

No.J-11015/56/2008-IA-II (M) pt. file  
Government of India  
Ministry of Environment, Forest and Climate Change  
IA-II (Coal Mining) Division

Indira Paryavaran Bhawan,  
Jorbagh Road, N Delhi-3  
Dated: 10<sup>th</sup> November, 2017

To,

The General Manager (Environment),  
M/s Western Coalfields Ltd,  
Coal Estate, 9<sup>th</sup> Floor, Civil Lines,  
**Nagpur** - 1 (Maharashtra)

Email: [gmenvironment.wcl@nic.in](mailto:gmenvironment.wcl@nic.in); [wclenv@yahoo.in](mailto:wclenv@yahoo.in)

**Sub: Durgapur Extension Deep OC Phase-II of 3 MTPA of M/s Western Coalfields Limited in a total area of 1622.50 ha located in District Chandrapur (Maharashtra) - Environmental Clearance - reg.**

Sir,

This refers to your letter No. WCL/ENV/HQ/20-C&3-C/96 dated 15.03.2016, along with online proposal No. IA/MH/CMIN/62601/2008 dated 17.02.2017 and subsequent letters dated 21.02.2017, 22.02.2017, 23.02.2017, 24.02.2017, 11.09.2017, 13.09.2017, 16.09.2017, 23.09.2017 and 26.09.2017 on the above-mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for grant of environmental clearance to Durgapur Extension Deep OC Phase-II of 3 MTPA of M/s Western Coalfields Limited in a total area of 1622.50 ha located in District Chandrapur (Maharashtra), dovetailing the EC for Phase-I granted on 16<sup>th</sup> March, 2012.

3. The proposal was considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Projects in its 6<sup>th</sup> meeting held on 27-28 February, 2017 and 19<sup>th</sup> meeting held on 26<sup>th</sup> September, 2017. The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

(i) The EC for Durgapur OC Project for 2.3 MTPA for a total lease area of 1354.64 ha was accorded vide letter dated 30<sup>th</sup> March, 2007.

(ii) The terms of reference for Durgapur Extension (Deep) OC was granted vide letter dated 12<sup>th</sup> June, 2008 for its expansion from 2.3 MTPA to 3 MTPA with increase in land area from 1354.64 ha to 1645.82 ha (included additional forest land of 121.58 ha for which stage-I forest clearance was under process). Based on the said ToR, public hearing was conducted on 30<sup>th</sup> October, 2009 and the EIA/EMP was submitted. The project was granted EC by the Ministry vide letter dated 16<sup>th</sup> March, 2012.



(iii) Total project area now includes 1186.54 ha of the existing land (257.77 ha of forest land for which stage-I FC was earlier granted in stages), additional area of 410.96 ha (includes 121.58 ha of forest land) and 25 ha for village rehabilitation. For diversion of the remaining forest land of 121.59 ha, stage-forest clearance was granted on 16<sup>th</sup> December, 2015.

(iv) The increase in total project area from 1186.54 ha to 1622.50 ha with the mining capacity remaining the same, would result in sustainability of coal mining operations, assured supply of coal to the consumers and increase in the life of the mine ultimately

(v) The land use pattern the project site will be as follows:

Pre-Mining: The total land requirement for this project is 1622.50 ha

S.N.	LAND USE	Within ML Area (ha)	Outside ML Area (ha)	Total
1	Agricultural land	1045.20	25.00	1070.20
2	Forest land	379.35	-	379.35
3	Waste land/Govt. Land	172.95	-	172.95
4	Grazing land	-	-	-
5	Surface water bodies	-	-	-
6	Settlements	-	-	-
7	Others (specify)	-	-	-
	<b>Total</b>	<b>1597.50</b>	<b>25.00</b>	<b>1622.50</b>

Post- Mining:

S. No.	Item	Land use (ha)				
		Plantation	Water Body	Public use	Un-disturbed	Total
1	External OB Dump	350.00	0.00	0.00	111.38	461.38
2	Excavation	150.00	175.00	0.00	335.68	660.68
3	Infrastructure like Sub-station, CHP Service Buildings etc.	10.00	0.00	90.00	0.00	100.00
4	Undisturbed area (brought under plantation)	100.00	0.00	0.00	245.44	345.44
5	Area for village rehabilitation	4.00	0.00	21.00	0.00	25.00
6	Road	2.00	0.00	8.00	0.00	10.00
7	Colony Land	4.00	0.00	16.00	0.00	20.00
	<b>Total</b>	<b>620.00</b>	<b>175.00</b>	<b>135.00</b>	<b>692.50</b>	<b>1622.50</b>

(vi) Total geological reserve is 49.76 MT. The mineable reserve 47.27 MT, extractable reserve is 47.27 MT. The percent of extraction would be 95%.

(vii) The coal grade is GCV 4581 k Cal /kg (Grade G-10). The stripping ratio is 1:6.58 m<sup>3</sup>/tonne. The average Gradient is 1 in 8 to 1 in 10. There will be one seam with average gradient thickness ranging 13.24 m to 17.51 m.

(viii) Total estimated water requirement is 790 m<sup>3</sup>/day industrial demand and 1400 m<sup>3</sup>/day for domestic demand. The level of ground water ranges from 2.87 m to 8.57 m.

- (ix) The method of mining would be Opencast with Shovel-Dumper combination.
- (x) There are eight external OB dumps with Quantity of 116.85 Mm<sup>3</sup> and area of 461.38 ha and 3 internal dump and 202.59 Mm<sup>3</sup> in an area of 485.68 ha. The final mine void would be in 175 ha with depth 150 m.
- (xi) Total quarry area is 660.68 ha. Out of total backfilled quarry area of 485.68 ha, 150 ha area shall be reclaimed with plantation. A void of 175.00 ha with depth 150 m which is proposed to be converted into a water body.
- (xii) The life of mine is 17 Years.
- (xiii) Transportation: Coal transportation in pit by through Dumpers from in pit to pit head coal handling plant, Coal from CHP to consumer is transported by belt conveyer.
- (xiv) There is R&R of Sinhala, Navegaon, Masala Tukum and old Masala involved. There are 1275 nos. of PAFs.
- (xv) Cost: Total capital cost of the project is Rs. 378.8711 Crores. CSR Cost based on 2% of the average net profit of the Company for the three immediate preceding financial years or Rs 2.00 per Tonne of Coal Production of the previous year whichever is higher. R&R Cost 126.4425 Crores. Environmental Management Cost: Capital – Rs155.00 Lakhs and Revenue- @ Rs 6/tonne.
- (xvi) Water body: one seasonal nallah flows through the block boundary. Nallah are proposed to be diverted. The re-alignment of this nala is proposed along periphery of external dump.
- (xvii) Approvals: Ground water clearance:-NOC for withdrawal of groundwater from CGWA was granted vide letter no.21-4(21)/CR/CGWA/2007-764 dated 31-08-2007 as per prevalent rules. Further as per amended rules of 2012 application for grant of NOC for dewatering of Groundwater has been submitted to CGWB dated 07-06-2016.
- (xviii) Mining Plan for the project was approved by the WCL Board on 21<sup>st</sup> February, 2017. Mine closure plan is an integral part of mining plan.
- (xix) Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- (xx) Total forest area involved 379.35 ha. Breakup of the forest land clearance is as below:
  - 40.46 ha - FLD- 3679/1435 – F3 dated 23<sup>rd</sup> May, 1980 from Revenue Department, Govt. of Maharashtra, Mantralaya, Bombay
  - 136.54 ha - F.8 – 35/2001 – FC dated 19.09.2006 from MOEF
  - 80.77 ha - F.8 – 123/2003 – FC dated 8<sup>th</sup> November, 2005 from MOEF
  - 121.58 - Stage – I FC granted vide 8-84/2014-FC Dated 16<sup>th</sup> September 2015 from MoEF&CC
- (xxi) Total afforestation plan shall be implemented covering an area of 620ha at the post-mining. Density of tree plantation 2500 trees/ ha of plants.
- (xxii) There are no court cases/violation pending with the project proponent.
- (xxiii) The monitoring report on compliance status of existing EC conditions has been forwarded to the Ministry by Regional Office, MoEF&CC Nagpur vide letter No.F-3-18/2012 (Env.) dated 7<sup>th</sup> September, 2017. Subsequently, the Action Taken Report on the observations (partially complied conditions) of the Regional Office has been submitted by the project proponent. The same was also presented before the EAC during the meeting.

