

F. No.J-11015/96/2004-IA.II (M)  
Government of India  
Ministry of Environment, Forest and Climate Change  
IA Division

Indira Paryavaran Bhawan,  
Jorbagh Road, N Delhi - 3  
Dated: 6<sup>th</sup> May, 2019

To,

M/s Bharat Aluminium Company Limited  
Aluminium Sadan, Core 6,  
Scope Office Complex,  
7 Lodhi Road, **New Delhi** - 3

**Sub: Chotia-II Captive coal mining project of 1 MTPA of M/s Bharat Aluminium Company Limited in mine lease area of 316.826 ha in Salaigot Village, Tehsil Podiuprodha, District Korba (Chhattisgarh) - Amendment in Environmental Clearance - reg.**

Sir,

This refers to your online proposal no. IA/CG/CMIN/50275/2016 dated 31<sup>st</sup> October, 2018 on above subject, and further communication vide letter dated 27<sup>th</sup> February, 2019 and 6<sup>th</sup> April, 2019.

2. The Ministry of Environment, Forest and Climate Change has granted environmental clearance dated 18<sup>th</sup> July, 2018 in favour of M/s Bharat Aluminium Company Limited (BALCO) for Chotia-II Captive coal mining project of 1 MTPA in mine lease area of 316.826 ha located in Salaigot Village, Tehsil Podiuprodha, District Korba (Chhattisgarh), subject to compliance of certain terms and conditions, which *inter-alia* included the following:-

*'4(ii) The environmental clearance for the capacity of 1 MTPA (opencast) shall be valid for a period up to one year. Meanwhile, the project proponent shall comply with the observations of the EAC for single EC against the combined mining lease and mining plan, to consider continuance of the project thereafter.'*

3. Now the proposal has been submitted for amendment in the said environmental clearance to revise the above condition for single environmental clearance against the combined mining lease and mining plan.


4. The proposal was considered by sectoral Expert Appraisal Committee in its meeting held on 21<sup>st</sup> February, 2019. Based on recommendations of the EAC and subsequent deliberations in the Ministry, it is hereby clarified that validity of the environmental clearance dated 18<sup>th</sup> July, 2018 remains for a period of 30 years or life of the mine, whichever is earlier. The project may continue to operate accordingly, subject to compliance of the terms and conditions stipulated therein.

5. Meanwhile, the project proponent shall comply with the requirements set by the EAC in its meeting held on 21<sup>st</sup> January, 2019 for revalidation of the environmental clearance dated 10<sup>th</sup> November, 2005 for Chotia-I project, as mandated under the Ministry's Notification dated 6<sup>th</sup> April, 2018 in this regard.



6. It is further clarified that after revalidation of the environmental clearance for Chotia-I project, the proposal for single environmental clearance against the combined mining lease and the mining plan, or otherwise, shall be considered by the sectoral EAC as admissible in the EIA Notification, 2006 and subsequent amendments therein.

7. This issues with approval of the competent authority.

  
6/5/2019  
**(S. K. Srivastava)**  
**Scientist E**

**Copy to:-**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The APCCF, Ministry of Environment Forest and Climate Change, Regional Office (Western Central Zone), Ground Floor, East Wing, New Secretariat Building Civil Lines, Nagpur (Maharashtra)
3. The Member Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
4. The Secretary, Department of Environment & Forests, Government of Chhattisgarh, Secretariat, Raipur
5. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
6. The Member Secretary, Chhattisgarh State Environment Conservation Board, 1-Tilak Nagar, Shiv Mandir Chowk, Main Road, Avanti Vihar, Raipur - 492001 (Chhattisgarh)
7. The District Collector, Korba, Government of Chhattisgarh
8. Monitoring File                      9. Guard File                      10. Record File.                      11. Notice Board

No. J-11015/96/2004-IA.II (M)  
Government of India  
Ministry of Environment, Forest & Climate Change  
IA-II (Coal Mining) Division

Indira Paryavaran Bhawan,  
Jorbagh Road, N Delhi - 3  
Dated: 18<sup>th</sup> July, 2018

To,

M/s Bharat Aluminium Company Limited  
Aluminium Sadan, Core 6,  
Scope Office Complex,  
7 Lodhi Road, New Delhi - 3

