ENVIRONMENTAL CLEARANCE	To, The Director (Corporate Affair Prakash Industries Limited	rnment of India ent, Forest and Climate Change sessment Division) s) sar Haryana,15 Km Stone ,Delhi Road ,
PARIVESH ive and Responsive Facilitation by Interactive, intuous Environment Single-Window Hub)	Hissar Haryana,Bilaspur,Hary Subject: Grant of Environmental Cleara under the provision of EIA Noti Sir/Madam, This is in reference to your a in respect of project submitted to	vana-495006 nce (EC) to the proposed Project Activity fication 2006-regarding pplication for Environmental Clearance (EC) the Ministry vide proposal number 2023. The particulars of the environmental below. EC23A001CG174723 IA-J-11015/90/2021-IA-II(M) New A 1(a) Mining of minerals Bhaskarpara Open Cast cum
(Pro-Active and Virt	 9. TOR Date The project details along with terms and no 2 onwards. Date: 18/09/2023 	N/A conditions are appended herewith from page (e-signed) Lalit Bokolia Scientist F
PARTY IN THE PARTY INTERPARTY INTERPA	Note: A valid environmental clearand	IA - (Coal Mining sector) te shall be one that has EC identification PARIVESH.Please quote identification

This is a computer generated cover page.

File No. J-11015/90/2021-IA.II (M) Government of India Ministry of Environment, Forest and Climate Change (Impact Assessment Division) *****

Indira ParyavaranBhawan, Jorbagh Road, N Delhi – 3 Email: lk.bokolia@nic.in Tel: 011-20819417

In

Dated: 15th September, 2023

To,

Director, M/s Prakash Industries Limited A/9 Shatabdi Nagar, Behind Songanga Colony, Seepat Road, Bilaspur 495006 (Chhattisgarh) Email: : md_bsp@prakash.com

Sub: Bhaskarpara Open Cast (0.76 MTPA) cum Underground (0.24 MTPA) Coal Mine with Production Capacity of 1.0 MTPA within mine lease area of 932.00 ha by M/s. Prakash Industries Ltd. located at villages Ammakhokha and Dallabhahara, Tehsil Bhaiyathan, District Surajpur (Chhattisgarh) – For Environmental Clearance reg.

Sir,

This has reference to your online proposal No. IA/CG/CMIN/417722/2023 dated 3rd March, 2023 for grant of Environmental Clearance to the above project.

2. The Ministry of Environment, Forest and Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance to the project Bhaskarpara Open Cast (0.76 MTPA) cum Underground (0.24 MTPA) Coal Mine with Production Capacity of 1.0 MTPA within mine lease area of 932.00 ha by M/s. Prakash Industries Ltd. located at villages Ammakhokha and Dallabhahara, Tehsil Bhaiyathan, District Surajpur (Chhattisgarh).

The project/activity is covered under category 'A' of item1(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 41st EAC Meeting on 13 -14 March, 2023 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 F44E11 & F44E15 (64 I/11 & 64 I/15) and is bounded by the geographical coordinates ranging from 23°21'20" N to 23°22'42" N and longitudes 82°45'05" E to 82°48'09" E.
- ii. Bhaskarpara Coal Block/ project is proposed for commercial use for various purposes.
- iii. No Joint venture cartel has been formed.
- Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13th January, 2010 has imposed moratorium on grant of environment clearance.
- v. Employment generation, 479 (Direct and Indirect) employment will be provided from the project.
- vi. The project is reported to be beneficial in terms of Socio and economic benefits
- vii. Terms of Reference granted on vide F. No. IA-J-11015/90/2021-IA-II(M) dated 31st January, 2022.
- viii. Total mining lease area as per block allotment is 932 ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the Coal Controller Organization, Ministry of Coal on 18th Nov, 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 ML Area	Outside ML Area	Total
1	Agricultural Land	370.737	24940.1	25310.837
2	Forestland	515.581	7652.6	8168.181
3	Wasteland	3.624	8574.6	8578.224
4	Grazing Land	1.3	1	÷
5	Surface Water Bodies	2.387	3365.3	3367.687
6	Settlements		1567.4	1567.4
7	Others(Specify)	38.520	(.)	38.520
8	Old Excavation Area (East Quarry)	-		-
9	Old Excavation Area (West Quarry)	-	-	-
10	Old OB Dumps			-
11	Roads & Mine Infrastructure	1.15		1.15
12	R&R Colony		tie -	2
13	Staff Colony			2
14	Green Belt			÷
15	Balance Area			-
	Total Project Area	932.00	46100	47032

