



No. J-11015/109/2003-IA-II (M)  
Government of India  
Ministry of Environment, Forest and Climate Change  
Impact Assessment Division

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Indira Paryavaran Bhawan,  
Jorbagh Road, N Delhi - 3

Dated: 20<sup>th</sup> March, 2020

To,

The Head of Department (Environment & Forest),  
M/s Central Coalfields Limited,  
Darbhanga House,  
**Ranchi** - 834029 (Jharkhand)  
Email: [envccl@yahoo.com](mailto:envccl@yahoo.com)

**Sub: Amrapali Opencast Coal Mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand) - For Environment Clearance under Clause 7(ii) of EIA Notification, 2006 - reg.**

Sir,

This has reference to your online proposal no. IA/JH/CMIN/123390/2019 on 10<sup>th</sup> January, 2020, on the above-mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for grant of Environment Clearance under Clause 7(ii) of EIA Notification, 2006 to Amrapali Opencast Coal Mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand).

3. The proposal was earlier considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Sector in its 53<sup>rd</sup> meeting held on 20<sup>th</sup> February, 2020. 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 project area is covered under Survey of India Topo Sheet No: 73-A/13 and is bounded by the geographical coordinates ranging from 23°51'31" to 23° 53'38" N latitude 84° 58'35" to 85° 02' 07" E longitude.
- (ii) Coal linkage of the project is proposed for generation of Energy Sector for various customers through Basket linkage. At present coal is being transported through Shivpur railway siding. A new railway siding, Amrapali siding adjacent to the mine boundary is under commissioning. In future, it is proposed to dispatch coal through Amrapali railway siding.

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- (iii) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC vide its OM dated 13th January 2010 has imposed moratorium on grant of environment clearance.
- (iv) Employment generation: The project has given a boost to the economy of the area by providing primary and secondary employment to local people. Total number of permanent & temporary employment is approximately 650.
- (v) The project is reported to be beneficial in terms of improvements in Physical Infrastructure; Improvements in Social Infrastructure; Increase in Employment Potential; Contribution to the Exchequer; Meet energy and steel sector requirement; Productive utilization of existing manpower of project.
- (vi) Earlier, Environment Clearance to the project was obtained under EIA Notification-1994 vide Ministry's letter No J-11015/109/2003-IA.II(M) dated: 03.01.2006 for 12 MTPA in project area of 1426.08 Ha. MoEF&CC through its notification vide no: S.O 1530 (E) dt. 16.04.2018 has directed that "The mining projects which were granted EC under EIA notification 1994 and but not obtained EC for expansion/ modernization/ amendment under the EIA notification 2006 shall make an application in Form I within six months from the date of issue of this notification for grant of EC under the provisions of the EIA notification, 2006". EAC(Coal) has recommended for revalidation of the Environment Clearance Dated: 03.01.2006, as mandated under the Ministry's Notification dated 6<sup>th</sup> April, 2018.
- (vii) Mining Plan (including Progressive Mine Closure Plan) has been approved by the CCL Board meeting held on 04.11.2019.
- (viii) The land usage pattern of the project is as follows:

Pre-mining land use details:

Description	Forest Area in Ha.	Non-Forest Area in Ha.	Total Area in Ha.
Quarry	392.75	32.47	425.22
Dump	60.14	29.02	89.16
Nala	2.85	0.25	3.10
Workshop	14.48	0	14.48
Chp	6.27	0	6.27
Sub Stn./Office	6.00	0	6.00
Haul Road	30.00	4.00	34.00
Safety Zone	4.70	14.22	18.92
Embankment/Garland Drain/ Diversion Of Public Road	14.45	8.27	22.72
<b>Total</b>	<b>531.64</b>	<b>88.23</b>	<b>619.87</b>

Post-mining land use details:

Description	Total Area in Ha	Description	Total Area in Ha
Quarry	425.22	Plantation on backfilled area	271.71
		Void	153.51
Dump	89.16	Plantation on External Dump	89.16
Nala	3.10	Nala	3.10
Workshop	14.48	Industrial Area	26.75
Chp	6.27		
Sub Stn./Office	6.00		
Haul Road	34.00	Haul Road	34.00
Safety Zone	18.92	Plantation on Safety Zone/Green belt	18.92
Embankment/Garland Drain/ Diversion Of Public Road	22.72	Embankment/Garland Drain/ Diversion Of Public Road	22.72
<b>Total</b>	<b>619.87</b>	<b>Total</b>	<b>619.87</b>