E-mail: [afroz.ali@vedanta.co.in](mailto:afroz.ali@vedanta.co.in); [ramesh.narang@vedanta.co.in](mailto:ramesh.narang@vedanta.co.in)

**Sub: Chotia-II Captive coal mining project of 1 MTPA of M/s Bharat Aluminium Company Limited (BALCO) in mine lease area of 316.826 ha located in Salaigot Village, Tehsil Podiuprodha, District Korba (Chhattisgarh)- Environmental Clearance-reg.**

Sir,

This has reference to your letter No.BALCO/Coal Mine/EC/2018/01 dated 30<sup>th</sup> January, 2018 along with online proposal No. IA/CG/CMIN/50275/2016 dated 19<sup>th</sup> February, 2018 and subsequent letters dated 38.03.2018, 04.04.2018 and 18.04.2018 on the above mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for grant of environmental clearance to the project for Chotia-II Captive coal mining project of 1 MTPA of M/s Bharat Aluminium Company Limited (BALCO) in mine lease area of 316.826 ha located in Salaigot Village, Tehsil Podiuprodha, District Korba (Chhattisgarh)

3. The proposal was considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Sector in its 28<sup>th</sup> meeting held on 17-18 April, 2018. The details of the project, as per the documents submitted by the project proponent, and also as informed during the meetings, are reported to be as under:-

(i) Earlier, the environment clearance for Chotia-II Coal Mine was granted by MoEF&CC vide letter dated 10<sup>th</sup> November, 2005 in favour of M/s Prakash Industries Ltd for its capacity of 0.25 MTPA by underground method only.

(ii) Chotia-II Coal Mine was allocated to M/s Bharat Aluminium Company Limited (BALCO) w.e.f. 1<sup>st</sup> April, 2015 through a competitive electronic auction process conducted by Nominated Authority, Ministry of Coal. No mining activity has been done in the Chotia-II Coal Mine till date by M/s BALCO.

(iii) Based on recommendations of the EAC and further deliberations in house, the project was accorded ToR vide letter dated 6<sup>th</sup> June, 2016 considering Chotia-II as a fresh project of 1 MTPA (UG/OC) and not of expansion from 0.25 MTPA (UG) to 1 MTPA.



(iv) The latitude and longitude of the project are:

Chotia-II Co-ordinates				Chotia-II Co-ordinates			
S.No.	Name	Northing	Easting	Sn	Name	Northing	Easting
1	BP-1	22° 50' 32.2" N	82° 32' 51.6" E	9	BP-3	22° 51' 58.6" N	82° 31' 57.9" E
2	BP-2	22° 50' 40.6" N	82° 33' 01.2" E	10	BP-4	22° 51' 57.2" N	82° 31' 41.2" E
3	BP-2A	22° 51' 02.5" N	82° 32' 41.6" E	11	BP-4D	22° 51' 36.8" N	82° 31' 24.7" E
4	BP-2B	22° 51' 06.2" N	82° 32' 45.1" E	12	BP-5	22° 51' 33.4" N	82° 31' 26.9" E
5	BP-2L	22° 51' 37.0" N	82° 32' 17.4" E	13	BP-6	22° 51' 01.3" N	82° 31' 47.7" E
6	BP-18	22° 51' 33.7" N	82° 32' 06.1" E	14	BP-7	22° 51' 07.1" N	82° 31' 53.7" E
7	BP-19	22° 51' 42.4" N	82° 32' 00.7" E	15	BP-8	22° 50' 59.1" N	82° 32' 05.7" E
8	BP-20	22° 51' 53.2" N	82° 32' 02.8" E	16	BP-9	22° 50' 41.7" N	82° 32' 16.5" E

(v) Joint Venture: There is no joint venture.

(vi) Coal will be used to partially meet the coal requirement of 600 MW Captive Power Plant of BALCO at Korba.

(vii) Employment generation/to be generated: Employment already generated 200; maximum direct employment to be generated= 605

(viii) Benefits of the Project: Generation of additional 605 direct jobs. The project will also result in Improvement of physical infrastructure such as upgradation/black topping of road connecting Chotia-II Coal Mine to nearest state highway (Chotia-Chirimiri). Improvement in social infrastructure, contribution to Exchequer, and post mining enhancement of Green cover.

(ix) Mining lease areas as per approved Mining Plan is 316.826 ha.

