

No. J-11015/287/2010-IA-II (M)
Government of India
Ministry of Environment, Forest & Climate Change
IA-II (Coal Mining Division)

Indira Paryavaran Bhawan,
Jorbag Road,
New Delhi-110003

Dated: 11th May, 2015

To,

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

Email: gmenvironment.wcl@nic.in

Sub. : Expansion of Kamptee Deep OC coal mine project of (Normative 1.5 MTPA to Peak 2 MTPA in an ML area of 667.65 ha; Latitude N 21° 02' to N 21° 15' and Longitude E 79° 13' to E 79° 14') M/s Western Coalfields Limited, located at dist. Nagpur, Maharashtra – Environmental Clearance - reg.

Sir,

This is with reference to letter no. 43011/35/2010-CPAM dated 01.09.2010 with the application for Terms of Reference (TOR) and this Ministry's letter dated 03.12.2010 granting TOR. Reference is also invited to the letter no WCL/HQ/ENV/6-1/638 dated 30.10.2013 and subsequent letter nos. dated 25.07.2014; 30.08.2014; 16.10.2014; 13.01.2015; 16.02.2015; 20.02.2015 and 24.02.2015 for environmental clearance on the above-mentioned subject.

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 Kamptee Deep OC coal mine project of (Normative 1.5 MTPA to Peak 2 MTPA in an ML area of 667.65 ha; Latitude N 21° 02' to N 21° 15' and Longitude E 79° 13' to E 79° 14') M/s Western Coalfields Limited, located at dist. Nagpur, Maharashtra.** The proposal was considered in the 23th EAC meeting held on 16th -17th October, 2014 and 31st EAC meeting held on 16th -17th February, 2015. The proponent has informed that:

- i. It was noted that EC was granted for Kamptee Deep Opencast vide letter no. letter J-11015/176/2006-IA.II (M) dated 17th October, 2006 for 1.5 MTPA.
- ii. TOR was granted to the project for Environmental Clearance vide letter no J-11015/287/2010-IA.II(M) dated 03.12.2010. The project proponent submitted EIA/EMP report vide letter no. WCL/HQ/ENV/6-1/638 dated 30.10.2013. In pursuance to the circular No. J-11013/41/2006-IA-II(I) dated 22nd March, 2010, the proposal was delisted on 19.05.2014. The request for consideration has been made in accordance to the Para 2 (iii) of OM J-11013/41/2006-IA-II(I)(part) circular No. J-11013/41/2006-IA-II(I) dated 22nd August, 2014.
- iii. The latitude and longitude of the project are -21°02' to 21°15' N and 79°13' to 79°14' E respectively.
- iv. Joint Venture: There is no Joint Venture.
- v. Coal Linkage: Linked to Thermal Power Plants of MAHAGENCO.



vi. The land usage of the project will be as follows:

Pre-Mining:

S.N.	LAND USE	Within ML Area (ha)	Outside ML Area (Ha)	Total
1	Agricultural land	640.765	11.185	651.95
2	Forest land	--	--	--
3	Waste land/Govt. land	9.70	--	9.70
	Total	650.465	11.185	661.650

Post- Mining:

S.N.	category	Land Use(ha)					Total
		Plantation	Water body	Public use	Technically Reclaimed Area	Undisturbed	
1.	External Waste Dump	200.00			54.859	--	254.859
2.	Excavation	--	178.05	--		--	178.05
3.	Infrastructure	10.00		41.907		--	51.907
4.	Area for future Extension of Quarry	--				11.185	11.185
5.	Danger Zone & Rationalisation Area	105.00				60.649	165.649
	Total	315.00	178.05	41.907	54.859	71.834	255.00

Core area :

Sl.No.	Particulars	Total Area (ha)
1.	Entire Quarry Area	178.050
2.	External OB dump	254.859
3.	Existing WCL colony, J.N. Hospital and other existing Infrastructure in rise side and in south west side near Kanhan river	51.907
4.	Land in rise side near WCL colony for shifting of residential and service buildings and other infrastructure proposed to be	11.185

	dismantled due to extension of quarry in western side.	
5.	Area needed for rationalization and blasting zone	165.649
	Total Land	661.650

