

No. J-11015/179/2014-IA-II (M)
Government of India
Ministry of Environment, Forests & Climate Change
IA-II (Coal Mining) Division

Indira Paryavaran Bhawan,
Jorbagh Road,
New Delhi-110003

Dated: 13th March, 2015

To,

The General Manager (Environment),
M/s Western Coalfields Ltd.,
Coal Estate, 9th Floor, Civil Lines,
NAGPUR -440001

Sub. : Expansion of Gouri Deep Expansion Mine Project (from 0.40 MTPA to 0.60 MTPA in an ML area of 356.11 Ha); latitude 19° 46' 33" -19° 47' 56" N and longitude 79° 16' 46.5" -79° 18' 53.6" E of M/s Western Coalfield Limited, located at dist. Chandrapur, Maharashtra - EC under 7(ii) of EIA Notification 2006 – Environmental Clearance - reg.

Sir,

This is with reference to letter no. 43011/09/2014-CPAM dated 30.04.2014 with the application and subsequent letter no. WCL/ENV/HQ/6-1/ dated 05.01.2015; 15.01.2015 and 18.01.2015 for Environmental Clearance for Expansion under 7(ii) of EIA Notification 2006 for the above-mentioned project.

2. The Ministry of Environment, Forests & Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance for **Expansion of Gouri Deep Expansion Mine Project (from 0.40 MTPA to 0.60 MTPA in an ML area of 356.11 Ha); latitude 19° 46' 33" -19° 47' 56" N and longitude 79° 16' 46.5" -79° 18' 53.6" E of M/s Western Coalfield Limited, located at dist. Chandrapur, Maharashtra under 7(ii) of EIA Notification 2006.** The proposal was considered in the 29th EAC meeting held on 15th -16th January, 2015. The proponent has informed that:

- i. The project was accorded EC vide letter no. J-11015/338/2008-1A.II(M) dated 18.02.2011 for 0.40 MTPA.
- ii. The latitude and longitude of the project are 19° 46' 33" to 19° 47' 56" and 79° 16' 46.5" to 79° 18' 53.6" respectively.
- iii. Joint Venture: No Joint Venture.
- iv. Coal Linkage: Linked to M/s Ultra Tech Cements.
- v. The land usage of the project will be as follows:

Pre-Mining:

S.No	Land particulars	CBA Act 1957 (ha)	Forest Act 1980 (ha)	Total Land (ha)
1	Agriculture	339.43	Nil	339.43
2	Govt/Other	16.68	Nil	16.68
3	Forest	Nil	Nil	Nil



	Total	356.11	Nil	356.11
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Land use during Mining:

S.No	Head	Land Requirement (ha)
1.	Excavation Area	92.45
2.	External OB Dump	94.12
3.	Infrastructure	05.00
4.	Project Township	10.00
5.	Boundary Adjustment & Miscellaneous	154.54
	TOTAL	356.11

Post- Mining:

S.No	Particulars	Land in ha
1	Afforested Area: a) Backfilled Area – 33.72 b) External OB Dump – 94.12	127.84
2	Water Body / Void	58.73
3	Vacant land to be released with plantation	154.54
4	Infrastructure	05.00
5	Township	10.00
	TOTAL	356.11

- vi. The total geological reserve is 15.24 MT. The mineable reserve 7.66 MT, extractable reserve is 7.66 MT. The per cent of extraction would be 50.3%.
- vii. The coal grade is 4462 Kcal / kg; G10 .The stripping ratio is 1:6.11. The average Gradient is 1in 4 in Q- I & 1in 3 in Q-II. There will be One Composite Seam with thickness ranging 14.00 m in Quarry–I & 13.50m in Quarry–II.
- viii. The total estimated **water requirement** is 6048 m³/day. The level of ground water ranges from 2.00m bgl to 19.55m bgl.
- ix. The Method of mining would be opencast with shovel-dumper combination.
- x. There are 2 external OB dumps with Quantity of 22.87Mbcm in an area of 94.12ha with height of 42 m (A) &60 m (B) above the surface level and 1 internal dump with Quantity of 23.94 Mbcm in an area of 33.72ha.
- xi. The final mine void would be in 58.73 Ha with depth of 130m. and the Total quarry area is 92.45 Ha. Backfilled quarry area of 33.72 Ha shall be reclaimed with plantation. A void of 58.73 ha with depth of 130 m which is proposed to be converted into a water body
- xii. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- xiii. The **life of mine** is 15 Years.
- xiv. **Transportation:** Coal transportation in pit by Dumpers, Surface to Siding by Dumpers and loading at siding by Pay loader.
- xv. There is **R & R** involved. There are 297 PAFs.
- xvi. **Cost:** Total capital cost of the project is Rs. 86.21 Crores. CSR Cost Rs. 2.00 per tonne. R&R Cost 4.78 Crores. Environmental Management Cost (capital cost Rs. 1.855 crores, annual recurring cost Rs. 0.12 crores).
- xvii. **Water body:** Gouri & Sasti Nullah flows near to the site. Wardha River flows at a distance of 5 km north – east of the project site.