(x) The land usage of the project will be as follows:

Pre-mining:

SN	Landuse	Within ML Area (ha)	Outside ML Area (ha)	TOTAL (Ha)
1	Agricultural land	NIL	NIL	NIL
2	Forest land	316.826	NIL	316.826
3	Wasteland	NIL	NIL	NIL
4	Grazing land	NIL	NIL	NIL
5	Surface water	NIL	NIL	NIL
6	Settlements	NIL	NIL	NIL
7	Others (specify)	NIL	NIL	NIL
	TOTAL	316.826	NIL	316.826

Post mining:

SN	Land use during Mining		Land use Post Mining				
	Particular	Area	Land use (Ha)				
			Plantation	Water	Public	Un	Total
1	External OB	3.0	3.0	0.00	0.00	0.00	3.0
2	Top Soil Dump	0.00	0.00	0.00	0.00	0.00	0.00
3	Excavation	79.40	79.40	0.00	0.00	0.00	79.40
4	Roads	0.00	0.00	0.00	0.00	0.00	0.00

*SB*

5	Built Up Area	6.826	6.826	0.00	0.00	0.00	6.826
6	Green Belt Area	6.702	6.702	0.00	0.00	0.00	6.702
7	Un disturbed	220.898	0.00	0.00	0.00	220.898	220.898
	Total	316.826	95.928	0.00	0.00	220.898	316.826

(xi) The total net geological reserve, mineable reserve and extractable reserve are 10.832 MT, 10.17 MT and 7.68 MT respectively. Thus percentage of extraction would be 70%

(xii) The coal grade is E-D. The stripping ratio is 4.82 Cum/Tonne. The average gradient is 2°-6°. There are 3 seams with thickness ranging from 0.06 m to 4.08 m

(xiii) The total estimated water requirement is 600 Cum/day out of which 250 Cum/day for mining purposes and 350 Cum/day is for domestic purposes. The level of ground water ranges from 45 m to 50 m below ground level.

(xiv) The method of mining would be conventional shovel & dumper combination for opencast mining and bord & pillar using SDL/LHD for underground mining.

(xv) There is one external OB dump with quantity of 1.5 Mm<sup>3</sup> in an area of 3 ha with height of 15 meter above the surface level only for initial 3 months and thereafter it will be re-handled and backfilled in the mined out pit. One internal dump with quantity of 20.34 Mm<sup>3</sup> in an area of 79.40 Ha with height of 15 meter above the surface level.

(xvi) Out of the total excavated area of 79.40 ha, 8.90 ha will be the final void. Initially this final void was proposed to convert into a water body. However, as per approved Mine Plan (3rd) revision by Ministry of Coal and suggestions by standing committee this void will be backfilled with fly ash brought from Balco's power plant which will be finally covered with top soil for plantation during final mine closure.

(xvii) The seasonal data for ambient air quality has been documented and all results at all stations are within the prescribed limits.

(xviii) Baseline air quality values at ambient air quality monitoring stations, are in the range of 14.1-23.1 µg/m<sup>3</sup> for PM<sub>2.5</sub>, 31.6-53.4 µg/m<sup>3</sup> for PM<sub>10</sub>, SO<sub>2</sub> from 8.1 -13.5 µg/m<sup>3</sup> and NO<sub>x</sub> from 10.1 -16.1 µg/m<sup>3</sup>, and thus meeting the prescribed standards.

(xix) Life of mine is 20 Years.

(xx) Transportation: Coal Transportation within the mine will be done by dumpers and from mine to end use plant located at Korba by tarpaulin covered trucks. Rail transportation is not possible as the nearest rail head is situated at Korba itself. On enquiry with concerned authority of railways there is no current proposal of railway line near to Chotia II Mine.

(xxi) No R&R is involved since mining lease entirely in the forest land.

(xxii) The capital cost of project is Rs. 100 crores.

(xxiii) BALCO is a company incorporated under the Companies Act 2013. However, the responsibilities regarding CSR in terms of Section 135 (1) of the Companies Act are currently not applicable on BALCO since it is making losses for last three financial years. However, as a responsible corporate, BALCO continues to be committed to uplifting communities in its neighbourhood. As a part of this commitment, a social needs assessment was carried out in and around Chotia-II Coal Mine. Based on this assessment, a budget of Rs. 5/tonne is taken for Enterprise Social Commitment (ESC)

(xxiv) EMP Cost: Rs. 10/tonne of coal produced.

