

No. J-11015/421/2008-IA.II (M)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan,  
CGO Complex, Lodhi Road,  
New Delhi- 110003.

To

Dated: 15 February, 2013

The General Manager,  
**M/s Central Coalfields Ltd.,**  
Ranchi-834001,  
Jharkhand.

**Sub: Ray Bachra underground mine (Production capacity 0.30 MTPA in an ML area of over 1130.70 ha (1215.45 ha - 84.75 ha = 1130.70 ha) of M/s Central Coalfields Ltd., located in dist. Ranchi, Jharkhand -Environment Clearance-reg.**

Sir,

This has reference to letter No. 43011/103/2008-CPAM dated 22.09.2008 of Ministry of Coal forwarding your application for Terms of Reference (TOR), which was granted vide MOEF letter dated 18.11.2008 and the application for environmental clearance letter no. CIL/DLI/EMP-TOR/2012/14 Dated 04.09.2009 and further resubmitted application vide letter no. CIL/DLI/EMP-TOR/2012/14 Dated 08.08.2012 after conducting the public hearing as per EIA notification, 2006 and subsequent letters dated 04.08.2012 on the above-mentioned subject.

2. It is noted that the proposal is for obtaining environmental clearance for renewal of lease. The project does not involve expansion in lease area and land or production. It is noted that the **Ray Bachra Underground Coal Mine with 0.30 million tonnes per annum (MTPA) rated capacity over an ML area of over 1215.45 ha** is a pre-nationalisation mine in the project area. The current production from the mine is 0.10 MTY. The machinery and infrastructure would be utilized in Piparwar OCP and manpower redeployed in other mines. Of the total ML area of 1215.45 ha, 984.35 ha is forestland 197.36 ha is tenancy land, 33.74 ha is Govt. land, Of the total of 200 ha area under surface right of which 84 ha is forestland, 8.70 ha is for infrastructure & building, 95.0 ha is for colony, 1.05 ha is for road, 3.0 ha is for mineral storage, 7.5 ha is for railway siding, 84.75 ha is barren land and old abandoned mine. There is no national park/wild life sanctuary, Biosphere Reserve found in the 15 km buffer zone. The balance mineable reserve is 0.16 MT and approved capacity is 0.30 MTPA. The grade of the coal is "C". The method of mining is Board & Pillar and depillaring with caving. The coal seams are upper and lower Bachra. The depth of mining is about 300 mt. Seams thickness is 2-3 mt with an average thickness of 2.5 m. Extraction is by caving. Subsidence is 1. 10 m. The production of the mine was 0.244 MT in 1993-94 and 0.056 MT in 2011-12. The peak production was 0.244 MT in 1993-94. Saphi River is within mine lease area. Damodar River is on the northern boundary of leasehold area. Water table is in the range of -10.40m bgl (pre-monsoon) and 1.60-8.75m bgl (Post-monsoon). Estimated peak water requirement would be 6608 m<sup>3</sup>/day, 3430 m<sup>3</sup>/day is industrial requirement and 3178 m<sup>3</sup>/day is domestic requirement. Peak mine discharge would be 1000m<sup>3</sup>/d. Transportation of 200 TPD of coal is by rail. Project does not involve R&R (homestead and land losers). The balance life of the mine is about 2 to 3 years only .For CSR, a provision of Rs. 15 Lakhs under the CSR activities during 2012-2013 for Ray- Bachara and Rs. 6.5 crores for the year 2012-2013 for Piparwar Area. The Public Hearing was held on 13.04.2012. The project was approved by CCL on 15.06.1998. The capital cost of the project is Rs. 3019 Lakhs. Since the proposal involved renewal of lease, the EAC suggested that the PP obtain forestry clearance for renewal. It was however noted that that the reserves would be exhausted in one and half year.

3. Reference is invited to the letter no. CCL/GM(E&F)/2013/155 dated 22.1.2013, stating that the proponent conformed that 84.75 ha of forest land under the head "type of land use" acquired under

surface rights (total of 200 ha) is not required now for mining activity by the project and hence will not be diverted. This land has been acquired under CBA (A&D) SO no. 20 of 9th Feb, 1958. In this regard, you are required to follow the guidelines issued by the FC Division of the Ministry of Environment & Forests vide no. 11-362/2012-FC dated 01-02-2013 "Guidelines for diversion of forest land for non-forest purposes under the Forest (Conservation) Act 1980. Submission of proposals to obtain forest land located within the mining lease and grant of environment clearance to mining projects" addressed to the Principal Secretary (Forests), Principal Secretary (Environment) of all the States/UT Govts. and copy to concerned Government Departments/Organisations which prescribes, inter-alia, the following:

“ (iii) As regards Environment Clearance (EC) cases of existing mining operations, where approval under the FC Act for the full forest area in the mining lease area is not available, granting of EC may be considered and the following process will be adopted for processing such cases:

- a) Grant of EC may be considered only for the non-forest area plus the forest area within the mining lease for which FC is available. No mining activities will be allowed in forest area for which the FC is not available; and
- b) The project proponent will seek and obtain approval under the FC Act for diversion of the entire forest land located within the mining lease within a period of two years from the date of issue of these guidelines, failing which the mining lease area will be reduced to the non-forest area plus the forest area for which the project proponent has been able to obtain the FC at the end of this time period. In the case of reduction in mine lease area, the project proponent will need to get a revised mining plan approved from the competent authority for reduced area and enter into a new mining lease as per reduced lease area. The EC will be construed to be available for the mining lease area as per the revised mining lease deed.”