- vii. The total requirement of the land for Kamptee Deep OC Project would be 661.65 ha. Out of this land, 476.12 ha of land has been acquired/under process of acquisition by WCL.
- viii. The total geological reserve is 26.763 MT. The mineable reserve 24.086 MT, extractable reserve is 24.086 MT. The per cent of extraction would be 89.99%.
- ix. The coal grade is G - 9. The stripping ratio is 5.833 (With Rehandling of OB) m³/t. The average Gradient is 1 in 3.5 to 1 in 4.5. There will be 5 seams with thickness ranging From 2.00 m (Seam I) to 13.00m (Seam V).
- x. The total estimated water requirement is 480 KL/day. The level of ground water ranges Pre monsoon Buffer zone 5 m to 17.8 m bgl and Post monsoon Buffer zone 1.70 m to 14.5 m bgl.
- xi. The Method of mining would be Semi Mechanized opencast with shovel-dumper combination.
- xii. There will be one external OB dump with Quantity of 131.389 Mm³ in an area of 254.86 ha with height of 90 meter above the surface level and one internal dump with Quantity of 9.10 MCM.
- xiii. The final mine void would be in 178.050 Ha with depth of 200.00 m. and the Total quarry area is 178.05 Ha. A void of 178.05 ha with depth of 200 m which is proposed to be converted into a water body.
- xiv. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- xv. The life of mine is 17 Years.
- xvi. Transportation: Coal transportation in pit by Dumpers, Surface to Siding by Dumpers and loading at siding by Pay loaders.
- xvii. There is R & R involved. There are PAFs.
- xviii. Cost: Total capital cost of the project is Rs. 270.19 Crores. CSR Cost Rs. 5 per tonne. R&R Cost Rs. 21.72 Crore. Environmental Management Cost (capital cost Rs. 90 Lakhs, annual recurring cost Rs. 6/tonne).
- xix. Water body: Kanhan river is flowing near the mine lease boundary of the project.
- xx. Approvals: Ground water clearance applied on not applicable as it is not falling in critical area as per CGWA. Board's approval obtained on 18.07.2010. Mining plan has been approved on 02.08.2010. Mine Closure Plan approval on 25.08.2012.
- xxi. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xxii. Forestry issues: There is no forest area involve.
- xxiii. Total afforestation plan shall be implemented covering an area of 150.00 ha at the end of mining. Green Belt over an area of 315 ha. Density of tree plantation 2500 trees/ ha of plants.
- xxiv. There are no court cases/violation pending with the project proponent.
- xxv. Public Hearing was held on 12.09.2012. The issues raised in the PH includes land use pattern: detail of land use pattern for the 185 hectare; Method of acquisition of Agriculture Land; cost of land details; village wise survey nos. etc.
- xxvi. Compliance Report: Certificate of earlier EC obtained from Regional Office, MOEF&CC vide its letter no. 3-43/2008(ENV)/2014 dated 20.12.2013, from Director(S),MOEF, Regional Office, Bhopal.



3. The proponent further informed that:

- i. Presently all the three open cast mine Kamptee OC, Inder OC, and Gondegaon OC are under operation and due to steep gradient, simultaneously internal dumping in Kamptee OC and Inder OC is difficult. Due to this, no simultaneous dumping is proposed in Inder OC.
 - a) In Inder OC the seam gradient is in the range of 1 in 3 - 1 in 3.5 with strike length of only 1250 m. Due to steep gradient of seams (1 in 3.5), no internal dumping is proposed in the quarry. Total Overburden of 61.99 Mm³ will be dumped externally in the north-eastern side of the quarry except 0.32 Mm³ of OB dumped for flood protection embankment around dip side of the quarry. The two dump benches would be of 30 m height and final angle of overall slope is kept about 28°. Maximum height of proposed dump is planned as 60 m.
 - b) As proposed in Gondegaon Extension OC, about 62.5 ha of land will be saved due to merger of dump B & C after rehabilitation of Gondegaon village. This in turn would result into reduction of land proposed to be acquired for Inder UG to OC project for purpose of OB dumping. The proposed external dump would move further west and reduce towards south by about 600m.
 - c) In case of Kamptee Deep OC, a meager quantity (9.096 Mm³) of OB is proposed for simultaneous Backfilling/ internal dumping.
 - i) Total OB to be excavated – 140.485 Mm³
 - ii) OB in external dump – 131.389 Mm³
 - iii) OB in internal dump/ Backfilling – 9.096 Mm³

