

**BY SPEED POST**

No. J-11015/92/2009-IA.II (M)  
**Government of India**  
**Ministry of Environment & Forests**

Paryavaran Bhawan,  
CGO Complex, Lodhi Road  
New Delhi-110510.  
Dated: 14 May, 2013

To,

Chief General Manager  
Ballarpur Area, WCL,  
Dist. Chandrapur,  
Maharashtra.

**Sub.: Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra - Environment Clearance – reg.**

Sir,

This has reference to letter No. 43011/22/2009 dated 24<sup>th</sup> March, 2009 of Ministry of Coal forwarding the application for Terms of Reference (TOR) and this Ministry's letter dated 30.04.2009 granting TOR to the above mentioned Project and subsequent letter from **M/s Western Coalfields Ltd.**, bearing no. WCL/ENV/HQ/1-0/462 dated 03.12.2012 submitting therewith the final EIA/EMP for Environmental Clearance for the above mentioned subject.

2. The Ministry of Environment & Forests has considered the application. It is noted that the application is for environmental clearance for Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra.

3. The Ministry of Environment & Forests has considered the application. The proposal was considered in the 65<sup>th</sup> Expert Appraisal Committee held on 8<sup>th</sup> -9<sup>th</sup> January, 2013. It is noted that the application is for environmental clearance for Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra (EC Based on TOR dated 30.04.2009). The proponent has informed that:

- i. The Chincholi opencast mine (0.30 MTPA (normative) & 0.45 MTPA (peak) with 255.56 ha land area is a new mine. The mine is 30 Km away from Ballarpur area. The TOR was granted on 30-04-2009. The main consumer of the coal is MAHAGENCO.
- ii. Of the total 255.56 ha land, 232.50 ha is agricultural land, 23.06 ha is waste land (Govt. Land). Land use during mining 56.12 ha is for excavation, 34.50 ha is for external OB dump area, 10 ha is for infrastructure, 63.44 ha is for rationalization and blasting zone, 22.50 ha is for Embankment, 69.0 ha land already acquired (includes land for residential colony (7.5 ha) and some of the infrastructure (5.0 ha). Land was acquired under Chincholi Underground mine.
- iii. Chincholi R.F., Rajur R.F., Tohogaon R.F., Garlapet R.F. within 3 to 10 Km of mining area. The area is rain fed area with single crop e.g. paddy, Chilli, tomato, vegetables are growing in the area.

- iv. The total coal reserve is 5.538MT and the net mineable reserve is 4.984MT. The blocked mineable reserve is 2.87MT and the mineable reserve is 2.11MT. There are two seams i.e., Seam – III with seam gradient 1 in 8 to 1 in 10 in sub-quarry-I and 1 in 10 to 1 in 11 in quarry –II; and Seam - IV with seam gradient 1 in 8 to 1 in 12.5 in sub –quarry –I and 1 in 10 to 1 in 11 in quarry – II. The average stripping ratio is 7.83m<sup>3</sup>/t.
- v. The coal grade is E. The depth of mining is 18-60m. The safety distance of 225 m from Indira nagar will be maintained.
- vi. The mining method is by Shovel Dumper Combination. At post mining stage, the 10 Mm<sup>3</sup> OB would be in one external dump with 50m height including embankment in 34.50 ha area and 5.76Mm<sup>3</sup> OB in internal dump area of 25 ha. The area of 137 ha will be under plantation with 342500 trees at end of mining. A void of 31.12 ha with 60m depth will be left at the end of mining.
- vii. Wardha River is at the distance of 4.0 km. Diversion of Subainala flowing over the quarry is proposed. Production will be started from 3rd year onward .Ground water level in the core area is in the range of 4.4 m bgl -6.2m bgl in pre monsoon and 2.1 -3.4 m bgl in post monsoon. Total water requirement is 210m<sup>3</sup>/day, 130 m<sup>3</sup>/day is industrial and 80m<sup>3</sup>/day domestic water requirement. Mine water discharge is 1600 m<sup>3</sup>/day. Flood protection embankment against HFL (182.90 m) of Subai Nala with top RL of embankment as 188.90 m, a distance of 100m has been kept between quarry surface and river.
- viii. The Proponent informed controlled blasting is being proposed because of Subai village, Indiranagar Basti and Subai – Chincholi road.
- ix. The coal transportation is by trucks covered with tarpaulin cover upto railway siding. The PWD roads connecting Subai to Chincholi village is proposed to be diverted beyond quarriable area (length- 2.5 km).
- x. There is no R&R. The EMP Cost is Rs. 41Lakhs and the capital cost of the project is Rs.24.6410Crores.The Project is approved by WCL Board.
- xi. **Forestry issues:** There is no forest land involved.
- xii. **Eco-sensitive area:** There are no ecologically sensitive areas such as national park/sanctuary/biosphere reserves within 15 km radius of the project. Tadoba-Andheri Tiger Reserve is more than 90 km from ML area.
- xiii. **Public Hearing:** The public hearing was held on 18.07.2012.The issues raised were with regard to cultivation of land is difficult due to dumping of overburden and farmers will be unemployed in such circumstances, pollution problems and decline of groundwater level due to mining, employment to affected persons, Subai PHC condition needs improvement, pollution due to coal transportation, employment to educated unemployed youths of village, tree plantation programme and impact of blasting activities, acquisition of remaining land and rehabilitation of houses which are close to mine, water scarcity, No Grampanchayat land for developmental activities, provision of employment, tree plantation be carried out near village, Indiranagar colony of Subai village is under threat due to proposed mine, electricity, acquisition of remaining land and construction of approach road for the villagers.