4. The proposal was considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 57<sup>th</sup> meeting held on 17-18 September, 2012 for granting Environmental Clearance. The Ministry of Environment & Forests has examined the application in accordance with the EIA Notification 2006 and under the provisions thereof, hereby accords environmental clearance for the above-mentioned Ray Bachra Under Ground mine (Production capacity 0.30 MTPA) in an ML area of over 1130.70 ha (1215.45 ha - 84.75 ha = 1130.70 ha) of M/s Central Coalfields Ltd., located in dist. Ranchi, Jharkhand under the provisions of the Environmental Impact Assessment Notification, 2006 and amendments thereto and Circulars issued thereon and subject to the compliance of the terms and conditions mentioned below. You will need to seek and obtain approval under the FC Act for diversion of the entire forest land located within the mining lease within a period of two years from the date of issue of these guidelines (i.e. 01 February, 2013), failing which the mining lease area will be reduced to the non-forest area plus the forest area for which you have been able to obtain the FC at the end of this time period. In the case of reduction in mine lease area, you will need to get a revised mining plan approved from the competent authority for reduced area and enter into a new mining lease as per reduced lease area. The EC will be construed to be available for the mining lease area as per the revised mining lease deed.

#### **A. Specific Conditions:**

- (i) No mining shall be undertaken in/under the forestland until prior forestry clearance has been obtained under the provisions of FC Act 1980.
- (ii) No additional land, manpower and equipment and water shall be used for the expansion project.
- (iii) The 84.75 ha area of old abandoned mine would be reclaimed with plantation.

- (iv) Mine closures activities include sealing of incline mouth dismantling of haulage system, clearing and afforestation of coal stock area, plantation on barren land and old abandoned mine.
- (v) Mining shall be carried out as per statuette at a safe distance from river/nallah .
- (vi) No mining should be carried out below the railway track.
- (vii) No depillaring shall be undertaken vertically below and within 60 m of nalas and ponds within the subsidence influence area.
- (viii) Sufficient coal pillars shall be left unextracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.
- (ix) Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the roads.
- (x) No depillaring operation shall be carried out below habitation.
- (xi) Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains. Details of extent of subsidence that has occurred and the extent of area under subsidence and measures to be taken therefore be furnished to the ministry for record.
- (xii) Mining shall be carried out as per statuette at a safe distance from river/nall following within adjacent to the lease boundary at the time of depillaring, protective bunds and garland drains shall be provided so that no water from the surface enters the subsidence area and the shaft.
- (xiii) While extracting panels in the lower seam, all water bodies in the subsidence area shall be drained. Dewatering of the old goaves of the upper seam shall be continued as long as the lower seam is worked to prevent accumulation of large water bodies over working area.
- (xiv) High root density tree species shall be selected and planted over areas likely to be affected by subsidence.
- (xv) Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures shall be taken to avoid loss of life and material. Cracks developed due to subsidence in underground mining shall be filled with clay and sand ,suitable material.. The area should be reclaimed back to the normal state.
- (xvi) Garland/surface drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity shall be designed keeping 50% safety margin over an above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity shall also be provided adequate retention period to allow proper settling of silt material. Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rainfall.
- (xvii) CHP 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.
- (xviii) Drills shall be wet operated only.

- (xix) The major approach roads from ML used for mineral transportation shall be black topped and a 3-tier avenue plantation developed using a mix of native species.
- (xx) An afforestation plan shall be prepared and implemented for the areas acquired under surface rights and shall include areas along roads, infrastructure, township, CHP, along ML boundary, etc, by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.
- (xxi) A Conservation Plan for endangered species shall be formulated in case they inhabit/visit/reported within the study area and implemented in consultation with the State Forest and Wildlife Departments. A budgetary provision shall be earmarked for its establishment and maintenance and a report thereon submitted as part of the Monitoring Report to the MoEF RO, Bhubaneswar and also regularly (at least once a year) uploaded on the company website.
- (xxii) 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.
- (xxiii) Monitoring of drinking water should be carried out regularly
- (xxiv) Project specific CSR should be prepared & activities under CSR undertaken for the neighbouring villages shall be for not less than Rs 5 per tonne of coal or a revenue budget of Rs. 10 lakhs, whichever is more and the progress made thereon shall be uploaded on the company annually on the company website. Green Belt/plantation should be provided on both side of road in Piper war area.CSR funds could be utilized for this purpose; A provision of Rs. 10 lakhs/year be made for the balance life of 3 years of mine life.
- (xxv) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring shows a declining trend of ground water level. 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 township. ETP shall also be provided for treating workshop and CHP effluents.
- (xxvii) 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 Bhubaneswar.
- (xxviii) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval. Mine closure should ensure that no illegal mining begins after mine is closed
- (xxix) If the water quality parameters such as F, pH, heavy metals, etc exceed the prescribed limits, suitable measures by the proponent be taken to ensure that the local communities are provided alternate source of water for their livelihood