The proposed Kamptee Deep OC mine has been planned upto 200m depth at the floor of bottom most seam- I (B) in Phase-I. Thereafter, the mine will be further deepened in Phase-II upto safe distance from Kanhan river depending upon the economical viability at that time. Since, the quarry will be further deepened; the simultaneous internal dumping has been planned leaving about 100m distance from the dip side coal face. Because of this as well as steep gradient of coal seam (1 in 3.5 to 1 in 4.5), the total volume of OB in simultaneous dumping is only 9.096 Mm³. Rest entire OB (140.485 – 9.096 – 131.389 Mm³) will be dumped externally. The simultaneous internal dumping will start in 10th year of quarry operation (14th year of mine life). In existing Kamptee, presently backfilling is done on the erstwhile void of Kamptee OC, the details are as follows:-

S. No.	Name of mine	Back filled Area		Remark
		Area in Ha	QTY inMm3	
1	Kamptee Open Cast Mine	40	25	

- d) In Gondegaon OC, in order to maximize the backfilling and considering the pit geometry with available strike length of 3000 m, the quarry has been further sub divided into two sub quarries viz. Gondegaon Sub – Quarry & Ghatrohan Sub Quarry. Although the seam gradient is in the range of 1 in 3.5 to 1 in 5.0 and with the aforesaid planning simultaneous internal dumping has been proposed in this mine. As planned, out of the total OB excavation of 183.85 million cubic metre, 94.21 million cubic meter i.e. 51.25 % is proposed to be accommodated simultaneously in the decoaled void. However the about 48.75% of OB i.e. 89.64 million cubic meter is proposed to be dumped externally.

- i. Total OB to be excavated – 153.91 Mm³
- ii. OB in external dump – 83.92 Mm³
- iii. OB in internal dump/ Backfilling – 69.99 Mm³

e) Further in Gondegaon OCP, in order to minimize the degradation of land (to the extent possible), the internal/backfilling dump & external OB dumping has been planned in such a way so that, backfilled dump after reaching the ground level, will get merged with the adjacent external OB dump and the height of external OB dump thus formed will be of maximum of 45 m in two stages of 30 m & 15 m. In addition, as directed by the EAC during deliberation, the possibility of future extension (towards dip side) was also examined and submitted to the EAC subsequently. As submitted, the proposed extension beyond the present limit upto 200 m will release about 16.00 Million tones of coal after an excavation of 88.67 Mm³ of OB at an average stripping ratio of 5.54 m³/te. The conceptual plan for distribution of 88.67 Mm³ of OB will be as follows:-

- i. Total OB to be excavated – 88.67 Mm³
- ii. OB in external dump – 69.26 Mm³
- iii. OB in internal dump/ Backfilling – 19.41 Mm³

f) The total external dumping quantity of 69.26 Mm³ (future extension portion only) will be dumped over the already created dump (during the life of present project) by raising its height from 60 m to 90 m thereby saving considerable land from fresh degradation. It has been further planned that about 19.30 Mm³ OB from adjacent Inder OC can be accommodated in the merged dump of Gondegaon OC by raising its height from 45 m to 60 m, thereby saving about 62.5 ha of land from fresh degradation due to OB dumping. It may be mentioned here that during future expansion of these mines, care will be taken to extend one of the mines first and then OB of the other expansion projects will be accommodated in already extended mine. Later the rise side external OB will be back filled in these above mines by utilizing mine closure fund to ensure no OB dump in rise side at the end of mining.