(xxv) Contribution to DMF: About Rs. 1.90 Crores per year.

(xxvi) Hasdeo river flows at a distance of 1 km in east from the mine.

(xxvii) Mine Plan & Mine Closure Plan (3<sup>rd</sup> Revision) of Chotia-II Coal Mine was approved by MOC on 11<sup>th</sup> March, 2016 for Open cast Cum Underground (1.0 MTPA Peak Capacity) Mine Closure Plan is an integral Part of the approved Mine Plan.

(xxviii) NOC issued by CGWA vide letter no. CGWA/NOC/MIN/ORIG/2016/2206 dated 23rd June, 2016.

(xxix) There are no national parks, wild life sanctuaries, biospheres reserves found in 10 Km buffer zone.

(xxx) Forestry issues: Total forest land involved is 316.826 ha. Forest Clearance obtained vide letter No.8-64/2005-FC dated 18<sup>th</sup> May, 2015

(xxxi) Total afforestation will be done over an area 95.928 ha including green belt at the end of mining. Density of tree plantation will be 2500 saplings/ha. In addition, gap plantation will also be carried out over an un-disturbed area of 220.898 ha.

(xxxii) There are no court cases/violation pending with project proponent

(xxxiii) Public Hearing for the project was held on 6<sup>th</sup> January, 2018. The issues raised during PH include employment, infrastructure development, drinking water facilities, education and health.

**4.** Based on the proposal submitted by the project proponent and recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to **Chotia-II Coal Mining project of capacity 1 MTPA (opencast)/0.30 MTPA (underground) of M/s Bharat Aluminium Company Limited (BALCO)** in mine lease area of 316.826 ha located at village Salaigot, Tehsil Podiuprodha, District Korba (Chhattisgarh), **for a period of one year**, under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms & conditions and environmental safeguards mentioned below:

(i) The capacity of the project shall be 1 MTPA (opencast) for first 5 years and 0.30 MTPA (underground) from 6<sup>th</sup> year till life of the mine.

(ii) The environmental clearance for the capacity of 1 MTPA (opencast) shall be valid for a period up to one year. Meanwhile, the project proponent shall comply with the observations of the EAC for single EC against the combined mining lease and mining plan, to consider continuance of the project thereafter.

(iii) To control the dust production at source, crusher and in-pit belt conveyors shall be provided with mist type sprinklers.

(iv) Mitigative measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions as presented before the Committee, 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 railway siding, etc.

(v) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.

(vi) To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.

(vii) Thick green belt of adequate width in the down wind direction of the project site shall be developed to mitigate/check the dust pollution. Plantation plan shall be prepared in consultation with the State Forest Department.

(viii) Mine water shall be disposed off after treatment.

(ix) The project proponent shall upgrade the road (blacktopping) connecting Chotia-II Coal Mine to the nearest State Highway (Chotia-Chirimiri).



4.1 The grant of EC is further subject to compliance of the generic conditions for OC as under:

**(a) Mining**

- (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) No change in mining method i.e OC to UG, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forest and Climate Change (MoEFCC).
- (iii) 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).
- (iv) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.

**(b) Land reclamation and water conservation**

- (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 shall be submitted to Ministry of Environment, Forest and Climate Change/Regional Office (RO).
- (ii) 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/Gol 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.
- (iii) 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 handed over to the respective state government 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.
- (iv) 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 Ministry of Environment, Forest and Climate Change/Regional Office on six monthly basis.
- (v) The top soil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized for long. 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 on six monthly basis.

**(c) Emissions, effluents, and waste disposal**

(i) 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.

(ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area in a phased manner. The green belt comprising a mix of native species shall be developed all along the major approach/ coal transportation roads.

(iii) The transportation of coal shall be carried out as per the provisions and route proposed in the approved Mining 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.

(iv) 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.

(v) 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.

(vi) Coal handling plant shall be operated with effective control measures viz. bag filters/water or mist sprinkling system etc to check fugitive emissions from crushing operations, conveyor system, transfer points, etc.

(vii) 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.

(viii) Catch/garland drains and siltation ponds of 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 measures and green belt development. 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.