- (ix) Total geological reserve is 486.50 MTe in Amrapali Block and 203.31 Mtes in Kishanpur Block. The mineable reserve is 114.59 MT, extractable reserve is 114.59 MT. The percent of extraction would be 100 %.
- (x) 08 seams with thickness ranging from 1 m – 20 m are workable. Grade of coal is Grade-F, stripping ratio 0.99, while gradient is 3° to 7°.
- (xi) The method of mining would be opencast method of mining with Surface miner and shovel-dumper combination.
- (xii) The balance life of mine is 9 years.
- (xiii) The project has 1 external OB dumps in an area of 89.16 Ha with 60 m height and 16.86 Mm<sup>3</sup> of OB. 2 internal OB in an area of 271.71 ha with 109.62 Mm<sup>3</sup> of OB is envisaged in the project.
- (xiv) Total Quarry area is 425.22 Ha. The final mine void would be in 153.50 Ha with depth an average up to 90 m below GL. Backfilled quarry area of 271.71 Ha shall be reclaimed with plantation. Final mine void will be converted into water body.
- (xv) Transportation of coal has been proposed by dumper from mine pithead, from surface to siding by tipping trucks.
- (xvi) Reclamation Plan in an area of 379.25 Ha, comprising of 89.16Ha of external dump, 271.71 Ha of internal dump and 18.92 ha of green belt & safety zone.

- (xvii) 531.64 ha of forestland has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 531.64 Ha of forestland for non-forestry purposes has been obtained vide MoEF&CC letter No. F.No.8-48/2008-FC Dt.12.10.2010.
- (xviii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xix) The ground water level has been reported to be varying between 6.50 m to 10 m during pre-monsoon and between 0.95 m to 6.50 m during post-monsoon. Total water requirement for the project is 3357 KLD.
- (xx) Application for obtaining the approval of the Central Ground Water Authority has been submitted vide no: 21-4/328/JH/MIN/2018 Dated: 29.12.2018.
- (xxi) Public hearing for the project of 12 MTPA capacity in an area of 1426.08 Ha was conducted on 02.03.2003. Major issues raised in the public hearing include mitigation of air & water pollution, compensation, employment opportunity, medical facilities & provision of drinking water etc. Appropriate action to address the issues raised in the Public Hearing have already been taken.
- (xxii) Consent to Operate/Establish for the existing capacity was obtained from the Jharkhand State PCB on 30.06.2019 and is valid till 30.06.2020.
- (xxiii) Chundru and Barki rivers flowing west to east and north to south respectively control the drainage of the block. The Barki River marks the eastern boundary of the property with a safe distance of about 100 mtrs.
- (xxiv) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to JSPCB and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations, which can be attributed to the specific local conditions during the day of sampling.
- (xxv) No court cases or violation cases are pending against the project of the PP.
- (xxvi) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under. The coal production from the mine was started from the year 2013-14 onwards. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations. The coal production, realized from the project, from 1993-94 onwards, is as under:

Year	Coal (Million tes)	OBR(Mcum)
2013-14	-	2.54
2014-15	2.55	17.74
2015-16	4.79	6.24

2016-17	6.23	4.19
2017-18	6.5	6.965
2018-19	10.2	12.2

(xxvii) The project involves 452 project-affected families. R&R of the PAPs will be done as per R&R Policy of CIL.

(xxviii) Total cost of the project is Rs. 85,811 Lakhs. Environment Management Cost is Approximately Rs. 8,900 lakhs

4. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent. The EAC in 53<sup>rd</sup> meeting held on 20<sup>th</sup> February, 2020 has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

5. The sectoral Expert Appraisal Committee after detailed deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006 and consideration of the parameters mentioned in the Ministry's OM dated 15<sup>th</sup> September, 2017, exempted the project from public hearing, and recommended for grant of Environment Clearance.

6. The Expert Appraisal Committee in 53<sup>rd</sup> meeting held on 20<sup>th</sup> February, 2020 has recommended the project for grant of Environment Clearance. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby **accords** approval for expansion of **Amrapali Opencast Coal Mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand)**, under the provision of clause 7(ii) of EIA Notification, 2006 and under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions in addition to the standard environmental conditions notified by the ministry and mentioned below:

- (i) EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.
- (ii) The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 14.4 MTPA (Peak) prior to commencement of the increased production.
- (iii) Transportation of coal from Coal Handling Plant shall be through covered trucks.
- (iv) To control the production of dust at source, the crusher and in-pit belt conveyors shall be

provided with mist type sprinklers.