4. The proposal was considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 65<sup>th</sup> Expert Appraisal Committee held on 8-9 January, 2013 for granting Environmental Clearance. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra** under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto subject to the compliance of the terms and conditions mentioned below as mentioned below:

**A Specific Conditions:**

- (i) The proponent shall abide by all the recommendations and commitments made in the EIA/EMP report.
- (ii) The detail of total Reserve present in the area should be provided.
- (iii) Subai nala should be protected and strengthened the embankment. An area of 100m should be left against both side of nala.
- (iv) There should be no external OB dump at the end of mining. OB should be backfilled in the existing void in post mining stage. Grass should be planted on temporary OB dump. The temporary OB dump should be rehandled and backfilled up to ground level. The land should be used as Agriculture Land.
- (v) A check list should be provided for record with regard to void depth, OB management, latitude and longitude etc.
- (vi) The Coal transportation in 20 T trucks by road upto 30 Km. distance at Ballarpur railway siding. The trucks should be properly covered.
- (vii) The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilised with plantation so as to withstand the peak water flow and prevent mine inundation.
- (viii) There shall be no overflow of OB into the river and into the agricultural fields and massive plantation of native species shall be taken up in the area between the river and the project.
- (ix) OB shall be stacked at two earmarked external OB dumpsite(s) only. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing 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.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) Drills shall be wet operated.
- (xiv) The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads,
- (xv) 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.
- (xvi) A Progressive afforestation plan shall be implemented covering an area of 137 ha at the end of mining, which includes reclaimed external OB dump 34.50 ha, Backfilled area 25 ha, undisturbed area 35 ha, embankment area 22.50 ha and Green belt 20 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 a 3-tier avenue plantation along the main approach roads to the mine.

- (xvii) An estimated 16.53 Mm<sup>3</sup> of OB will be generated during the entire life of the mine. Out of which 10 Mm<sup>3</sup> of OB will be dumped in one external OB Dump in an earmarked area covering 34.50 ha of land. 5.76 Mm<sup>3</sup> of OB will be dumped in internal dump covering an area of 25 ha. The maximum height of external OB dump for hard OB will not exceed 90 m and that for soft OB shall not exceed 60 m. The maximum slope of the dump shall not exceed 28 degrees. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self- sustaining and compliance status shall be submitted to MOEF and its Regional Office on yearly basis.
- (xviii) The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- (xix) Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- (xx) The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.
- (xxi) No groundwater shall be used for mining operations.
- (xxii) Of the total quarry area of 385.68 ha, the backfilled quarry area of 150 ha shall be reclaimed with plantation and a void of 185.68 ha at a depth of 150 m 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.
- (xxiii) No groundwater shall be used for mining operations.
- (xxiv) Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. 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.
- (xxv) 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.
- (xxvi) Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
- (xxvii) 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 a specialised agency /institution within the District/State and the results reported to this Ministry and to DGMS.
- (xxviii) Land oustees shall be compensated as per the norms laid out R&R Policy of CIL or the National R&R Policy or R&R Policy of the State Government whichever is higher.
- (xxix) For monitoring land use pattern and for post mining land use, a time series of land use 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.
- (xxx) A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests within 6 months of grant of Environmental Clearance.
- (xxxi) The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.