(ix) 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 Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Oil and grease trap shall be installed and maintained fully functional with effluents discharge adhering to the norms. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste.

(x) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.

**(d) Illumination, noise & vibration**

(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 & its RO on six-monthly basis.

(ii) Adequate measures shall be taken for control of noise levels below 85 dB(A) 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.

(iii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations and fly rocks as per the guidelines prescribed by the DGMS.

(iv) 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) Occupational health & safety**

(i) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the workers 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 workers identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any.

(ii) Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.

(iii) Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.

**(f) Ecosystem and biodiversity conservation**

(i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered 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.

**(g) Public hearing, R&R and CSR**

(i) 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.

(ii) The project proponent shall ensure the expenditure towards socio-economic development in and around the mine, in every financial year in pursuance of the Corporate Social Responsibility Policy as per the provisions under Section 135 of the Companies Act, 2013

(iii) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.11 (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'.

(iv) 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.

**(h) Corporate environment responsibility**

(i) The Company shall have a well laid down environment policy duly approved by Board of Directors. The environment 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 or forest norms/conditions. Also, the company shall have a defined system of reporting of non-compliances/violations of environmental norms to the Board of Directors and/or shareholders/stakeholders.

(ii) The project proponent shall comply with the provisions contained in this Ministry's OM dated 1<sup>st</sup> May, 2018, as applicable, regarding Corporate Environment Responsibility.

(iii) A separate environmental management cell both at the project and company headquarter level, with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Board level executive/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.

(vi) Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.

(vii) Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.

**(i) Statutory Obligations**

(i) The environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Court, NGT and any other Court of Law from time to time, and as applicable to the project.

(ii) This environmental clearance shall be subject to obtaining wildlife clearance, if applicable, from the Standing Committee of National Board for Wildlife.

(iii) The project proponent shall obtain Consent to Establish/Operate under the Air Act, 1981 and the Water Act, 1974 from the concerned State Pollution Control Board.

(iv) The project proponent shall obtain the necessary permission from the Central Ground Water Authority (CGWA).

**(j) Monitoring of project**

(i) 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. 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 25.9.2000 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) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.

(iv) 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 27.05.2009 issued by the Ministry shall also be referred in this regard for its compliance.

(v) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area through 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 MoEF&CC/Regional Office.

(vi) 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.

(vii) The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental conditions to the Ministry of Environment, Forest and Climate Change/Regional Office. 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.

(viii) 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.

**(k) Miscellaneous**

(i) Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.

(ii) The project authorities shall inform to the Regional Office regarding commencement of mining operations.

(iii) A copy of the environmental clearance shall be marked to concerned Panchayat. A copy of the same shall also be sent 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.

(iv) The EC 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.

(v) The project authorities shall 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 this clearance, informing that the project has been accorded environmental clearance and a copy of the same is available with the State Pollution Control Board and also at website of the Ministry.

(vi) The environmental statement for each financial year ending 31 March in Form-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. Concerns raised during public hearing.

(vii) 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.

**5.** 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.

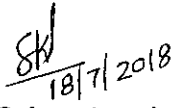
6. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

7. 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'.

8. The concerned State Government shall ensure that the mining operations shall not 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.


9. This environmental 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.

10. This EC supersedes the earlier environmental clearance granted vide letter No.J-11015/96/2004-IA.II (M) dated 10<sup>th</sup> November, 2005.

  
(S. K. Srivastava)  
Scientist E

**Copy to:-**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi-1
2. The DG (Forest), MOEFCC, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi -3
3. The Secretary, Department of Environment & Forests, Government of Chhattisgarh, Secretariat, Raipur
4. The Principal Chief Conservator of Forest and CWLW, Govt. of Chhattisgarh, Raipur
5. The APCCF, Ministry of Environment Forest and Climate Change, Regional Office (Western Central Zone), Ground Floor, East Wing, New Secretariat Building Civil Lines, Nagpur-1
6. The Chairman, Chhattisgarh State Environment Conservation Board, 1- Tilak Nagar, Shiv Mandir Chowk, Main Road, Avanti Vihar, Raipur - 492001 (Chhattisgarh)
7. The Chairman, CPCB, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
8. The Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
9. The District Collector, Korba, Government of Chhattisgarh
10. Monitoring File 11. Guard File 12. Record File

  
(S. K. Srivastava)  
Scientist E