



Ministry of Environment & Forests

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

No. J-11015/56/2008-IA.II (M)

Dated: 16th March 2012

To
Chief General Manager (E&F),
M/s Western Coalfields Ltd.,
Coal Estate, Civil Lines,
NAGPUR-440001.

Sub: Durgapur Opencast Expansion Project (expansion from 2.30 MTPA to 3 MTPA in 1186.54 ha of existing ML area) of M/s Western Coalfields Ltd., located in village Durgapur, Tehsil & Dist. Chandrapur, Maharashtra -Environmental Clearance regarding.

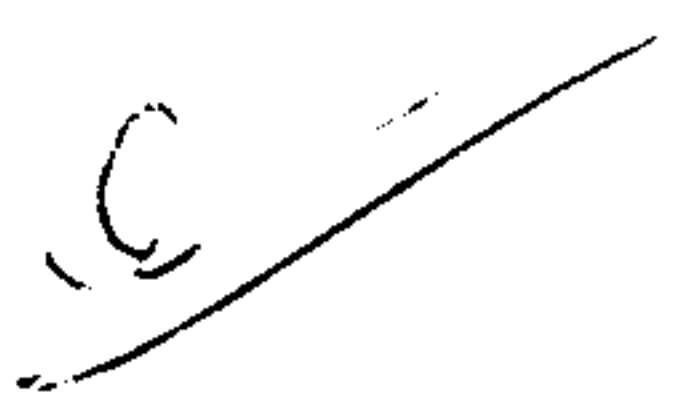
Sir,

This has reference to letter No 43011/1/2008-CPAM dated 14.01.2008 of the Ministry of coal forwarding your application for Terms of Reference and a revised application vide letter No. 43011/20/2008-CPAM dated 25.03.2008 and this Ministry's grant of TOR vide letter dated 12.06.2008 and your application for environmental clearance vide letter no.WCL/ENV/HQ/3-C/110 dated 18.03.2011 on the above mentioned subject. The Ministry of Environment & Forests has considered the application. It is noted that **Durgapur Opencast Coalmine Project** was granted an environmental clearance for production of 2.30 million tonnes per annum (MTPA) in an ML area of 1354.64 ha on 30.03.2007. The proposal is for **expansion of the existing Durgapur Opencast Coalmine Project for expansion in production capacity from 2.30 MTPA to 3 MTPA in 1186.54 ha of area acquired within the existing ML area of 1354.64 ha.** There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found within 10km of the buffer zone. As per letter No. Kaksh-5/survey/09-10/659 dated 16.01.2010 of the Office of the Conservator of Forests & Regional Director, Tadoba Andhari Tiger Project, the mine is located at a distance of 12.25 km from the Tadoba Andhari Tiger Reserve. The total ML area is 1354.64 ha, of which the total area for the present project is 1186.54 ha, which consists of 872.14 ha of agricultural land, 157.93 ha of Govt. land and 257.77 ha of forestland. Forestry clearance has been obtained for 257.77ha of forestland – 40.46 ha on 23.05.1980, 136.54 ha on 19.09.2006 and 80.77ha on 08.11.2005. The expansion in production does not involve change in technology. The opencast expansion would be carried out by using shovel-dumper and by working deeper from 110m to an ultimate depth of 190m bgl. Of the total ML area, 533.52 ha is for excavation, 577.83 ha is for ext. OB dump, 45 ha is for infrastructure, 25 ha is for road diversion, 92.57 ha is blasting zone, 102 ha is for township, 100 ha is for green cover. Of the total OB generation of 205.08 Mm³, 103.91 Mm³ of OB would be stored in external OB dump and the balance 101.17 Mm³ of OB would be backfilled. An area of 368ha has been developed with plantation. The total estimated peak water requirement is 2995 m³/d, which is met from mine pit water. Mineral transportation of 9090 TPD is by aerial ropeway. No R&R is involved. It is proposed at a later stage to extend the mine along the dip side further by expansion of the ML area from 1354.64 ha 1475.92 ha, which involves an additional forestland of about 121 ha for which FC is under process. Public Hearing for the expansion project involving 1475.92 ha and expansion in production from 2.30 MTPA to 3 MTPA has been held on 30.10.2009.

