

No. J-11015/118/2013 -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: 24th December, 2014

To,

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

Sub. : Expansion of Pauni opencast (from 0.72 MTPA 0.90 MTPA in an ML area of 255 ha; Latitude 19° 47' 30" to 19° 49' 25" N and Longitude 79°16' 21" to 79° 19'09 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. CIL/DLI/EMP/2013/27 dated 04.04.2013 with the application and subsequent letter no. dated 19.07.2013; 05.08.2014; 28.08.2014; 04.09.2014 and 15.11.2014 for Environmental Clearance for Expansion under 7(ii) of EIA Notification 2006 for the above-mentioned project.

2. The Ministry of Environment, Forest & Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance for **Expansion of Pauni opencast (from 0.72 MTPA 0.90 MTPA in an ML area of 255 ha; Latitude 19° 47' 30" to 19° 49' 25" N and Longitude 79°16' 21" to 79° 19'09 E) of M/s Western coalfield Limited, located at dist. Chandrapur, Maharashtra.** The proposal was considered in the 17th EAC meeting held on 23rd – 25th July, 2014 and reconsidered in the 23rd EAC meeting held on 16th -17th October, 2014. The proponent has informed that:

- i. The project was accorded EC vide letter no. J-11015/91/2005-IA.II (M) dated 14.07.2006 for 0.72 MTPA. Now project proponent has applied for 25 % expansion under 7(ii) of EIA Notification 2006 in line with the MOEF O.M. No. J-11015/30/2004-IA.II (M) dated 19.12.2012.
- ii. The latitude and longitude of the project are 19° 47' 30" to 19° 49' 25" N and 79°16' 21" to 79° 19'09 E respectively.
- iii. There is no joint venture.
- iv. Coal Linkage: Linked to Thermal Power Plants of MAHAGENCO.
- v. The land usage of the project will be as follows:

Pre-Mining:

Agricultural land – 240.45 ha
Govt. Land – 13.55 ha
Total – 255 ha



Post- Mining

S. N.	category	Plantation /Reclaimed with plantation	Reclaim ed land	Water Body	Public use	Undisturbed	Total
1.	External OB dump	20.00				46.00	66.00
2.	Excavation/quarry area	5.00		54.00		5.00	64.00
3.	Infrastructure incl. roads				3.50		3.50
4.	Afforestation	20.00				-	20.00
5.	Embankment	3.50					3.50
6.	Blasting zone &Rationalisation area					98.00	98.00
		48.50	--	54.00	3.50	149.00	255.00

- vi. The total geological reserve is 55.697 Mt. The mineable reserve 2.482 Mt (Balance as on 01.04.2012). The per cent of extraction would be 13.27%. (based on overall geological vs extractable/mineable)
- vii. The coal grade is 30% Grade 'D' and 70% Grade 'E'. The stripping ratio is 1:3.87 m³/t. The average Gradient is 1 in 7 to 1 in 10. There will be One Composite Seam with thickness ranging from 11.95 m to 14.83 m.
- viii. The total water requirement for project site has been worked out to 350 KI per day.
- ix. The method of mining would be Opencast with Shovel – Dumper Combination.
- x. There is one external OB dump with Quantity of 14.73 Mm³ in an area of 66 Ha with height of 55 meter and 1 internal dump with Quantity of 8.709 Mm³ in an area of 10 Ha with the height of upto ground level.
- xi. The final mine void would be in 54 Ha with depth of 85 m.
- 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 3 years (Balance life).
- xiv. **Transportation:** Coal transportation in pit by Dumpers, Surface to Siding by Tippers and loading to siding by Pay Loaders.
- xv. **Cost:** Total capital cost of the project is Rs. 45.63 crores. CSR Cost Rs. 5 /Tonne. Environmental Management Cost Rs. 11.74 lakhs.
- xvi. **Water body:** There are flowing Wardha River (8 Km) and three season nullahs namely Sakhari, Chincholi & Pauni flow around the mine area ultimately discharging into Wardha River.
- xvii. **Approvals:** Mine Plan Approved on 20.02.2013. Mine closure plan has been approved by WCL Board on 25.08.2012.
- xviii. **Wildlife issues:** There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xix. **Forestry issues:** There is no forest area involved in the project.
- xx. Total **afforestation** plan shall be implemented covering an area of 48.50 ha at the end of mining. Density of tree plantation 2500 trees/ ha of plants.
- xxi. There are no court **cases/violation** pending with the project proponent.

3. Certificate of compliance of earlier EC from MoEF, Regional office, Bhopal has been received vide their letter no. -46/2006(ENV)/715 dated 28.03.2014. The Committee deliberated upon the compliance report received from MoEF, Regional Office, Bhopal. The Committee was not satisfied with the level of compliance from the proponent which is a subsidiary of the Coal India Limited. The EAC was of the view Coal India Limited is technically rich and has enough human resources to deal with the

environmental matters more specifically with compliance of EC conditions. The proponent has submitted that they have complied with and also prepared action plan so as to comply with the EC conditions. The proponent has further submitted that even after they informed the RO, MoEF, the responses were fully captured in the RO's report. The Committee has observed that there is a deficiency in cooperation and communication between the proponent and the RO, MoEF and urged both the parties to sort out the matter and submit a revised compliance report so as to enable the EAC to take a view.