- (xxx) Medical camps should be organized in the area for regular check up of workers/ villagers/population. Detailed prevalent disease pattern in the area should be documented and details of medical facilities provided for the same be made available to the MoEF
- (xxxi) Proponent should make written submission on the compliances/clarifications to the MoEF on the above cited issues.

## **B. General Conditions**

- (i) No change in technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.
- (ii) No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.
- (iii) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, in particulates shall be carried out at least once in six months.
- (iv) Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> and heavy metals such as Hg, As, Ni, Cr, etc) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bhubaneswar and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EP Rules, 1986 shall be furnished as part of the compliance report.
- (v) Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.
- (vi) Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19<sup>th</sup> May 1993 and 31<sup>st</sup> December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.
- (vii) Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of the mineral shall be covered with tarpaulins and optimally loaded.
- (viii) Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EP Rules, 1986.
- (ix) 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.
- (x) 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.

- (xi) 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 Bhubaneswar.
- (xii) 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>
- (xiii) A copy of the environmental clearance letter shall be marked to concerned Panchayat/Zila Parishad, Municipal Corporation or Urban Local Body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.
- (xiv) A copy of the clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.
- (xv) The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.
- (xvi) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and the SPCB.
- (xvii) The Regional Office of this Ministry located at Bhubaneshwar 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.
- (xviii) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-mail.

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. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrashekarapur, Bhubaneswar – 751023.
4. Chairman, Jharkhand State Pollution Control Board, T.A. Division Building (Ground Floor), H.E.C., Dhurwa, Ranchi – 834004.
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. District Collector, Chatra, Government of Jharkhand.
8. Monitoring File    9.        Guard File        10.        Record File

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- (xxii) Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new peizometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.
- (xxiii) Monitoring of drinking water should be carried out regularly
- (xxiv) Project specific CSR should be prepared & activities under CSR undertaken for the neighbouring villages shall be for not less than Rs 5 per tonne of coal or a revenue budget of Rs. 10 lakhs, whichever is more and the progress made thereon shall be uploaded on the company annually on the company website. Green Belt/plantation should be provided on both side of road in Piper war area.CSR funds could be utilized for this purpose; A provision of Rs. 10 lakhs/year be made for the balance life of 3 years of mine life.
- (xxv) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring shows a declining trend of ground water level. 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 township. ETP shall also be provided for treating workshop and CHP effluents.
- (xxvii) 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 Bhubaneswar.
- (xxviii) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval. Mine closure should ensure that no illegal mining begins after mine is closed
- (xxix) If the water quality parameters such as F, pH, heavy metals, etc exceed the prescribed limits, suitable measures by the proponent be taken to ensure that the local communities are provided alternate source of water for their livelihood

- (xxx) Medical camps should be organized in the area for regular check up of workers/ villagers/population. Detailed prevalent disease pattern in the area should be documented and details of medical facilities provided for the same be made available to the MoEF
- (xxxi) Proponent should make written submission on the compliances/clarifications to the MoEF on the above cited issues.

## **B. General Conditions**

- (i) No change in technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.
- (ii) No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.
- (iii) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, in particulates shall be carried out at least once in six months.
- (iv) Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> and heavy metals such as Hg, As, Ni, Cr, etc) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bhubaneswar and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EP Rules, 1986 shall be furnished as part of the compliance report.
- (v) Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.
- (vi) Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19<sup>th</sup> May 1993 and 31<sup>st</sup> December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.
- (vii) Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of the mineral shall be covered with tarpaulins and optimally loaded.
- (viii) Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EP Rules, 1986.
- (ix) 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.
- (x) 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.

- (xi) 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 Bhubaneswar.
- (xii) 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>
- (xiii) A copy of the environmental clearance letter shall be marked to concerned Panchayat/Zila Parishad, Municipal Corporation or Urban Local Body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.
- (xiv) A copy of the clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.
- (xv) The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.
- (xvi) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and the SPCB.
- (xvii) The Regional Office of this Ministry located at Bhubaneshwar 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.
- (xviii) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-mail.

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. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrashekarapur, Bhubaneswar – 751023.
4. Chairman, Jharkhand State Pollution Control Board, T.A. Division Building (Ground Floor), H.E.C., Dhurwa, Ranchi – 834004.
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. District Collector, Chatra, Government of Jharkhand.
8. Monitoring File    9.        Guard File        10.        Record File

(Dr. Manoranjan Hota)  
Director