- (xxxii) 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 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 of production for quantum of mineral coal 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 PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> 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. In addition, CO and CH<sub>4</sub> shall also be monitored within the underground coal mine and records thereof maintained and uploaded on the company website and also submitted to MOEF, RO, Bhopal.
- iv. Fugitive dust emissions (PM<sub>10</sub> and PM<sub>2.5</sub>) 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 (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) 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 19<sup>th</sup> May 1993 and 31<sup>st</sup> 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. 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.
- 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>.
5. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
  6. 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.
  7. 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. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment, Government of Maharashtra, 15<sup>th</sup> 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, 3<sup>rd</sup> & 4<sup>th</sup> 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, Core-I, 4<sup>th</sup> Floor, Vikas Marg, Laxminagar, New Delhi.
8. District Collector, Chandrpaur, Government of Maharashtra.
9. Monitoring File      10.      Guard File      11.      Record File.

(Dr. Manoranjan Hota)  
Director

**BY SPEED POST**

No. J-11015/92/2009-IA.II (M)  
**Government of India**  
**Ministry of Environment & Forests**

Paryavaran Bhawan,  
CGO Complex, Lodhi Road  
New Delhi-110510.  
Dated: 14 May, 2013

To,

Chief General Manager  
Ballarpur Area, WCL,  
Dist. Chandrapur,  
Maharashtra.

**Sub.: Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra - Environment Clearance – reg.**

Sir,

This has reference to letter No. 43011/22/2009 dated 24<sup>th</sup> March, 2009 of Ministry of Coal forwarding the application for Terms of Reference (TOR) and this Ministry's letter dated 30.04.2009 granting TOR to the above mentioned Project and subsequent letter from **M/s Western Coalfields Ltd.**, bearing no. WCL/ENV/HQ/1-0/462 dated 03.12.2012 submitting therewith the final EIA/EMP for Environmental Clearance for the above mentioned subject.

2. The Ministry of Environment & Forests has considered the application. It is noted that the application is for environmental clearance for Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra.

3. The Ministry of Environment & Forests has considered the application. The proposal was considered in the 65<sup>th</sup> Expert Appraisal Committee held on 8<sup>th</sup> -9<sup>th</sup> January, 2013. It is noted that the application is for environmental clearance for Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra (EC Based on TOR dated 30.04.2009). The proponent has informed that:

- i. The Chincholi opencast mine (0.30 MTPA (normative) & 0.45 MTPA (peak) with 255.56 ha land area is a new mine. The mine is 30 Km away from Ballarpur area. The TOR was granted on 30-04-2009. The main consumer of the coal is MAHAGENCO.
- ii. Of the total 255.56 ha land, 232.50 ha is agricultural land, 23.06 ha is waste land (Govt. Land). Land use during mining 56.12 ha is for excavation, 34.50 ha is for external OB dump area, 10 ha is for infrastructure, 63.44 ha is for rationalization and blasting zone, 22.50 ha is for Embankment, 69.0 ha land already acquired (includes land for residential colony (7.5 ha) and some of the infrastructure (5.0 ha). Land was acquired under Chincholi Underground mine.
- iii. Chincholi R.F., Rajur R.F., Tohogaon R.F., Garlapet R.F. within 3 to 10 Km of mining area. The area is rain fed area with single crop e.g. paddy, Chilli, tomato, vegetables are growing in the area.