4. The proponent further informed that:

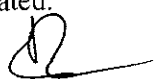
- i. It has submitted the compliance report certified by the RO, MoEFCC and the Action Plan.
- ii. The artificial ground water recharge measures have already been taken with due consultation with the concerned village Panchayat through de-silting/ deepening of existing pond in Chunala, Pauni & Panchgaon Village at a total cost of Rs. 8.42 lakhs. The water requirement of nearby village is met during water scarcity months. However, from the ground water level monitoring being carried out continuously every quarter as per EC condition does not reveal any adverse impact on ground water level till date.
- iii. For treatment of mine discharge, a sedimentation pond/settling tank has already been provided.
- iv. The plantation in the Mine area has been carried out through the State Forest Agency and with 3 years/ 5 years maintenance contract. Adequate fund provision is made every year under revenue head for plantation.
- v. The artificial ground water recharge measures have already been taken with due consultation with the concerned village Panchayat through de-silting/ deepening of existing pond in the Chunala, Pauni & Panchgaon villages at a total cost of Rs. 8.42 lakhs. In addition to the above, check dams shall also be constructed through boulders of 1 m height in the natural water course flowing in the vicinity at 3-4 points along its course.
- vi. The existing 3 nos. bores are taken as piezometers and the same are being monitored. These bores are in continuous use and the ground water level monitoring results will clearly indicate the rise /fall of water level. Till date no such adverse impacts have been noticed.
- vii. The Sustainability Report 2012-13 covering Land degradation and impact on biodiversity; Mine Water Utilization; Energy Consumption in mining operations; Expenditure for environmental protection etc has been prepared for further follow up.

5. The proposal was reconsidered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in 23rd EAC meeting held on 16th -17th October, 2014 for granting Environmental Clearance. The Ministry of Environment, Forests and Climate Change hereby accords Environmental Clearance for the above-mentioned **Expansion of Pauni opencast (from 0.72 MTPA 0.90 MTPA in an ML area of 255 ha; Latitude 19° 47' 30" to 19° 49' 25" N and Longitude 79°16' 21" to 79° 19'09 E) of M/s Western coalfield Limited, located at dist. Chandrapur, Maharashtra** under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars issued thereon and subject to the compliance of the following specific conditions, in addition to the general 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. Plantation of Prosopis species should be avoided and only native plant species be planted.
- iv. Rain water harvesting and other facilities should be created for ground water recharge.
- v. The Surface run off to the garland canal must pass through the settling tank.

- vi. No bore well should be made close to the mine as far as possible,.
- vii. Trained manpower and environmental laboratory be provided at site for analysing basic environmental parameters. A regional environmental laboratory be established so as to cater to a group of mines in the vicinity for advanced analysis. Action Taken Report for the implementation of action plan be submitted to the concerned SPCB to the RO, MoEFCC.
- viii. Coal transportation in pit by Dumpers, Surface to Siding by Tippers and loading to siding by Pay Loaders.
- ix. The production shall be within the same Mining Lease area.
- x. The depth of the void shall be 40 m from the ground level and should be adequate for fishery purpose.
- 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. The rest of the area will be backfilled upto the ground level and covered with about a meter thick top soil and put to use.
- 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 land after mining shall be brought back for the use of agriculture purpose to the extent possible.
- xvi. The CSR cost should be Rs 5 per Tonnes of Coal produced which should be adjusted as per the annual inflation.
- xvii. Everybody in the core area should be provided with mask for protection against fugitive dust emissions.
- xviii. Dust mask to be provided to everyone working in the mining area.
- xix. The supervisory staff should be held personally responsible for ensuring compulsory regarding wearing of dust mask in the core area.
- xx. 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.
- xxi. The mining area should be surrounded by green belt having thick closed thick canopy of the tree cover.
- xxii. 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.
- xxiii. 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.
- xxiv. OB shall be stacked at one 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.
- xxv. 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.
- xxvi. 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.
- xxvii. 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.
- xxviii. Drills shall be wet operated.



- xxix. 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,
- xxx. 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.
- xxxi. A Progressive afforestation plan shall be implemented covering an area of 28.50 ha at the end of mining, which includes reclaimed External OB dump area (10 ha), excavated area (5.0 ha), afforestation (10 Ha) and Embankment area (3.50 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.
- xxxii. An estimated total 23.439 Mm³ of OB will be generated during the entire life of the mine. Out of which 14.73 Mm³ of OB will be dumped in one external OB Dumps an earmarked area covering 66 ha of land with height of 60 m. 8.709 Mm³ of will be one internal OB dump in covering an area of 10 ha with height upto ground level. The maximum height of external OB dump for hard OB will 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.
- xxxiii. The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- xxxiv. Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- xxxv. The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.
- xxxvi. No groundwater shall be used for mining operations.
- xxxvii. Of the total quarry area of 64 ha. the backfilled quarry area of nil ha shall be reclaimed with plantation and a void of 54 ha at a depth of 40 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.
- xxxviii. 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.
- xxxix. 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.
- xl. Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
- xli. 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.
- xl. 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.
- xlii. 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

- xliv. 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.
- xlv. 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.
- xlvi. 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. J-11015/91/2005-1A.II (M) dated 14.07.2006 for 0.72 MTPA.


(Dr. Manoranjan Hota)
Director

Copy to:

1. Secretary, Ministry of Coal, New Delhi.
2. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, E-2/240 Arera Colony, Bhopal – 462016.
3. Secretary, Department of Environment & Forests, Government of Madhya Pradesh, Secretariat, Bhopal.
4. Member Secretary, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal – 462016.
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. Dr. R.K. Garg, Advisor, Coal India Limited, SCOPE Minar, Core-I, 4th Floor, Vikas Marg, Laxmi nagar, New Delhi.
8. District Collector, Yavatmal, Government of Maharashtra.
9. Monitoring File 10. Guard File 11. Record File 12. Notice Board.


(Dr. Manoranjan Hota)
Director