S. No.		Land use (ha)					
	Land use	Plantation	Water Body	Public Use	Undisturbed	Total	
1	External OB Dump	94.93	*		÷	94.93	
2	Top Soil Dump		-	-	-		
3	Excavation		×	→ 211	-	-	
4	Roads		*	1.125	×	1.125	
5	Built-up Area		÷	6.290	-	6.290	
6	Green Belt	312.796	4	-	-	312.796	
7	Undisturbed Area	22.719	2		333.180	355.899	
8	Safety Zone / Rationalization Area	13.33	2	=	-	13.33	
9	Diversion/Below River /Nala/Canal	-	~	1.940	-	1.940	
10	Water Body	-	144.570 +1.120	800		145.69	
11	Staff Colony	-				S -	
	Total Area=	443.775	145.69	9.355	333.180	932.000	

Post Mining (Area in Ha)

- x. Total geological reserve reported in the mine lease area is 46.91 MT with 27.75MT mineable reserve. Out of total mineable reserve of 46.91 MT, 24.17 MT are available for extraction. Percent of extraction is 51.524 %.
- xi. Total 5 No. of seams with thickness ranging from 0.50 m 4.11 m are workable. Grade of coal is G8, stripping ratio 1:8.50, while gradient is 2° to 3° in southern south western part of the block and 9° to 10° in eastern central part.
- xii. Method of mining operations envisages by conventional system using Pay loader Dumper in conjunction with drilling and blasting. The OB would be removed using conventional shovel dumper method with drilling & blasting. Drilling & blasting will be conducted in scientific way using environment friendly technology.
- xiii. Life of mine is 28 years.
- xiv. The project has 2 No's of external OB dumps in an area of 94.93 ha with 8-10 m height and 48.33 Mm3 of OB. 2 No's of internal OB in an area of 312.796 ha with 112.41 Mm3 of OB is envisaged in the project.
- xv. Total quarry area is 457.366 ha out of which backfilling will be done in 312.796 ha; while final mine void will be created in an area of 144.570 ha with a depth of 30 m. Backfilled quarry area of 312.796 ha shall be reclaimed with plantation. Final mine void will be converted water body for public use.
- xvi. Transportation of coal has been proposed by 35T capacity tipping trucks to stock yard and Coal buyers will carry coal from Stock Yard to respective destinations by road. Consumers will have access to carry the coal produced from the mine to their plants by road to consumers over relatively shorter distances.

- xvii. Reclamation Plan in an area of 421.056 ha, comprising of 94.93 ha of external dump, 312.796 ha of internal dump and 13.33 ha of green belt. In addition to this, an area of ha, included in the safety zone/rationalization area, has also been proposed for green belt development.
- xviii. 515.581 ha of forest land has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 515.581 ha of forest land for non-forestry purposes has been applied for Stage-I FC vide MoEF &CC letter No.: FP/CG/MIN/149564/2021dated 26thNov, 2021.
 - xix. Please mention any National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones fall within 10km boundary of the project None
 - xx. Wildlife conservation plan for schedule–I species has been submitted to Forest department, Chhattisgarh for approval of existing wildlife flora and fauna. Principal Chief Conservator of Forests (PCCF) cum Chief Wildlife Warden, Nava Raipur (CG), vide approval Order No. Wildlife/Management-550/106, New Raipur dated 23-05-2022.
- xxi. The ground water level has been reported to be varying between 1 m to 12.1 m during pre-monsoon and between 1.52 m to 16.46 m during post-monsoon. Total water requirement for the project is 490 KLD.
- xxii. NOC obtained from Central Ground Water Authority vide No. CGWA/ NOC/ MIN/ORIG/2022/16171 dated 31st August, 2022for ground water drawl of 490 KLD.
- xxiii. Public hearing for the project of 1.0 MTPA capacity in an area of 932 ha was conducted on 09-11-2022 at Government High School campus, Village-Kewara, Tehsil-Bhaiyathan, Dist. Surajpur, Chhattisgarh under the Chairmanship of Sub Divisional Magistrate (SDM), Bhaiyathan and Regional Officer, CECB, Ambikapur. Major issues raised in the public hearing include Employment to local youth, Urge to plant trees and plants on both sides of the road, Proper compensation for land, Development of PAF villages under CSR activities, Effect due to blasting etc. Appropriate action to address the issues raised in the Public Hearing have already been taken/proposed to be taken areas under:

Budget Allocated Towards To Address Public Hearing Issues As Per The Corporate Environment Policy MoEF&CC OM No. dated 30/09/2020

Sr. No.	Activity	Budget in Rs. Lakhs			
		1st Year	2 nd Year	3 rd Year	Total
1.	Provision of drinking water to all the 7 villages	16.00	8.00	8.00	32.00
2.	Development of existing Anganwadis in all the 7 villages	10.00	7.00	5.00	22.00
3.	Development of existing inner village roads with the participation of the District administration in all the 7 villages		40.00	20.00	100.00
4.	Strengthening the education sector in Government schools in all the 7 villages	10.00	10.00	5.00	25.00
5.	Fully equipped Ambulance will be purchased and maintained by PIL	20.00	5.00	5.00	30.00

Total	104.00	78.00	51.00	233.00
Avenue plantation along the village roadwith approximately 10,000 plants will b planted.		8.00	8.00	24.00

- xxiv. Manik nala is flowing within the ML boundary of lease. The nala will be diverted in consultation with the Water Resource Department of the State Government. Necessary approval will be obtained before undertaking any activity towards Nala diversion. However, it is pertinent to mention here that the concern Executive Engineer of District Surajpur (C.G.) has already made a visit on 04th January, 2023 for its preliminary inspection to prepare an Agenda note for its approval from the appropriate authorities for diversion of Nala.
- xxv. No court cases, violation cases are pending against the project of the PP No cases are pending
- xxvi. The project does not involve violation of the EIA Notification, 2006 and amendment issued thereunder. The coal production from the mine was started from the year 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: Not Applicable
- xxvii. The project involves 1290 persons of affected families. R&R of the PAPs will be done as per schedule II & III "Rehabilitation & Resettlement Package as per the Provisions as per Central RFCT LARR Act 2013 & Chhattisgarh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Survey and Census of Affected Families and Preparation of Rehabilitation and Resettlement Scheme) Rules, 2018 Published Vide Notification No. F-4-123/Seven-1/2016, Dated 03.02.2018".
- xxviii. Total cost of the project is Rs. 28000 lakhs. Cost of production is approx Rs 1800/- per tone for OC and approx Rs 3000/- per tone for UG, CSR cost is Rs.10 per tonne, R&R cost is Rs.105.3234crores. Environment Management Cost is Capital Rs. 3.65 Crores & Recurring Rs. 1.50 Crores.
 - 4. The Expert Appraisal Committee in its 41st EAC Meeting held on 13 -14 March, 2023 through video conference 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 Bhaskarpara Open Cast (0.76 MTPA) cum Underground (0.24 MTPA) Coal Mine with Production Capacity of 1.0 MTPA within mine lease area of 932.00 ha by M/s. Prakash Industries Ltd. located at villages Ammakhokha and Dallabhahara, Tehsil Bhaiyathan, District Surajpur (Chhattisgarh), 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 :-

Specific condition:

- i. PP to obtain CTE/ CTO from SPCB for production capacity of 1.0 MTPA for opencast and underground as proposed by PP subject to the submission of Forest Clearance.
- ii. Peak production for opencast coal mine is 0.76 MTPA and 0.24 in case of underground, thereby totaling 1 MTPA except for 2 years i.e. 2025-26 and 2026-27wherein Opencast production shall be of 1 MTPA (Peak).
- iii. PP shall adhere to the conditions of Stage I Forest Clearance for 515.581 ha forest land involved in the project for non-forestry activities .
- iv. PP shall have to take measure to maintain water storage as available in earthen reservoirs/bunds namely Kursidhi located at South and Brijeshwar located at North side, with the adequate flow water from diverted nala as well as with proper plantation all around the periphery of reservoir in consultation with Gram Panchayat.
- v. As recommended by EAC, the Manik Nala flowing in the North West direction of the mine lease area shall be diverted in the 6th year of mining operations only after obtaining in-principle approval from water resource department, Chhattisgarh. PP should ensure that storage capacity two existing earthen reservoirs may not get changed after diversion after 6 years.
- vi. PP shall adequate measures and complete the plantation on the both sides of Nallah to be diverted as well as part of Nallah remains same in the Mine lease area.
- vii. PP shall create at least 2 more artificial water bodies for Ground water recharge within or outside the mine lease area.
- viii. PP should dump the overburden (OB) at a safe distance of 100m from Manik Nala as well as the PP shall provide Garland drain all along the toe of the dump keeping in mind to restrict the flow of mine water & Seepage from OB dump into Stream or Nallah. No OB shall dumped on forest land.
 - ix. PP shall transport the coal with the covered truck capacity of 40 tonne and above for first three years after commissioning, after 3rd year of mining PP shall explore 50% transportation of Coal through Railway siding.
 - x. Project proponent to plant 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.
 - xi. 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. No village road shall be used for coal transportation.
- xii. PP shall install fixed fog cannon (mist sprayer) and fixed sprinkler all along the haul road till CHP 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.
- xiii. PP to implement EMP budget of Rs. 405 Lakhs as capital expenditure on pollution control measures with annual recurring cost of Rs 150 Lakhs.
- xiv. PP to implement the public hearing budget of Rs. 233 Lakhs on proposed activities.
- xv. 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.
- xvi. The status of mine closure activities must be included in every six months compliance report submitted to the state pollution control board and IRO.

- xvii. 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.
- xviii. PP to provide bio toilets to the villages located within the study areas within 1 year from the grant of this EC.
- xix. Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.
- xx. 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.
- xxi. 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.
- xxii. 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.
- xxiii. 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.
- xxiv. 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.
- xxv. PP to obtain the star rating as per the guidelines of Ministry of Coal.
- xxvi. 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 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.

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

(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_{10} , $PM_{2.5}$, SO_2 and NO_x . 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 25th 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 $PM_{10}/PM_{2.5}$) 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.

(viii) Major approach roads shall be black topped and properly maintained.

(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 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.

(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 rivarine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

(xii) The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side,

stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.

(xiii) Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff

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

(iv) No change in mining method *i.e.* UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).

(v) Underground work place environmental conditions shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.

(vi) No mining activity 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

(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 27th 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.

(vii) 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 27th August, 2009 and subsequent amendments.

(viii) Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil/suitable material.

(ix) A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.

(x) Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.

(xi) Native tree species shall be selected and planted over areas affected by subsidence.

(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.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'.

(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) Corporate Environment Responsibility

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

(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_{10} , SO_2 , 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 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'.

(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.

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 2nd 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, Department of Environment & Forests, Government of Chhattisgarh, Secretariat, Raipur
- 2. The Chairman, Chhattisgarh State Environment Conservation Board, 1-Tilak Nagar, Shiv Mandir Chowk, Main Road, Avanti Vihar, Raipur (Chhattisgarh) - 492001
- Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Aranya Bhawan, North Block, Sector-19 Naya Raipur, Atal Nagar, Chhattisgarh - 492002
- The Chairman, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
- 5. The District Collector, Surajpur, Government of Chhattisgarh
- 6. Monitoring File /Record File 7. PARIVESH Portal

(Lalit Bokolia)