- iv. The total coal reserve is 5.538MT and the net mineable reserve is 4.984MT. The blocked mineable reserve is 2.87MT and the mineable reserve is 2.11MT. There are two seams i.e., Seam – III with seam gradient 1 in 8 to 1 in 10 in sub-quarry-I and 1 in 10 to 1 in 11 in quarry –II; and Seam - IV with seam gradient 1 in 8 to 1 in 12.5 in sub –quarry –I and 1 in 10 to 1 in 11 in quarry – II. The average stripping ratio is 7.83m<sup>3</sup>/t.
- v. The coal grade is E. The depth of mining is 18-60m. The safety distance of 225 m from Indira nagar will be maintained.
- vi. The mining method is by Shovel Dumper Combination. At post mining stage, the 10 Mm<sup>3</sup> OB would be in one external dump with 50m height including embankment in 34.50 ha area and 5.76Mm<sup>3</sup> OB in internal dump area of 25 ha. The area of 137 ha will be under plantation with 342500 trees at end of mining. A void of 31.12 ha with 60m depth will be left at the end of mining.
- vii. Wardha River is at the distance of 4.0 km. Diversion of Subainala flowing over the quarry is proposed. Production will be started from 3rd year onward .Ground water level in the core area is in the range of 4.4 m bgl -6.2m bgl in pre monsoon and 2.1 -3.4 m bgl in post monsoon. Total water requirement is 210m<sup>3</sup>/day, 130 m<sup>3</sup>/day is industrial and 80m<sup>3</sup>/day domestic water requirement. Mine water discharge is 1600 m<sup>3</sup>/day. Flood protection embankment against HFL (182.90 m) of Subai Nala with top RL of embankment as 188.90 m, a distance of 100m has been kept between quarry surface and river.
- viii. The Proponent informed controlled blasting is being proposed because of Subai village, Indiranagar Basti and Subai – Chincholi road.
- ix. The coal transportation is by trucks covered with tarpaulin cover upto railway siding. The PWD roads connecting Subai to Chincholi village is proposed to be diverted beyond quarriable area (length- 2.5 km).
- x. There is no R&R. The EMP Cost is Rs. 41Lakhs and the capital cost of the project is Rs.24.6410Crores.The Project is approved by WCL Board.
- xi. **Forestry issues:** There is no forest land involved.
- xii. **Eco-sensitive area:** There are no ecologically sensitive areas such as national park/sanctuary/biosphere reserves within 15 km radius of the project. Tadoba-Andheri Tiger Reserve is more than 90 km from ML area.
- xiii. **Public Hearing:** The public hearing was held on 18.07.2012.The issues raised were with regard to cultivation of land is difficult due to dumping of overburden and farmers will be unemployed in such circumstances, pollution problems and decline of groundwater level due to mining, employment to affected persons, Subai PHC condition needs improvement, pollution due to coal transportation, employment to educated unemployed youths of village, tree plantation programme and impact of blasting activities, acquisition of remaining land and rehabilitation of houses which are close to mine, water scarcity, No Grampanchayat land for developmental activities, provision of employment, tree plantation be carried out near village, Indiranagar colony of Subai village is under threat due to proposed mine, electricity, acquisition of remaining land and construction of approach road for the villagers.

4. The proposal was considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 65<sup>th</sup> Expert Appraisal Committee held on 8-9 January, 2013 for granting Environmental Clearance. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra** under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto subject to the compliance of the terms and conditions mentioned below as mentioned below:



**A Specific Conditions:**

- (i) The proponent shall abide by all the recommendations and commitments made in the EIA/EMP report.
- (ii) The detail of total Reserve present in the area should be provided.
- (iii) Subai nala should be protected and strengthened the embankment. An area of 100m should be left against both side of nala.
- (iv) There should be no external OB dump at the end of mining. OB should be backfilled in the existing void in post mining stage. Grass should be planted on temporary OB dump. The temporary OB dump should be rehandled and backfilled up to ground level. The land should be used as Agriculture Land.
- (v) A check list should be provided for record with regard to void depth, OB management, latitude and longitude etc.
- (vi) The Coal transportation in 20 T trucks by road upto 30 Km. distance at Ballarpur railway siding. The trucks should be properly covered.
- (vii) The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilised with plantation so as to withstand the peak water flow and prevent mine inundation.
- (viii) There shall be no overflow of OB into the river and into the agricultural fields and massive plantation of native species shall be taken up in the area between the river and the project.
- (ix) OB shall be stacked at two earmarked external OB dumpsite(s) only. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing 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.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) Drills shall be wet operated.
- (xiv) The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads,
- (xv) 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.
- (xvi) A Progressive afforestation plan shall be implemented covering an area of 137 ha at the end of mining, which includes reclaimed external OB dump 34.50 ha, Backfilled area 25 ha, undisturbed area 35 ha, embankment area 22.50 ha and Green belt 20 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 a 3-tier avenue plantation along the main approach roads to the mine.