- ii. The ambient air quantity is influenced due to various activities like drilling, blasting and handling related to the project. The concentration of pollutants may vary depending upon the various micro-meteorological parameters. In order to assess the latest quality of ambient air in the surrounding when all the three mines are running simultaneously, the baseline data on environmental quality for Pre Monsoon Season are collected for 91 days during the period from 1st April to 30th June 2013. Ambient air quality parameters viz., PM10, PM2.5, SO₂, NO_x, and all heavy metals are well within the NAAQ standards 2009 prescribed by CPCB. The cumulative impact has already been assessed and modeling has been done which shows insignificant impact due to proposed expansion of capacity.
- iii. Total 6060 TPD coal (considering Peak Capacity at 2.00 MTPA) is transported through 600 trucks per day each having capacity of 20 tonne (Empty & loaded). Coal from mine pit is transported to Dumri Siding- about 16 km., thereafter from siding coal is dispatched to Power Plants through rail only.
- iv. At present firstly about 12.20 ha of void at 50.00 m depth filled with water is available which is acting as a source of water recharge and it is last for next – 2 to 3 years. Secondly, balance treated mine pumped out water, before reaching confluence at the river, is allowed to accumulate in a low lying area of about 9.00 ha. This accumulation is a continuous state of affair which helps in recharging of ground water. These two structures are acting as source of ground water recharge at present. However, the monitoring report shows that there is no adverse impact on ground water table. Moreover as directed, check – dams for recharge structures shall also be constructed.

v. The Public Hearing for the proposed Kamptee Deep Opencast Project, WCL, Nagpur Area, Tal. Parseoni, Dist. Nagpur, conducted on **12/09/2012** at Black Diamond Stadium, Tekadi, Tal. Parseoni, Dist. Nagpur. The detailed action plan for issues raised during the Public Hearing are as follows:

- i) Land use pattern and land under acquisition: EIA has been prepared as per the TOR accorded by MOEF. The environmental impact has been assessed for the proposed project and mitigative measures have been incorporated. The core Zone land includes agricultural land of Tekadi village, Pipri village, Juni Kamptee Village and Kanhan village. The total project area of proposed Kamptee Deep OC mine is 661.650 ha. Total 239.10 ha land has already been acquired and 96.70 ha land is under process of acquisition. In addition to this, out of total 92.603 ha land proposed to be transferred from Inder OC to Kamptee Deep OC mine, 3.19 ha has already been acquired and balance 89.413 ha land is under process of acquisition.
- ii) The details of land acquisition under the specific provisions of respective Land acquisition act has been detailed out in the EIA/EMP.
- iii) The land acquisition is totally a separate and independent activity which will be carried out under the specific provision of the respective Coal Bearing (Acquisition & Development) Act, 1957 and/or Land Acquisition Act.
- iv) Every year WCL undertakes various welfare activities for surrounding villages under CSR. The activities/expenditure undertaken since last three years i.e. 2010-11, 2011-12, 2012-13 has been submitted.
- v) Employment and monetary compensation in lieu of employment is given to land outstee as per R& R Policy, 2012 of CIL observing all formalities. About 301 nos. of people have been provided employment from Gondgaon village.
- vi) Source Apportionment: The main source of dust in the surrounding area is due to transportation of coal. In order to control the dust, various measures as discussed and presented during the meeting will be operated and maintained. Further, the measures will be augmented depending on the analysis results.
- vii) Alternate mode of Transport: The mines viz. Gondgaon OC, Inder OC and Kamptee OC are all operating and will continue to operate. At present entire coal from these mines are dispatched to MAHAGENCO through Rail mode after bringing coal from Pithead to siding by road (10 – 15 km). It is now being proposed to develop the aerial ropeway mode and the issue has been taken up with MAHAGENCO to take the entire coal from these three mines (about 3.5 – 4.00 Million tones) through aerial ropeway system.
- viii) Quality of Mine discharge: In this regard it is submitted that analysis of the mine discharge from Kamptee has been done and found that all the parameters are well within the permissible limits

