





# Government of India Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

To.

The Senior General Manager AUROBINDO REALTY & INFRASTRUCTURE PRIVATE LIMITED Plot 32, Snehnagar, Wadgaon, Chandrapur, Chandrapur, Maharashtra-442401

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/MH/CMIN/223819/2021 dated 01 Sep 2022. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No. EC22A042MH110729 IA-J-11015/62/2021-IA-II(M) 2. File No. 3. **Project Type** 

4. Category

5. Project/Activity including 1(a) Mining of minerals Schedule No.

Proposed Takli Jena Bellora (North) and 6. Name of Project

Takli Jena Bellula (OCC)
Underground Coal Block of Production
capacity (1.1 MTPA Opencast; 1.0 MTPA

Coalfield, Maharashtra, India

7. Name of Company/Organization **AUROBINDO REALTY &** INFRASTRUCTURE PRIVATE LIMITED

8. **Location of Project** Maharashtra **TOR Date** 04 Oct 2021 9.

The project details along with terms and conditions are appended herewith from page no 2 onwards.

(e-signed) Làlit Bokolia Date: 03/11/2022 Scientist F IA - (Coal Mining sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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# File No. IA-J-11015/62/2021-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

Email: lk.bokolia@nic.in;Tel: 011-20819417

Dated: 03rd November, 2022

To,

The Senior General Manager
M/s Aurobindo Realty & Infrastructure Pvt Ltd,
Plot 32, Snehnagar, Wadgaon,
District - Chandrapur – 442401 (Maharashtra)
Email: anup.r@auinf.com

Sub: Takli Jena Bellora (North & South) Opencast cum Underground Coal Mine of overall capacity 1.5 MTPA in total area of 936 Ha (OC – 236.9 Ha; UG – 699.10 Ha) of M/s Aurobindo Realty Infrastructure Pvt Ltd (ARIPL) located in Village Bellora, Tehsil Bhadravati, District Chandrapur (Maharashtra) - For Environmental Clearance- reg.

Sir,

This has reference to your online proposal No. IA/MH/CMIN/223819/2021 dated 1<sup>st</sup> September, 2022 submitted to this Ministry for grant of Environmental Clearance (EC) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986 for Takli Jena Bellora (North & South) Opencast cum Underground Coal Mine of overall capacity 1.5 MTPA in total area of 936 Ha (OC – 236.9 Ha; UG – 699.10 Ha) of M/s Aurobindo Realty Infrastructure Pvt Ltd (ARIPL) located in Village Bellora, Tehsil Bhadravati, District Chandrapur (Maharashtra).

- 2. The project/activity is covered under category 'A' of item 1(a) 'Mining of Minerals' the Schedule to the EIA Notification, 2006
- 3. The proposal was considered by the sectoral Expert Appraisal Committee (EAC) in its 35<sup>th</sup> EAC Meeting on 26-27<sup>th</sup> September, 2022 through Video Conferencing The details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meetings, are given as under:
- (i) The project area is covered under Survey of India Topo Sheet No. F44S15, F44S16, F44T3, F44T4 and is bounded by the geographical coordinates ranging from 20° 9'16"N to 20°11'57" N and longitudes 79° 03" 41"E to 79° 06' 21"E.
- (ii) Coal linkage of the project for commercial use and thereby reducing the gap in the demand supply of coal in the country.
- (iii) There is no Joint venture cartel for this company.
- (iv) The project doesn't fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide

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- its OM dated 13th January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation, Direct and Indirect employment to 1130 persons will be provided from the project.
- (vi) The project is reported to be beneficial in terms of meeting consumptive coal for commercial use and thereby reducing the gap in the demand supply of coal in the country
- (vii) MOEF&CC has accorded Terms of Reference (TOR) vide its letter No. IA-J-11015/62/2021-IA-II(M) dated 04.10.2021
- (viii) Total mining lease area as per block allotment is 936.0 ha. Ministry of Coal has accorded approval for Mining Plan including Mine Closure Plan of Takli Jena Bellora (North) and Takli Jena Bellora (South) Coal Block vide Letter No: MHMR008/APP0060/2021 on 16.02.2022.
- (ix) The land usage pattern of the project is as follows:

#### Pre-mining land use details

(Area in Ha)

S. No.	Land Use	Within MLA (ha)	Outside MLA (ha)	Total
1.	Agricultural Land	893	0	893
2.	Forest land	0	0	0
3.	Waste land	0	0	0
4.	Grazing land	0	0	0
5.	Surface Water Bodies	12.5	0	12.5
6.	Settlements	11.0	0	11.0
7.	Other (Specify)	19.5	0	19.5
	Total	936.0	0	936.0

#### **Post Mining**

S. No.	Land use	Land use (ha)				
		Plantation	Water Body	Public Use	Undistu rbed	Total
1	External OB Dump	85.28	-	•	-	85.28
2	Top Soil Dump	4.40	- 68	-	-	4.40
3	Excavation	132.18	-	-	-	132.18
4	Roads		-	2.00	-	2.00
5	Built-up Area	32.57	A THE SE	5.00		37.57
6	Green Belt	6.32	-	-	- 1	6.32
7	Undisturbed Area	-	-	-	643.61	643.61
8	Safety Zone /Rationalization Area (Safety zone, Settling pond, Garland drain, UG entry)	23.08	-	-	-	23.08
9	Diversion / Below River /Nala / Canal	-	1.56	-	-	1.56
10	Water Body	-	-	-	-	•
11	Staff Colony	- ·	-		-	

Total Area = 283.83 1.56 7.00 643.61 936

- Total geological reserve reported in the mine lease area is 111.819 MT with 63.56 MT (x) mineable reserve. Out of total mineable reserve of 63.56 MT, 37.97 MT are available for extraction. Percent of extraction is 41.129 %.
- 3 seams with thickness ranging from 4.45m 14.19 m are workable. Grade of coal is G7, (xi) G9 & G10, stripping ratio 1:6.73, while gradient is 8° to 16°.
- Method of mining operations envisages by opencast and underground mining method (xii)
- Life of mine is 34 years. (xiii)
- The project has 2 external OB dumps in an area of 85.28 ha with 60m height and 16.43 Mm3 (xiv) of OB. Internal OB in an area of 132.18 ha with 70 Mm3 of OB is envisaged in the project.
- Total quarry area is 132.18 ha out of which backfilling will be done in 132.18 ha while final (xv) mine void will be created in an area of 0 ha with a depth of 0 m. Backfilled quarry area of 132.18 ha shall be reclaimed with plantation. Final mine void will be converted to Plantation.
- Transportation of coal has been proposed by dumpers in mine pit head, from surface to siding (xvi) by dumpers and at sidings by road/conveyor
- (xvii) Reclamation Plan in an area of 283.83 ha, comprising of 85.28 ha of external dump, 132.18 ha of internal dump and 6.32 ha of green belt. In addition to this, an area of 60.05 ha, included in the safety zone/rationalization area, built up area, virgin area and top soil storage, has also been proposed for green belt development.
- (xviii) There are no National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones fall within 10 km boundary of the project. However, a small part of Bhadravati range falls in the wildlife corridor of Tadoba- Kanhargaon- Tipeshwar wildlife sanctuary comes in the 5.00 km radius of the buffer zone of the proposed coal block as per PCCF clarification vide letter no: D23(2)/Survey/C.N.97/2858/2021-22; Dated: 10th February 2022.
- Wildlife conservation plan for schedule I species has been prepared and has been submitted (xix) for approval vide letter Government of Maharashtra PCCF(WL), ARIPL/CCF/WLO/2022/1076; Dated: 19th September 2022.
- The ground water level has been reported to be varying between 5.40 m to 10.10 m during (xx)pre-monsoon and between 0.90 m to 4.90 m during post-monsoon. Total water requirement for the project is 1674.03 KLD.
- An application of NOC for groundwater clearance (21-4/8012/MH/MIN/2022) is submitted to CGWA on 12.05.2022 and the NOC for ground water abstraction has been obtained from CGWA vide NOC no: CGWA/NOC/MIN/ORIG/2022/16172.
- (xxii) Public hearing for the project of 1.5 MTPA capacity in an area of 936 ha was conducted on 21st June 2022 at Project site of M/s Aurobindo Realty & Infrastructure Private Limited (ARIPL), Village- Bellora, Tal- Bhadravati, Dist - Chandrapur, Maharashtra under the Chairmanship of Additional District Magistrate, Chandrapur. Major Issues raised in the public hearing include environmental pollution, noise pollution, water conservation measures & Land acquisition etc.
- (xxiii) Takli, Bellora and Khandala nalla is flowing within the boundary of lease. The Bellora and Takli nallah will be diverted in consultation with the Water Resource Department of the State Government.
- Regular monitoring of ambient air quality will be carried out on fortnightly basis. In (xxiv) general, the results of ambient air quality monitoring data were found within prescribed limits