- (xvii) An estimated 16.53 Mm<sup>3</sup> of OB will be generated during the entire life of the mine. Out of which 10 Mm<sup>3</sup> of OB will be dumped in one external OB Dump in an earmarked area covering 34.50 ha of land. 5.76 Mm<sup>3</sup> of OB will be dumped in internal dump covering an area of 25 ha. The maximum height of external OB dump for hard OB will not exceed 90 m and that for soft OB shall not exceed 60 m. The maximum slope of the dump shall not exceed 28 degrees. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self- sustaining and compliance status shall be submitted to MOEF and its Regional Office on yearly basis.
- (xviii) The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- (xix) Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- (xx) The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.
- (xxi) No groundwater shall be used for mining operations.
- (xxii) Of the total quarry area of 385.68 ha, the backfilled quarry area of 150 ha shall be reclaimed with plantation and a void of 185.68 ha at a depth of 150 m 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.
- (xxiii) No groundwater shall be used for mining operations.
- (xxiv) Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. 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.
- (xxv) 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.
- (xxvi) Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
- (xxvii) 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 a specialised agency /institution within the District/State and the results reported to this Ministry and to DGMS.
- (xxviii) Land oustees shall be compensated as per the norms laid out R&R Policy of CIL or the National R&R Policy or R&R Policy of the State Government whichever is higher.
- (xxix) For monitoring land use pattern and for post mining land use, a time series of land use 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.
- (xxx) A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests within 6 months of grant of Environmental Clearance.
- (xxxi) The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.

- (xxxii) 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 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 of production for quantum of mineral coal 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 PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> 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. In addition, CO and CH<sub>4</sub> shall also be monitored within the underground coal mine and records thereof maintained and uploaded on the company website and also submitted to MOEF, RO, Bhopal.
- iv. Fugitive dust emissions (PM<sub>10</sub> and PM<sub>2.5</sub>) 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 (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) 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 19<sup>th</sup> May 1993 and 31<sup>st</sup> 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. 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.
- 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>.
5. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
  6. 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.
  7. 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. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment, Government of Maharashtra, 15<sup>th</sup> 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, 3<sup>rd</sup> & 4<sup>th</sup> 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, Core-I, 4<sup>th</sup> Floor, Vikas Marg, Laxminagar, New Delhi.
8. District Collector, Chandrpaur, Government of Maharashtra.
9. Monitoring File      10.      Guard File      11.      Record File.

(Dr. Manoranjan Hota)  
Director

**BY SPEED POST**

No. J-11015/92/2009-IA.II (M)  
**Government of India**  
**Ministry of Environment & Forests**

Paryavaran Bhawan,  
CGO Complex, Lodhi Road  
New Delhi-110510.  
Dated: 14 May, 2013

To,

Chief General Manager  
Ballarpur Area, WCL,  
Dist. Chandrapur,  
Maharashtra.

**Sub.: Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra - Environment Clearance – reg.**

Sir,

This has reference to letter No. 43011/22/2009 dated 24<sup>th</sup> March, 2009 of Ministry of Coal forwarding the application for Terms of Reference (TOR) and this Ministry's letter dated 30.04.2009 granting TOR to the above mentioned Project and subsequent letter from **M/s Western Coalfields Ltd.**, bearing no. WCL/ENV/HQ/1-0/462 dated 03.12.2012 submitting therewith the final EIA/EMP for Environmental Clearance for the above mentioned subject.

2. The Ministry of Environment & Forests has considered the application. It is noted that the application is for environmental clearance for Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra.