- xviii. **Approvals:** Board's approval obtained on 28.02.2014. Mining plan has been approved on 28.02.2014. Mine Closure Plan approval on 15.02.2014
- xix. **Wildlife issues:** There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xx. **Forestry issues:** There is no forest area involved.
- xxi. Total **afforestation** plan shall be implemented covering an area of 94.12ha at the end of mining. Green Belt over an area of 3.00ha. Density of tree plantation 2500 trees/ ha of plants.
- xxii. There are no **court cases/violation** pending with the project proponent.
- xxiii. **Public Hearing:** Public Hearing is not applicable as the applied under 7 (ii) of EIA Notification, 2006.

3. The proponent further submitted that

a) Revised Post Mining Land use plan

S.No.	Particulars	Land (in ha)
1)	Reclaimed and Afforested area: a) Backfilled area – 33.72	33.72
2)	Backfilled area (to be completed after rehandling of OB- to be reclaimed biologically during closure period)	58.73
3)	Land with plantation developed on plains, avenue, around infrastructure and block plantation	154.54
4)	Land released after rehandling of OB dump (which will be biologically reclaimed during closure period)	94.12
5)	Infrastructure	5.0
6)	Township	10.00
	Total	356.11

4. **EC Compliance report: The compliance report of the**, Regional Office, MoEFCC at Bhopal vide letter no. 3-17/2011/(ENV)/376 dated 08.12.2014 was deliberated in the EAC meeting. The Committee has noted the Action Taken for compliance by the Project which, inter alia, are as follows:

- i. The catch drains will continue to be maintained along with adequate plantation so as to arrest any flow of silt and sediments. The balance catch drain of 400 mtr length will be completed before onset of 2015 Monsoon. Retaining wall with sand bags and boulder pitching in wire crafts shall be constructed additionally by May 2015.
- ii. Assistance to villages for meeting water requirement shall be rendered as committed.
- iii. CSR will be continued as per the approved Policy of the Company.

5. The proposal was considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in 29th EAC meeting held on 15th -16th January, 2015 for granting Environmental Clearance. The Ministry of Environment, Forests and Climate Change hereby accords Environmental Clearance for the above-mentioned **Expansion of Gouri Deep Expansion Mine Project (from 0.40 MTPA to 0.60 MTPA in an ML area of 356.11 Ha); latitude 19° 46' 33" -19° 47' 56" N and longitude 79° 16' 46.5" -79° 18' 53.6" E of M/s Western Coalfield Limited, located at dist. Chandrapur, Maharashtra under 7(ii) of EIA Notification 2006** under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms and conditions mentioned below:

A. Specific Conditions:

- i. The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC.
- ii. The validity of the EC is for the life of the Mine or as specified in the EIA Notification, 2006, whichever is earlier.
- iii. Coal transportation in pit by Tippers, Surface to Siding by Tippers and loading at siding by Pay loader.
- iv. Toe wall will be constructed with boulder.
- v. Plantation should be made along the boundary of the OBD.
- vi. The catch drains will continue to be maintained along with adequate plantation so as to arrest any flow of silt and sediments. The balance catch drain of 400 mtr length will be completed before onset of the Monsoon. Retaining wall with sand bags and boulder pitching in wire crafts shall be constructed additionally by May 2015.
- vii. Assistance to villagers for meeting water requirement shall be rendered as committed.
- viii. CSR will be continued as per the approved Policy of the Company and Social Audit conducted as per GOI Guidelines/Notification.
- ix. The depth of the internal void shall be 35 m from the ground level and should be adequate for fishery purpose.
- x. All safety measures shall be taken as per CMR, 1957 & related Circulars
- xi. The production shall be within the same Mining Lease area.
- xii. The OB shall be completely re-handled at the end of the mining and will be back filled upto the ground level and covered with about a meter thick top soil and put to use. The land after mining shall be brought back for agriculture purpose.
- xiii. Garland drains be provided.
- xiv. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine.
- xv. The CSR cost should be Rs 5 per Tonnes of Coal produced which should be adjusted as per the annual inflation.
- xvi. Everybody in the core area should be provided with mask for protection against fugitive dust emissions.
- xvii. Dust mask to be provided to everyone working in the mining area.
- xviii. The supervisory staff should be held personally responsible for ensuring compulsory regarding wearing of dust mask in the core area.
- xix. People working in the core area should be periodically tested for the lung diseases and the burden of cost on account of working in the coal mine area.
- xx. The mining area should be surrounded by green belt having thick closed thick canopy of the tree cover.
- xxi. 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.
- xxii. 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.
- xxiii. 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 & Climate Change and its concerned Regional office on yearly basis.
- xxiv. 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.