4. The Expert Appraisal Committee in its 19<sup>th</sup> meeting held on 26<sup>th</sup> September, 2017, has recommended the proposal for grant of Environmental Clearance subject to compliance of certain terms and conditions. Based on the recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to **Durgapur Extension Deep OC Phase-II of 3 MTPA of M/s Western Coalfields Limited in a**

*(Signature)*

total area of 1622.50 ha located in District Chandrapur (Maharashtra), under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to compliance of the terms and conditions, and environmental safeguards as under:

- (i) The maximum production from the mine shall not exceed the sanctioned capacity of 3 MTPA as mentioned 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) Standard Operating Procedures are required to be prepared and vetted by the company headquarters for adoption of environmental measures in course of various mining activities right from drilling, blasting to coal dispatch be submitted to EAC for monitoring.
- (iv) Transportation of coal should be carried out by covered trucks. Mitigative measures to be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers.
- (v) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (vi) Controlled blasting techniques should be adopted to control ground vibration and fly rocks.
- (vii) Thick green belt of 30-45 m width to be provided to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads

4.1 The grant of Environmental Clearance is further subject to compliance of generic conditions as under:

(a) Mining

- (i) No change in mining technology and scope of work shall be made without prior approval of the Ministry of Environment, Forest and Climate Change. No change in the calendar plan including excavation, quantum of coal and waste should be made.
- (ii) Mining shall be carried out as per the approved mining plan, and also abiding by the relevant laws related to coal mining and the circulars issued by Directorate General Mines Safety (DGMS). An approved progressive Mine Closure Plan shall strictly be complied with and submitted.

(b) Land Reclamation

- (i) Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office.
- (ii) Final mine void depth should not be more than 40 m. The void area should be converted into water body. The remaining area should be back filled up to the ground level and covered with thick top soil. The land after mining should be restored for agriculture or forestry purpose.
- (iii) The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The overburden dumps should be vegetated with suitable native species to prevent erosion and surface run off. The entire excavated area shall be backfilled and afforested in line with the

approved Mine Closure Plan. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

(iv) Greenbelt shall be developed all along the mine lease area in a phased manner. The width of the green belt along forest area should not be less than 7.5 m, and the total area covered by 3 tier green belt shall not be less than 100 ha. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads.

(c) Emissions, Effluents, and Waste Disposal

(i) Transportation of coal by road should be carried out by covered trucks only. Effective measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM<sub>10</sub> and PM<sub>2.5</sub> such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board in this regard.

(ii) Vehicular emissions shall be kept under control and regularly monitored. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centres.

(iii) Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely 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, etc carried out at least once in six months.

(iv) Crusher/feeder and breaker material transfer points should invariably be provided with dust suppression system. Belt-conveyors should be fully covered to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.

(v) The project proponent shall not alter the major channels around the site. Appropriate embankment should be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary should be of suitable dimensions and critical patches should 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.

(vi) Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources in the area in consultation with Central Ground Water Board.

(vii) Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, coal heaps and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. Dimension of the retaining wall to be constructed at the toe of the dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.

(viii) Industrial waste water (CHP, workshop and waste water from the mine) should be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.