3. The Ministry of Environment & Forests has considered the application. The proposal was considered in the 65<sup>th</sup> Expert Appraisal Committee held on 8<sup>th</sup> -9<sup>th</sup> January, 2013. It is noted that the application is for environmental clearance for Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra (EC Based on TOR dated 30.04.2009). The proponent has informed that:

- i. The Chincholi opencast mine (0.30 MTPA (normative) & 0.45 MTPA (peak) with 255.56 ha land area is a new mine. The mine is 30 Km away from Ballarpur area. The TOR was granted on 30-04-2009. The main consumer of the coal is MAHAGENCO.
- ii. Of the total 255.56 ha land, 232.50 ha is agricultural land, 23.06 ha is waste land (Govt. Land). Land use during mining 56.12 ha is for excavation, 34.50 ha is for external OB dump area, 10 ha is for infrastructure, 63.44 ha is for rationalization and blasting zone, 22.50 ha is for Embankment, 69.0 ha land already acquired (includes land for residential colony (7.5 ha) and some of the infrastructure (5.0 ha). Land was acquired under Chincholi Underground mine.
- iii. Chincholi R.F., Rajur R.F., Tohogaon R.F., Garlapet R.F. within 3 to 10 Km of mining area. The area is rain fed area with single crop e.g. paddy, Chilli, tomato, vegetables are growing in the area.

- iv. The total coal reserve is 5.538MT and the net mineable reserve is 4.984MT. The blocked mineable reserve is 2.87MT and the mineable reserve is 2.11MT. There are two seams i.e., Seam – III with seam gradient 1 in 8 to 1 in 10 in sub-quarry-I and 1 in 10 to 1 in 11 in quarry –II; and Seam - IV with seam gradient 1 in 8 to 1 in 12.5 in sub –quarry –I and 1 in 10 to 1 in 11 in quarry – II. The average stripping ratio is 7.83m<sup>3</sup>/t.
- v. The coal grade is E. The depth of mining is 18-60m. The safety distance of 225 m from Indira nagar will be maintained.
- vi. The mining method is by Shovel Dumper Combination. At post mining stage, the 10 Mm<sup>3</sup> OB would be in one external dump with 50m height including embankment in 34.50 ha area and 5.76Mm<sup>3</sup> OB in internal dump area of 25 ha. The area of 137 ha will be under plantation with 342500 trees at end of mining. A void of 31.12 ha with 60m depth will be left at the end of mining.
- vii. Wardha River is at the distance of 4.0 km. Diversion of Subainala flowing over the quarry is proposed. Production will be started from 3rd year onward .Ground water level in the core area is in the range of 4.4 m bgl -6.2m bgl in pre monsoon and 2.1 -3.4 m bgl in post monsoon. Total water requirement is 210m<sup>3</sup>/day, 130 m<sup>3</sup>/day is industrial and 80m<sup>3</sup>/day domestic water requirement. Mine water discharge is 1600 m<sup>3</sup>/day. Flood protection embankment against HFL (182.90 m) of Subai Nala with top RL of embankment as 188.90 m, a distance of 100m has been kept between quarry surface and river.
- viii. The Proponent informed controlled blasting is being proposed because of Subai village, Indiranagar Basti and Subai – Chincholi road.
- ix. The coal transportation is by trucks covered with tarpaulin cover upto railway siding. The PWD roads connecting Subai to Chincholi village is proposed to be diverted beyond quarriable area (length- 2.5 km).
- x. There is no R&R. The EMP Cost is Rs. 41Lakhs and the capital cost of the project is Rs.24.6410Crores.The Project is approved by WCL Board.
- xi. **Forestry issues:** There is no forest land involved.
- xii. **Eco-sensitive area:** There are no ecologically sensitive areas such as national park/sanctuary/biosphere reserves within 15 km radius of the project. Tadoba-Andheri Tiger Reserve is more than 90 km from ML area.
- xiii. **Public Hearing:** The public hearing was held on 18.07.2012.The issues raised were with regard to cultivation of land is difficult due to dumping of overburden and farmers will be unemployed in such circumstances, pollution problems and decline of groundwater level due to mining, employment to affected persons, Subai PHC condition needs improvement, pollution due to coal transportation, employment to educated unemployed youths of village, tree plantation programme and impact of blasting activities, acquisition of remaining land and rehabilitation of houses which are close to mine, water scarcity, No Grampanchayat land for developmental activities, provision of employment, tree plantation be carried out near village, Indiranagar colony of Subai village is under threat due to proposed mine, electricity, acquisition of remaining land and construction of approach road for the villagers.