- xxv. 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.
- xxvi. 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.
- xxvii. Drills shall be wet operated.
- xxviii. 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,
- xxix. 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.
- xxx. A Progressive afforestation plan shall be implemented covering an area of 94.12 ha at the end of mining, which includes reclaimed External OB dump area (94.12 ha), Internal OB dump area (33.72 ha), along roads and Green belt (3.00 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.
- xxxi. An estimated total 46.81 Mm³ of OB will be generated during the entire life of the mine. Out of which 22.87 Mm³ of OB will be dumped in two external OB Dumps an earmarked area covering 94.12 ha of land with height of 60 m. 23.94 Mm³ of will be one internal OB dump in covering an area of 33.72 ha with height of 60 m. The maximum height of external OB dump for hard OB will not exceed 90 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.
- xxxii. The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- xxxiii. Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- xxxiv. The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.
- xxxv. No groundwater shall be used for mining operations.
- xxxvi. Of the total quarry area of 92.45 ha. the backfilled quarry area of 33.72 ha shall be reclaimed with plantation and a void of 58.73 ha at a **depth of 35 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.
- xxxvii. 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 & climate change and the Central Pollution Control Board quarterly within one month of monitoring.
- xxxviii. 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.
- xxxix. Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.

- xl. Besides carrying out regular periodic health check-up of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, through an specialised agency /institution within the District/State and the results reported to this Ministry and to DGMS.
- xli. 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.
- xl.ii. 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&CC and its concerned Regional office
- xl.iii. A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forests & Climate Change within 6 months of grant of Environmental Clearance.
- xl.ii. 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.
- xl.ii. 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

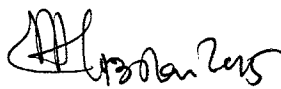
- i. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment, Forests & Climate Change.
- ii. No change in the calendar plan of production for quantum of mineral coal shall be made.
- iii. Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM₁₀, PM_{2.5}, SO₂ and NO_x monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.
- iv. Data on ambient air quality (PM₁₀, PM_{2.5}, SO₂ and NO_x) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office 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 EPA rules, 1986 shall be furnished as part of 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, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st

December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.

- vii. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting 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 EPA 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.
- x. 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. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.
- 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 concerned Regional Office.
- xiii. The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the Ministry of Environment, Forests & Climate Change at <http://envfor.nic.in>.
- xiv. A copy of the environmental clearance letter shall be marked to concern 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 company's website.
- xv. A copy of the environmental clearance letter shall be shall also 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 Sector and Collector's Office/Tehsildar's Office for 30 days.
- xvi. The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance 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 public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM₁₀, PM_{2.5}, SO₂ and NO_x (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.
- xvii. The project proponent shall submit six monthly compliance reports on status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the Ministry, respective Zonal Office s of CPCB and the SPCB.
- xviii. The Regional Office of this Ministry located in the Region shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
- xix. The Environmental statement for each financial year ending 31 March in For –V is mandated to be submitted by the project proponent for 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&CC by e-mail.



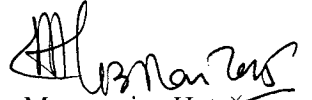
6. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.
7. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent
8. The proponent is required to obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
9. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
10. The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.
11. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
12. 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 and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter. 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.
13. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
14. This EC supersedes the earlier EC, vide letter no. letter J-11015/338/2008-1A.II(M) dated 18.02.2011 for 0.40 MTPA.


(Dr. Manoranjan Hota)
Director

Copy to:

1. Secretary, Ministry of Coal, New Delhi.
2. Secretary, Department of Environment, Government of Maharashtra, 15th Floor, New Admn. Bldg., Madam Cama Road, MUMBAI – 400032.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, E-2/240 Arera Colony, Bhopal – 462016.
4. Member Secretary, Maharashtra State Pollution Control Board, Kalapataru Point, 3rd & 4th Floors, Sion, Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai – 400002.

5. Member Secretary, 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, Chandrapur, Government of Maharashtra.
8. Monitoring File 9. Guard File 10. Record File 11. Notice Board


(Dr. Manoranjan Hota)
Director