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- except few aberrations which can be attributed to the specific local conditions during the day of sampling.
- (xxv) Court cases: Name of the court: High court, Name of the sub court: Delhi, Case No: WP(C) 5701/2021 & CM APPL 17807/2021, Verdict: As per the direction of the high court ARIPL was directed to deposit 5.9 crores and additional B.G of 9 crores that has been done and the subject land has been transferred in the name of the company
- (xxvi) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under.
- (xxvii) The project involves 822 project affected families. R&R of the PAPs will be done as per RFCTLARR 2013
- (xxviii)Total cost of the project is Rs. 655.2 Crores. Cost of production is Rs 700 /- per tonne., CSR cost is Rs. 5 per tonne, R&R cost is Rs.171.68 crores. Environment Management Cost: Capital cost is Rs. 9.76 Crores & Recurring cost is Rs 1.28 Crores
- (xxix) Consent to operate (CTO) was obtained from the State Pollution Control Board: Not applicable as it is a proposed coal mining project.
- 4. The Expert Appraisal Committee in its 35<sup>th</sup> EAC meeting held on 26-27 September 2022 through Video Conferencing has recommended the project for grant of Environment Clearance (EC). Based on recommendations of the EAC, Ministry of Environment, Forest and Climate Change hereby accords approval for Environment Clearance(EC) to Takli Jena Bellora (North & South) Opencast cum Underground Coal Mine of overall capacity 1.5 MTPA in total area of 936 Ha (OC 236.9 Ha; UG 699.10 Ha) of M/s Aurobindo Realty Infrastructure Pvt Ltd (ARIPL) located in Village Bellora, Tehsil Bhadravati, District Chandrapur (Maharashtra). 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 as under: -
- (i) PP to obtain CTE/ CTO from SPCB for production capacity of 1.5 MTPA for opencast and underground as proposed by PP.
- (ii) PP shall prepare a detailed plan for distribution of water within and outside Mine lease area from dewatering of Daga mine pit in consultation with gram panchayat and shall implement the water treatment plant to meet the requirement with the start of production.
- (iii) As proposed by PP vide letter dated 26.09.2022, Rs. 2.2 Crore shall be invested for water distribution system in 6 villages (Kiloni, Kadholi, Kondha, New Kondha, Takli and Gotala Rith) with commissioning of mine. PP to implement the revised public hearing budget to tune of Rs. 3.03 crore on proposed activities.
- (iv) PP to implement revised EMP budget of Rs. 22.79 crore as capital expenditure on pollution control measures with annual recurring cost of Rs. 4.19 Crore.
- (v) In addition to manual monitoring, PP to install a continuous ambient air quality monitoring stations at suitable location preferably village side with consultation of SPCB. The real time data so generated shall be uploaded on company website. In addition, data should also be displayed digitally at entry and exit gate of mine lease area for public display.