- (v) PP shall implement inpit conveyor to railway siding through silo loading in three years.
- (vi) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.
- (vii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (viii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (ix) Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (x) Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- (xi) The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 14.4 MTPA (Peak).
- (xii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (xiii) A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.
- (xiv) Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
- (xv) Compliance of the non-compliance/partial compliance conditions certified by Regional Office, Nagpur vide its Letter dated 4<sup>th</sup> December, 2019. The PP shall complete all non-compliance/partial compliance conditions in one year and the Action taken report shall be submitted to the Regional Office of the MoEF&CC.
- (xvi) Project proponent to plant 100,000 nos. of native trees with broad leaves along the villages and 50,000 nos of native trees along transportation route to prevent the effect of air pollution in 2 years. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.
- (xvii) The activities and fund provisions for CER shall be made as per the guidelines issued by

the ministry regarding CER on 1<sup>st</sup> May, 2018.

- (xviii) Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (xix) The Project Proponent shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xx) Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commenced after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- (xxi) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antsnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xxii) Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29<sup>th</sup> October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (xxiii) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.

- (xxiv) 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.
- (xxv) Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.
- (xxvi) Amrapali Railway siding shall be completed in 3 years and road transportation to Balumath railway siding will be stopped accordingly.
- (xxvii) The distance of atleast 100 m shall be kept from Barki River and Bahut Chuha nala with no mine water discharge.
- (xxviii) Project Proponent shall comply to the observation in show cause notice dated 12<sup>th</sup> December, 2018 regarding non-compliance of earlier EC and necessary report should be submitted to the Regional Office, Ranchi within stipulated time.

**7.1** The grant of environmental clearance is further subject to compliance of the Standard EC conditions as under:

**(a) Statutory compliance**

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iii) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).



- (iv) The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vi) Solid/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.

**(b) Air quality monitoring and preservation**

- (i) Continuous ambient air quality monitoring stations as prescribed in the statute 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. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- (ii) The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- (iii) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM<sub>10</sub>/PM<sub>2.5</sub>) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all 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.
- (iv) The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- (v) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.

(vi) Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.

(vii) Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

**(c) Water quality monitoring and preservation**

(i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board.

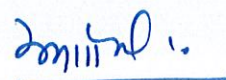
(ii) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27<sup>th</sup> May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.

(iii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.

(iv) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.

(v) Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.

(vi) Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB



dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.

- (vii) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
- (viii) Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.
- (ix) The water pumped out from the mine, after siltation, shall be utilized for industrial purpose *viz.* watering the mine area, roads, green belt development *etc.* The drains shall be regularly desilted particularly after monsoon and maintained properly.
- (x) The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.
- (xi) The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

**(d) Noise and Vibration monitoring and prevention**

- (i) Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
- (ii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.

- (iii) The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

**(e) Mining Plan**

- (i) Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- (ii) Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- (iii) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.
- (iv) Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

**(f) Land reclamation**

- (i) Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- (ii) The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27<sup>th</sup> August, 2009 and subsequent amendments.
- (iii) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the “during mining”/“post mining” land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.
- (iv) Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines.

Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.

- (v) Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
- (vi) The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.
- (g) **Green Belt**
  - (i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
  - (ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.
- (h) **Public hearing and Human health issues**
  - (i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.
  - (ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.

- (iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- (iv) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- (v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

**(i) Corporate Environment Responsibility**

- (i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
- (ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will report directly to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

**(j) Miscellaneous**

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (vi) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
- (vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (viii) The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- (ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

- (xi) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.
  - (xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
  - (xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  - (xiv) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  - (xv) 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.
  - (xvi) The above conditions shall 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, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 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.
8. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.
  9. The 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. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
  10. 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.
  11. The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2<sup>nd</sup> August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.
  12. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through



their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.

13. This Environment Clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.
14. This issues in supersession of the earlier EC granted vide letter dated 3<sup>rd</sup> January, 2006 an 28<sup>th</sup> February, 2020.

*Manoj Kumar Gangeya*  
20.3.2020  
(Manoj Kumar Gangeya)  
Director

**Copy to:**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi
3. The Additional Principal Chief Conservator of Forests, Regional office (ECZ), Ministry of Environment & Forests, Bungalow No. A-2, Shyamali Colony, Ranchi - 834002
4. The Member Secretary, Jharkhand State Pollution Control Board, TA Building, HEC Complex, PO Dhurwa, Ranchi
5. CMD, M/s Central Coalfields Limited.
6. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
7. The Member Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
8. The District Collector, Chatra, Government of Jharkhand
9. Monitoring File                      10. Guard File                      11. Record File.                      12. Notice Board

*Manoj Kumar Gangeya*  
20.3.2020  
(Manoj Kumar Gangeya)  
Director