(d) Noise & Vibration Control

- (i) 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.
- (ii) Controlled blasting techniques should be practiced with use of delay detonators to mitigate ground vibrations and fly rocks.

(e) Occupational Health & Safety

- (i) Besides carrying out regular periodic health check-up of their workers, 20% 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.
- (ii) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Supervisory staff shall be held responsible for ensuring compulsory wearing of dust mask.
- (iii) In case of outsourcing of work through MDO, the project proponent shall ensure the strict enforcement of the above conditions.

(f) Biodiversity

- (i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.

(g) Implementation of Action Plan as per Public Hearing and CSR Activities

- (i) Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing. Land oustees should be compensated as per the norms laid out R&R Policy of the Company or the National R&R Policy or R&R Policy of the State Government, whichever is higher.
- (ii) The Board of every company, shall ensure that the company spends, in every financial year, at least two per cent. of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy under Section 135 of the Companies Act, 2013, for the socio economic development of the neighbourhood.

(h) Corporate Environment Responsibility

- (i) The Company should have a well laid down Environment Policy approved by the Board of Directors.



- (ii) To have proper checks and balances, the Company should 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.
- (iii) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (iv) The funds earmarked for environmental protection measures should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office.

(i) Statutory Obligations

- (i) Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, NGT and any other Court of Law, if any, as may be applicable to the project.
- (ii) This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife, if any, as applicable to the project.
- (iii) The project proponent shall obtain Consent to Establish and Consent to Operate from the concerned State Pollution Control Board prior to increase in capacity of washery and effectively implement all the conditions stipulated therein.
- (iv) Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) for drawl of water (surface and ground water).

(j) Monitoring of Project

- (i) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- (ii) The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.
- (iii) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- (iv) The activities pertaining to development of green belt/horticulture shall be reported to concerned Regional Office of MoEF&CC on six monthly basis from the date of commencement of mining operations.
- (v) For half yearly monitoring reports, the data should be monitored for the period of April to September and October to March of the financial years and submitted to the concerned authorities within 2 months of the completion of periodicity of monitoring.



(k) Miscellaneous

- (i) A copy of clearance letter will be marked to concerned Panchayat/local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
- (ii) An electronic copy of the EC letter shall be marked to the concerned State Pollution Control Board, Regional Office, District Industry Sector and Collector's Office/Tehsildar Office for information in public domain within 30 days.
- (iii) The EC 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 public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant 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 mine office and in corporate office and on company's website.
- (iv) The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue 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 also at web site of the Ministry of Environment, Forest and Climate Change at [www.environmentclearance.nic.in](http://www.environmentclearance.nic.in) and a copy of the same should be forwarded to the Regional Office.
- (v) The Environmental Statement for each financial year ending 31 March in Form-V is mandated to be submitted by the PP 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 project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the EAC. The commitment made by the project proponent to the issue raised during Public Hearing shall be implemented by the proponent.

6. The project proponent shall 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.

7. The PP shall set up an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.

8. 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 EC and attract action under the provisions of Environment (Protection) Act, 1986.


9. 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 project






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.

10. Any appeal against this EC 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.

  
10/11/2017  
(S. K. Srivastava)  
Scientist E

**Copy to:**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Secretary, Department of Environment, Government of Maharashtra, 15th Floor, New Admn. Bldg, Madam Cama Road, **Mumbai** - 32
3. The APCCF, MOEF&CC (Western Central Zone), Ground Floor, East Wing, New Secretariat Building Civil Lines, Nagpur (Maharashtra)
4. The Member Secretary, Maharashtra State Pollution Control Board, Kalapataru Point, 3<sup>rd</sup> & 4<sup>th</sup> Floors, Sion, Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai - 2
5. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi -110 032
6. The Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
7. The District Collector, **Chandrapur**, Government of Maharashtra
8. Monitoring File 9. Guard File 10. Record File 11. Notice Board

  
10/11/2017  
(S. K. Srivastava)  
Scientist E