

No. J-11015/67/2009-IA.II (M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
CGO Complex, Lodi Road
New Delhi-110510.
Dated: 31st December, 2012

To

The Director (Tech.)
M/s Western Coalfields Ltd.,
Coal Estate,
NAGPUR -440001.

Sub: Jamuniya underground -Phase -I project for a normative capacity of 0.72 MTPA & peak capacity of 0.828 MTPA in a ML Area of 332.30 ha without any forest land of M/s Western Coalfield Ltd., located in Pench-Kanhan Coalfields, dist. Chindwara, Madhya Pradesh. - Environmental Clearance – reg.

Sir,

This is with reference to letter No 43011/16/2009- CPAM dated 04.03.2009 for Terms of Reference, which was granted vide MOEF letter dated 15.04.2009 and with reference to application for environmental clearance based on the prescribed Terms of Reference vide letter No. WCL/HQ/ENB/8-G/629 dated 21.10.2009 and letters dated 09.03.2010, 12.07.2011 and 17.08.2011 on the above-mentioned subject. The Ministry of Environment & Forests has considered the application. It has been noted that the proposal is for opening a new underground coalmine of 0.72 MTPA & peak capacity of 0.828 MTPA in a ML Area of 332.30 ha of which, 325.305 ha is tenancy land. 9.0 ha is Govt. land and no forest land is involved in the present proposal. 316.24 ha is all right land and 7.0 ha is land for surface right. is required for shaft and surface infrastructure like CHP, building and colony. The mine is located at about 53 km from the viable tiger corridor and is flanked by Mandla North and Mandla South UG mines. River Pench flows 1.5-2.5 km from the southern and western boundaries of the lease area. Mining methodology is Board & Pillar and continuous miner. The working depth is about 194m-400m bgl. Grade of coal is C to E and B to D in the lower seams. Since there is no forest land under Surface/All right, the initial mining activities namely incline driaage can start after EC. The Incline driaage (two nos. of 840 m each) and sinking of air shaft (194 m depth) will take about 3 years. Thereafter, the main dip development can start below non-forest land along with development of panels namely Panel 6, 14, 15 & 16 also below non-forest land which will take another 3-4 years. Peak production would be achieved in the 4th year after sinking of the shaft has been completed. Subsidence is not anticipated due to presence of overlying hard rock. Ground water level is 15-18m bgl. A seasonal Gunor river flows adjoining the Block. It was informed that it is proposed to acquire it (all rights). Mineral transportation would be by road to railway siding proposed at a distance of 15 km at Parasia railway siding (existing Railway Siding of WCL) and by rail thereafter to the linked sponge iron plant located at a distance of 400km. belt conveyors for coal transportation. No R&R is involved. CSR would be undertaken at Rs10 /T of coal. A budgetary provision of Rs 5/tonne of coal has been made under the CSR for undertaking socio-economic activities for the adjoining villages.. Life of the project is about 37 years. Public Hearing was held on 30.7.2009. The capital cost of the project is Rs.127.5223 crores.

2. The Ministry of Environment & Forests hereby accords environmental clearance to the above-mentioned Jamuniya **underground coalmine Project Phase –I of M/s Western Coalfield Ltd. for a normative Production capacity of 0.72 MTPA & peak capacity of 0.828 MTPA in a ML Area of 332.30 ha, without any forest land**, under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and under MOEF Circulars there under 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, structure, roads, and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures shall be taken to avoid loss of life and material. Cracks shall be effectively plugged with ballast and clayey soil/suitable material.
- (ii) If subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement of the landowners.
- (iii) Mining shall be carried out as per statuette at a safe distance from the river/nallah flowing adjacent to the lease boundary.
- (iv) High root density tree species shall be selected and planted over areas likely to be affected by subsidence.
- (v) Coal Extraction shall also be optimised in areas where agricultural production is continuing. 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) 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.
- (vii) 3-tier plantation should be developed 2 km stretch of road from the mine using native species
- (viii) 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.
- (ix) 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.
- (x) Transportation of coal from the mine to railway siding proposed at a distance of 15 km at Parasia railway siding (existing Railway Siding of WCL should be by 20T mechanically covered trucks.
- (xi) A progressive afforestation plan shall be prepared and implemented over the mine lease area acquired and shall include areas under green belt development, areas along roads, infrastructure, along ML boundary and township etc, by planting native species in consultation with the local DFO/Agriculture Department.
- (xii) 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.
- (xiii) Acid Water Treatment Plant, volume of water to be treated and disposal of brine should be provided.
 - (xiv) Mine discharge water outside the ML shall be monitored, particularly for TDS and treated to conform to prescribed levels before discharge into the natural environment.
 - (xv) 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.
 - (xvi) 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, Ahmadabad within a period of one year and the results reported to this Ministry and to DGMS.
 - (xvii) The user agency shall contribute on proportionate basis, the amount required for implementation of the Habitat Restoration of Pench-Satpura Tiger corridor plan to be prepared by the NTCA for rejuvenation and restocking of the flora-fauna found in the viable corridor to ensure the long-term survival of the tiger population and the mitigative measures to eliminate/minimise the adverse impact of the transportation of coal to be extracted from the Pench-Kanhan coal fields on the viable corridor.
 - (xviii) The mining in the existing mines would be phased out after expiry of the current mining lease and after reclamation of mined over area. The operating mines may be analysed and monitored for compliance of conditions, having bearing with movement of wild life until such time they are closed/phased out
 - (xix) Project specific CSR for an amount of Rs5/Tonne of coal production should be provided for the activities under CSR undertaken for the neighboring villages shall be for not less than Rs 10 per tonne of coal and the progress made thereon shall be uploaded on the company annually on the company website. Monitoring of the impacts of activities under CSR shall be carried out periodically.
 - (xx) 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.
 - (xxi) Corporate Environment Responsibility:
 - a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
 - b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.

- d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

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.
- (ii) No change in the calendar plan including quantum of mineral coal and waste being produced 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 PM10, PM2.5, SO2 and NOx. 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 of heavy metals such as Hg, As, Ni, Cd, Cr, in RSPM etc. shall be carried out at least once in six months.
- (iv) Data on ambient air quality (PM10, PM2.5, SO2 and NOx and heavy metals such as Hg, As, Ni, Cr, etc) 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.
- (v) 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.
- (vi) 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 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.
- (vii) 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.
- (viii) 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.
- (ix) Monitoring of outlet points should be carried out and records of same should be maintained and submitted to the Regional Office of the MOEF as part of the Compliance Report.
- (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 contractions 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 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>
 - (xiv) 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.
 - (xv) 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.
 - (xvi) 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 PM10, PM2.5, SO₂ and NO_x (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.
 - (xvii) 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.
 - (xviii) 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.
 - (xix) The environmental statement for each financial year ending 31st 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. Manoranjan Hota)
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 Arear 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. CGM, Coal India Limited, SCOPE Minar, Core-I, 4t Floor, Vikas Marg, Laxminagar, New Delhi.
8. District Collector, Chindwara, Government of Madhya Pradesh, New Delhi.
9. Monitoring File 10. Guard File 11. Record File

(Dr. Manoranjan Hota)
Director