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above mentioned **expansion of the existing Durgapur Opencast Coalmine Project for expansion in production capacity from 2.30 MTPA to 3 MTPA rated capacity in 1186.54 ha of the ML** under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and Circulars issued thereon subject to the compliance of the terms and conditions mentioned below:

A. Specific Conditions

- (i) The peak production capacity of the project shall not exceed 3 MTPA without prior EC from this Ministry.
- (ii) No mining operations shall be carried out beyond 1186.54 ha of the ML.
- (iii) OB shall be stacked at earmarked external OB dumpsites covering an area of 577.83 ha. The ultimate slope of the dump shall not exceed 28°. Bamboo and other native species shall be planted on OB dumps for slope stability. Monitoring and management of the reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall 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 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 provide adequate retention period to allow proper settling of silt material. 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) Crushers at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.
- (vi) Drills shall be wet operated.
- (vii) Main approach roads shall be black topped and properly maintained. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads and major haul roads and roads near Mines Office, infrastructure and other buildings.
- (viii) Coal transportation shall be by aerial ropeway only.
- (ix) Controlled blasting shall be practiced with use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.
- (x) A progressive afforestation plan shall be implemented, which includes external OB dumps, backfilled area, vacant/undisturbed area, area around infrastructure and roads and township area for colony by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.
- (xi) Mine pit water shall be used for the mining operations. No groundwater shall be used for mining operations.



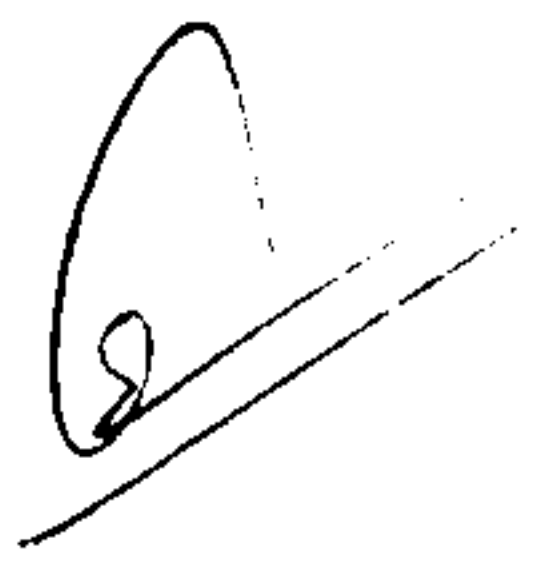
- (xii) Monitoring of ground water regime and river flow conjunctively shall be undertaken on a regular and long term basis through a network of peizometers/wells taking into account depth and site characteristics. Monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (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 as part of the compliance Report.
- (xiii) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring indicates a decline in water table. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- (xiv) Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
- (xv) 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.
- (xvi) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests in case of the extension project is not implemented.
- (xvii) The project authorities shall in consultation with the local administration and Panchayats of the local villages prepare and implement a Plan for socio-economic and welfare measures under CSR to be carried out over the balance life of the mine. A budgetary provision of Rs 5 per tonne of coal) shall be earmarked for CSR activities. The budget and expenditure thereon village-wise and activity-wise for CSR shall be displayed on WCL website and also included as part of the Annual Plan.
- (xviii) The company shall have a well laid down Environmental Policy approved by the Board of Director. The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringement/deviation/violation of the enviroental norms/conditions. To provide for checks and balances the company should have a well laid out system of reporting on 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 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 PM₁₀, PM_{2.5}, SO₂ and NO_x monitoring. 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 (PM₁₀ and PM_{2.5}) 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 (PM₁₀, PM_{2.5}, SO₂ and NO_x) 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.
- (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 contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof.
- (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 Collectors 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>.



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.


 (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 Arera 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. Dr.R.K.Garg, Advisor. Coal India Limited, SCOPE Minar, New Delhi
8. District Collector, Chnadrapur, Government of Maharashtra.
9. Monitoring File 10. Guard File 11. Record File.