4. The proposal was reconsidered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in 31st EAC meeting held on 16th -17th February, 2015 for granting Environmental Clearance. The Ministry of Environment, Forest and Climate Change hereby accords environmental clearance for the above-mentioned **Expansion of Kamptee Deep OC coal mine project of (Normative 1.5 MTPA to Peak 2 MTPA in an ML area of 667.65 ha; Latitude N 21° 02' to N 21° 15' and Longitude E 79° 13' to E 79° 14') M/s Western Coalfields Limited, located at dist. Nagpur, Maharashtra** 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. All safety measures shall be taken as per Coal Mining Regulation Act, 1957 & related Circulars.
- iv. There shall be zero mine void at the end of the mine.
- v. The issue of transportation of entire coal from three mines i.e. Gondegaon OC, Inder OC and Kamptee OC by aerial ropeway with MAHAGENCO need to be expedited.
- vi. Coal transportation in pit by Dumpers, Surface to Siding by Dumpers and loading at siding by Pay loaders.
- vii. The production shall be within the same Mining Lease area.
- viii. 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.
- ix. Garland drains be provided.
- x. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine.
- xi. The CSR cost should be Rs 5 per Tonnes of Coal produced which should be adjusted as per the annual inflation.
- xii. Everybody in the core area should be provided with mask for protection against fugitive dust emissions.
- xiii. The supervisory staff should be held personally responsible for ensuring compulsory regarding wearing of dust mask in the core area.
- xiv. 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.
- xv. The mining area should be surrounded by green belt having thick closed thick canopy of the tree cover.
- xvi. 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.
- xvii. 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.
- xviii. OB shall be stacked at **one** 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, Forest & Climate Change and its concerned Regional office on yearly basis.
- xix. 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.
- xx. 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.
- xxi. 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.
- xxii. Drills shall be wet operated.



- xxiii. 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.
- xxiv. 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.
- xxv. A Progressive afforestation plan shall be implemented covering an area of 150.00 Ha at the end of mining, which includes reclaimed external OB dump area (150.00) and internal OB dump area (nil ha) and Green belt (65 ha) 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.
- xxvi. An estimated total **140.49** Mm³ of OB will be generated during the entire life of the mine. Out of which 131.39 Mm³ of OB will be dumped in **one** external OB Dumps an earmarked area covering 254.859 ha of land with height of nil m. **226.78** Mm³ of will be two internal OB dump in covering an area of **275.797** ha with height of 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.
- xxvii. The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- xxviii. Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- xxix. The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.
- xxx. No groundwater shall be used for mining operations.
- xxxi. Of the total quarry area of **178.05** Ha the backfilled quarry area of **178.05** Ha shall be reclaimed with plantation and a void of **178.05** Ha at a depth upto **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.
- xxxii. 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, Forest & Climate Change and the Central Pollution Control Board quarterly within one month of monitoring.
- xxxiii. 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.
- xxxiv. Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
- xxxv. 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.
- xxxvi. 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.
- xxxvii. For monitoring land use pattern and for post mining land use, a time series of landuse maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is

- consistent in the time series), and the report submitted to MOEF&CC and its concerned Regional office
- xxxviii. A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest & Climate Change within 6 months of grant of Environmental Clearance.
- xxxix. 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. 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, Forest & 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, Forest & 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.

5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.

6. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent.

7. 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.



8. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

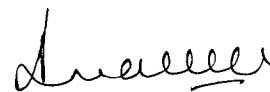
9. The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.

10. 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.

11. 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.

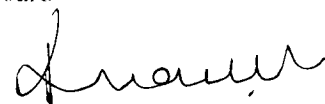
12. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

13. This EC supersedes the earlier EC, vide letter no. letter J-11015/176/2006-IA.II (M) dated 17th October, 2006 for 1.5 MTPA.


(Dr. R. Warriar)
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, Forest & Climate Change, 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.
Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi -110032.
5. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
6. Advisor, Coal India Limited, SCOPE Minar, Core-I, 4th Floor, Vikas Marg, Laxmi nagar, New Delhi.
7. District Collector, **Nagpur**, Government of Maharashtra.
8. Monitoring File 9. Guard File 10. Record File 11. Notice Board


(Dr. R. Warriar)
Director

