

No.J-11015/928/2007-IA.II(M)
Government of India
Ministry of Environment & Forests

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

Dated: 29th April 2010

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

Sub: Kolar Pimpri Extension OCP (Expansion from 511 ha to 1488.42 ha and production capacity from 1.05 MTPA to 1.50 MTPA) of M/s Western Coalfields Ltd. located in dist. Yavatmal, Maharashtra - environmental clearance - reg.

Sir,

This has reference to letter No. 43011/106/2007-CPAM dated 23.08.2007 of Ministry of Coal forwarding your application for Terms of Reference and this Ministry's grant of TOR vide letter dated 17.12.2007 and your application vide letter No. CIL/DLI/ENV/1681 dated 13.01.2010 and dated 07.01.2010 on the above-mentioned subject. The Ministry of Environment & Forests has considered the application. It is noted that the existing Kolar Pimpri Opencast Project of 1.05 MTPA capacity in an ML area of 511 ha was granted EC on 20.05.2005 and the present proposal is for **expansion of the Kolar Pimpri Extension Opencast Coalmine Project from 1.05 MTPA to 1.50 MTPA production capacity and expansion in ML area from 511 ha to 1488.42 ha**. Of the total ML area, 1438.38 ha consist of agricultural land and 50.04 ha consist of wasteland. No forestland is involved. Of the ML area of 1438.38 ha, 479.46 ha of the ML is under possession and the balance 961 ha is yet to be acquired. Of the total lease area, area for excavation is 357.65 ha, 674.55 ha is for OB dumps, 5 ha is for infrastructure, 55 ha is for embankment, 356.22 ha is for danger zone, rationalisation area, roads and for diversion of nala. There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 15 km buffer zone. River Wardha flows at distance of 100m from the ML. Major part of the ML is below the HFL of River Wardha (186.20mRL). An embankment has been constructed. The project involves modification of the natural drainage by diversion of a nala. Mining is opencast by mechanised method involving shovel-dumper. Mineral transportation of **4545 TPD** of coal is by road. Ultimate working depth of the mine is 200m below ground level (bgl). Present working depth is 95m bgl. Water table is in the range of 3.49-16.97m bgl during pre-monsoon and 1-9.34m bgl during post monsoon. Peak water requirement is 390 m³/d, which is met from mine pit water. No fresh source of water is proposed for use in the project operations. The estimated total OB generation over the life of mine is 282.303 Mm³ of which 37.337 Mm³ would be backfilled and the balance 244.964 Mm³ of OB is being dumped in 4 external OB dumps of a max. height of 60m of benches of 15m each, backfilling has begun from first year of mining operation. At the post mining stage, an area of 902.28 ha would be developed with plantation and a water body of 268.9 ha would be left in the decolled void. R&R involves 512 PAFs to be displaced from 4 villages - Gowari, Aheri, Kolera and Pimpri of which Aheri, Kolera and Pimpri are yet to be resettled. Land oustees from the balance 961 ha of agricultural land yet to be acquired are to be enumerated. Balance life of the mine at 1.50 MTPA rated capacity is 27 years. Public Hearing was held on 23.12.2008. The project has been approved by M/s WCL on 14.07.2006. Capital cost of the project is **Rs. 7289.84 lakhs**.

2. The Ministry of Environment & forests hereby accords environmental clearance for the above-mentioned **expansion of the Kolar Pimpri Extension Opencast Coalmine Project from 1.05 MTPA to 1.50 MTPA production capacity and expansion in ML area from 511 ha to 1488.42 ha** under the Environmental Impact Assessment Notification,

File - 11 - D

2006 and subsequent amendments and Circulars thereto subject to the compliance of the terms and conditions mentioned below:

A. Specific Conditions

- (i) The embankment constructed along the river boundary shall be of suitable dimensions and stabilised with plantation so as to withstand the peak water flow and prevent mine inundation.
- (ii) The mining operations shall not extend in the balance 961 ha of the lease area until the R&R for all the villages has been completed and compensation paid to land oustees as per norms not less than that laid out under the National R&R Policy,
- (iii) OB shall be stacked at four earmarked external OB dumpsite(s) only covering an area of 641.98 ha and shall not exceed the max. height of 65m consisting of benches of 15m each. The ultimate slope of the dump shall not exceed 28°. 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.
- (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 provide 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) 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) The project authorities shall ensure that the roads used for mineral transportation are 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.
- (viii) 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.
- (ix) A progressive afforestation plan shall be implemented covering an area not less than 902.28 ha, which includes reclaimed external OB dump (674.55 ha), backfilled area (88.73 ha), along ML boundary, along roads and infrastructure (5 ha), embankment (55 ha) and within vacant land (356.22 ha) and in township located outside the lease by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. Massive plantation shall be carried out in open spaces in and around the mine and avenue plantation along the main approach roads to the mine.


- (x) Of the total quarry area of 357.65 ha, the backfilled quarry area of 88.73 ha shall be reclaimed with plantation and a void of 268.90 ha which is proposed to be converted into a water body shall be gently sloped and the upper benches shall be terraced and stabilised with plantation/afforestation 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.
- (xi) No groundwater shall be used for mining operations.
- (xii) Monitoring of ground water regime and river flow conjunctively on regular and long term basis shall be undertaken in view that the mine site is in the proximity of the river Wardha, through a close network of observation wells/piezometers & river gauging. Similarly, the hydrogeological impact on account of proposed expansion should also to be monitored regularly on long term perspectives.
- (xiii) A comprehensive 'Ground Water Monitoring Plan' shall be submitted within a period of three months of grant of EC. The plan shall incorporate information on details of piezometer/well (depth, locations) site characteristics, monitoring parameters (quality and quantity), time frame of implementation and budgetary provisions etc. 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.
- (xiv) 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.
- (xv) Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
- (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, Ahmedabad within a period of one year and the results reported to this Ministry and to DGMS.
- (xvii) 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.
- (xviii) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests within six months from date of environmental clearance for approval.
- (xix) The project authorities shall in consultation with the panchayat of the local villages identify 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.

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, PM2.5, SO2 and NOx 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 Nox) 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 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 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>.
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, Maharsashtra 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, Yavatmal, Government of Maharashtra.
9. Monitoring File 10. Guard File 11. Record File.