15th Floor, New Admn. Bldg., Madam Cama Road, MUMBAI – 400032.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, E-2/240 Arear Colony, Bhopal – 462016.
4. Chairman, Maharashtra State Pollution Control Board, Kalapataru Point, 3rd & 4th Floors, Sion, Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai – 400002.
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. Shri M.K. Shukla, CGM, Coal India Limited, SCOPE Minar, Core-I, 4th Floor, Vikas Marg, Laxminagar, New Delhi.
8. District Collector, Chandrapur, Government of Maharashtra.
9. Monitoring File 10. Guard File 11. Record File.