4. The proposal was considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 65<sup>th</sup> Expert Appraisal Committee held on 8-9 January, 2013 for granting Environmental Clearance. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Chincholi OC Project (0.30 MTPA (Normative) and 0.45 MTPA (Peak) over an ML area of 255.56 ha) M/s Western Coalfields Ltd. Village Subai, Tehsil Rajura, Distt. Chandrapur, Maharashtra** under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto subject to the compliance of the terms and conditions mentioned below as mentioned below:

**A Specific Conditions:**

- (i) The proponent shall abide by all the recommendations and commitments made in the EIA/EMP report.
- (ii) The detail of total Reserve present in the area should be provided.
- (iii) Subai nala should be protected and strengthened the embankment. An area of 100m should be left against both side of nala.
- (iv) There should be no external OB dump at the end of mining. OB should be backfilled in the existing void in post mining stage. Grass should be planted on temporary OB dump. The temporary OB dump should be rehandled and backfilled up to ground level. The land should be used as Agriculture Land.
- (v) A check list should be provided for record with regard to void depth, OB management, latitude and longitude etc.
- (vi) The Coal transportation in 20 T trucks by road upto 30 Km. distance at Ballarpur railway siding. The trucks should be properly covered.
- (vii) The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilised with plantation so as to withstand the peak water flow and prevent mine inundation.
- (viii) There shall be no overflow of OB into the river and into the agricultural fields and massive plantation of native species shall be taken up in the area between the river and the project.
- (ix) OB shall be stacked at two earmarked external OB dumpsite(s) only. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing 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.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) Drills shall be wet operated.
- (xiv) The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads,
- (xv) 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.
- (xvi) A Progressive afforestation plan shall be implemented covering an area of 137 ha at the end of mining, which includes reclaimed external OB dump 34.50 ha, Backfilled area 25 ha, undisturbed area 35 ha, embankment area 22.50 ha and Green belt 20 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 a 3-tier avenue plantation along the main approach roads to the mine.

- (xvii) An estimated 16.53 Mm<sup>3</sup> of OB will be generated during the entire life of the mine. Out of which 10 Mm<sup>3</sup> of OB will be dumped in one external OB Dump in an earmarked area covering 34.50 ha of land. 5.76 Mm<sup>3</sup> of OB will be dumped in internal dump covering an area of 25 ha. The maximum height of external OB dump for hard OB will not exceed 90 m and that for soft OB shall not exceed 60 m. The maximum slope of the dump shall not exceed 28 degrees. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self- sustaining and compliance status shall be submitted to MOEF and its Regional Office on yearly basis.
- (xviii) The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- (xix) Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- (xx) The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.
- (xxi) No groundwater shall be used for mining operations.
- (xxii) Of the total quarry area of 385.68 ha, the backfilled quarry area of 150 ha shall be reclaimed with plantation and a void of 185.68 ha at a depth of 150 m 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.
- (xxiii) No groundwater shall be used for mining operations.
- (xxiv) Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. 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.
- (xxv) 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.
- (xxvi) Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
- (xxvii) 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 a specialised agency /institution within the District/State and the results reported to this Ministry and to DGMS.
- (xxviii) Land oustees shall be compensated as per the norms laid out R&R Policy of CIL or the National R&R Policy or R&R Policy of the State Government whichever is higher.
- (xxix) For monitoring land use pattern and for post mining land use, a time series of land use 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.
- (xxx) A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests within 6 months of grant of Environmental Clearance.
- (xxxi) The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.



- (xxxii) 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 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 of production for quantum of mineral coal 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 PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> 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. In addition, CO and CH<sub>4</sub> shall also be monitored within the underground coal mine and records thereof maintained and uploaded on the company website and also submitted to MOEF, RO, Bhopal.
- iv. Fugitive dust emissions (PM<sub>10</sub> and PM<sub>2.5</sub>) 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 (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) 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 19<sup>th</sup> May 1993 and 31<sup>st</sup> 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. 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.
- 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>.
5. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
  6. 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.
  7. 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. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment, Government of Maharashtra, 15<sup>th</sup> 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, 3<sup>rd</sup> & 4<sup>th</sup> 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, Core-I, 4<sup>th</sup> Floor, Vikas Marg, Laxminagar, New Delhi.
8. District Collector, Chandrpaur, Government of Maharashtra.
9. Monitoring File      10.      Guard File      11.      Record File.

(Dr. Manoranjan Hota)  
Director