- (vi) PP shall implement the plan for transportation of coal nearly 80% i.e 1.2 MTPA through Railway and rest 20% i.e 0.3 MTPA by road.
- (vii) Presently as recommended by EAC, only Bellora nallah shall be diverted with due permission from Irrigation Department of the Maharashtra State Government and PP to take adequate safety measures to restore the catchment areas fall under these streams. However, no diversion of Takli stream shall be allowed for next 12 years. PP to take adequate measures for its environment/natural flow and also to ensure that no untreated mine water shall enter into this stream and proper garland drain shall be made all along the stream to catch mine water.
- (viii) PP shall construct a pucca road to maintain the safety of people residing nearby along the transportation route with plantation on either side of the road.
- (ix) PP shall install fixed fog cannon (mist spayer) and fixed sprinkler all along the haul road till CHP, Railway siding and OB Dump area and accordingly sufficient number of fog cannons (not less than 10 nos.) with 40 mts jet length shall be installed within 6 months. It should be ensured that air pollution level confirm to the standards prescribed by the MOEFCC/CPCB.
- (x) PP shall construct a proper cemented 4 lane approach road of 1.36 km for the purpose of transportation of Coal from mine lease area to nearby National highway.
- (xi) Project proponent to plant 150,000 nos. of native trees with broad leaves along the transportation route in three years to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.
- (xii) PP shall deploy only 30-35 tonnes covered trucks/dumper to reduce fleet size till Rapid loading system and to implement surface miner and conveyor belt system from pit head to CHP as feasible.
- (xiii) PP shall conduct third party audit of compliance of EC condition at an interval six months and its report shall be submitted to IRO, MoEF&CC.
- (xiv) The status of mine closure activities must be included in every six months compliance report submitted to the state pollution control board and IRO.
- (xv) PP to maintain the topped haul road properly to minimized the dust emission. PP to also develop pucca roads by seeking consent from the panchayat with widening of roads especially roads inter linking the villages within the study area of 10 km radius buffer zone.
- (xvi) PP to install solar lights along the road used for transportation of minerals to avoid the accidents at night and also seek its maintenance. PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone within one year.
- (xvii) PP to provide bio toilets to the villages located within the study areas within 1 year from the grant of this EC.
- (xviii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.
- (xix) PP to fulfill all the commitment made in the minutes of public hearing to address the issues raised therein in a time bound manner and a progressive report to be furnished to IRO in every six monthly as compliance report.

- (xx) 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.
- (xxi) PP shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per extent rules or norms.
- (xxii)PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non-compliance or infringement should be reported to the concerned authority.
- (xxiii) PP to implement the recommendation of land subsidence study carried out for underground mine and report shall be submitted to IRO in every six monthly report
- (xxiv) PP to obtain the star rating as per the guidelines of Ministry of Coal.
- (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 8<sup>th</sup> 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 MoEF&CC.
- **4.1** The grant of environmental clearance is further subject to compliance of the Standard EC conditions applicable coal mining 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 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 statue 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.

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.

# Water quality monitoring and preservation

- The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of (i) the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th 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 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- 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.
- 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.
- 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.
- Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size (vi) 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.
- 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 rivarine/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.

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(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

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- (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.
- 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

- Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and (i) monitored weekly. The report on the same shall be submitted to this ministry & it's RO on sixmonthly basis.
- The project proponent shall undertake occupational health survey for initial and periodical (ii) 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.
- 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.
- 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.
- The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (M) dated 29th 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'.

#### **Corporate Environment Responsibility** (i)

The company shall have a well laid down environmental policy duly approve by the Board (i) 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.

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- (ii) 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 directly to the head of the organization.
- (iii) 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.
- (iv) 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>, NO<sub>x</sub> (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.I1 (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.
- 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. 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.

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- 8. 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.
- 9. 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.
- 10. 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.

This issues with the approval of the competent Authority

(Lalit Bokolia) Director

# Copy to:

- 1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
- 2. The Secretary, Department of Environment & Forests, Government of Maharashtra, Secretariat, Maharashtra.
- 3. The Additional Principal Chief Conservator of Forests, Regional office (WCZ), Ground Floor, East Wing, New Secretariat Building Civil Lines Nagpur-1
- 4. The Chairman, Maharashtra State Pollution Control Board, Kalapataru Point, 3<sup>rd</sup> Floors, Sion, Mumbai-2 (Maharashtra)
- 5. The Chairman, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
- 6. The District Collector, Chandrapur, Government of Maharashtra
- 7. Monitoring File/Guard File/Record File.

(Lalit Bokolia) Director