



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

To,

The Chief Manager  
Central Coalfields Limited  
Project Officer, Giddi A OCP, Argada Area, Central Coalfields Limited,  
Block Dadi,,Hazaribag,Jharkhand-829108

**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/JH/CMIN/74323/2018 dated 03 Feb 2022. The particulars of the environmental  
clearance granted to the project are as below.

1. **EC Identification No.** EC23A042JH159153
2. **File No.** 23-245/2018-IA.III (V)
3. **Project Type** New
4. **Category** A
5. **Project/Activity including  
Schedule No.** 1(a) Mining of minerals
6. **Name of Project** Giddi A OCP
7. **Name of Company/Organization** Central Coalfields Limited
8. **Location of Project** Jharkhand
9. **TOR Date** 25 Sep 2019

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

Date: 24/03/2023

(e-signed)  
Lalit Bokolia  
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.*

*This is a computer generated cover page.*



**File No. 23-245/2018-IA.III (V)**  
Government of India  
Ministry of Environment, Forest and Climate Change  
(Impact Assessment Division)

\*\*\*\*\*

Indira Paryavaran Bhawan,  
Jorbagh Road, N Delhi – 3  
Email: [lk.bokolia@nic.in](mailto:lk.bokolia@nic.in) ; Tel: 011-20819417

**Dated: 24<sup>th</sup> March, 2023**

**To,**

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

**Sub: Giddi Opencast Project of production capacity 1 MTPA (Peak) of M/s Central Coalfields Limited in the Mine lease area of 187.98 ha located at Argada Area of Central Coalfields Limited, Dadi CD block, District Hazaribag (Jharkhand) – For Environmental Clearance (Under Violation category) –reg**

Sir,

This has reference to your online proposal No. IA/JH/CMIN/74323/2018 dated 3<sup>rd</sup> February, 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 Giddi Opencast Project of production capacity 1 MTPA (Peak) of M/s Central Coalfields Limited in the Mine lease area of 187.98 ha located at Argada Area of Central Coalfields Limited, Dadi CD block, District Hazaribag (Jharkhand).

The project/activity has been considered as 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 26<sup>th</sup> meeting held on 18<sup>th</sup> February, 2022, 30<sup>th</sup> meeting held on 20<sup>th</sup> May, 2022 and 39<sup>th</sup> Meeting on 12-13 January, 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 is covered in Survey of India toposheet no. 73-E/6 and is bounded by latitudes 23° 40' 56" N to 23° 41' 58" N and longitudes 85° 20' 46" E to 85° 21' 56" E.
- (ii) Coal linkage of the project is proposed through basket linkage for various power plants and other industries.
- (iii) No Joint venture cartel has been formed for the project.
- (iv) Project does not fall in Critically Polluted Area (CPA), where the MoEF&CC vide its OM

*EC Letter to Giddi Opencast of M/s Central Coalfields Limited*

Page 1 of 17

dated 13th January 2010 has imposed moratorium on grant of environment clearance.

- (v) Employment generation, project is source to temporary and permanent employment of about 449 persons.
- (vi) The project is reported to be beneficial in terms of Environmental benefit that Reclamation activities will be carried out throughout the life of mine and post closure as per progressive and final mine closure plan. Socioeconomic benefits of the Project will accrue through direct and indirect employment to local population and financial benefit in terms of contribution to exchequer etc.
- (vii) Terms of Reference granted on 25.09.2019 vide letter no. 23-245/2018-IA.III (V)
- (viii) Total mining lease area as per block allotment is 187.98 Ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved in the 507th CCL Board meeting on 23.09.2021.
- (ix) The land usage pattern of the project is as follows

**Pre-mining land use details**

Description	Area (Ha)
Scrubs	17.0
Plantation Area	50
Agricultural land	6.0
Mining Area	114
Settlements	1.0
<b>Total Land</b>	<b>187.98</b>

**Post-Mining: Area in Ha**

Particulars	Area in Ha
Mine void filled with water	29.97
OB Dump Reclaimed with Plantation	36.56
Infrastructure	7.36
Road	3.39
Nala/Stream	1.13
Old waterlogged quarry	15.13
Dump reclaimed with plantation	10.31
Plantation	14.04
Plantation on Vacant Land	70.09
<b>Total</b>	<b>187.98</b>

- (x) As per the approved Mining Plan, total geological reserve reported in the mine lease area is 10.07 MT with 2.76 MT mineable reserve. Out of the total mineable reserve of 2.76 MT, 2.76 MT is available for extraction. Percent of extraction is 100 %.
- (xi) 7 seams with thickness ranging from 2.16 meter to 26 meter are workable. Grade of coal is G-8. Stripping ratio is 2.03 while gradient is 14 degree to 22 degree.
- (xii) Method of mining operation is by open-cast mining with Shovel-Dumper operation
- (xiii) Life of mine is 05 years

- (xiv) The project has 1 existing external OB dumps in an area of 18.87 ha and average height of 45 meter. However, no further dumping is proposed in the external OB dump.
- (xv) 5.61 Mcum overburden will be generated from the project, which will be backfilled in the Old waterlogged quarry in an area of 15.13 Ha within the project area.
- (xvi) Total quarry area is 29.97 ha. Final mine void will be created in an area of 29.97 ha with a depth of 110 m. Backfilling will be done in the old worked out quarry of 7.69 ha.
- (xvii) It is proposed to transport coal from Mine to Giddi Railway Siding (0.3 km) by tipping trucks. Total length of coal transportation road is around 1.5 kms within the project boundary.
- (xviii) Reclamation Plan in an area of 145.73 ha, comprising of 29.18 ha of external dump, 15.13 ha of internal dump, 87.38 Ha in vacant land and 14.04 ha of green belt.
- (xix) 73.94 ha of forest land has been reported to be involved in the project. Stage I forest clearance obtained for 232.42 ha of forest land vide MoEF&CC letter No. 8-73/2003-FC Dt.08.06.2004.
- (xx) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones fall within 10 km boundary of the project.
- (xxi) The ground water level has been reported to be varying between 4-9.3 m (Pre monsoon) and 1.8-6.57m (Post monsoon). Total water requirement for the project is 837 KLD.
- (xxii) NOC of the Central Ground Water Authority has been issued vide no: CGWA/NOC/MIN/ORIG/2021/13941 Dated: 03.12.2021.
- (xxiii) Wildlife conservation plan for schedule – I species has been submitted to DFO Ramgarh vide letter no: PO GDA/ Survey/2022/44 Dated: 13.04.2022.
- (xxiv) Public hearing for the project of 1 MTPA capacity was conducted on 26.10.2021 at Officer's Club, Giddi A, Post- Giddi A. Major issues raised in the public hearing include Environmental pollution, employment for locals, supply of drinking water, health, motor driving training facility and better roads. Appropriate action to address the issues raised in the Public Hearing have been taken.
- (xxv) Consent to Operate for the existing capacity was obtained from the Jharkhand State PCB on 30.07.2021 and is valid upto 31.03.2022.
- (xxvi) The drainage of the block is controlled by easterly flowing Damodar river, which flows in the south of the block at a safe distance, and its tributary, southerly flowing Local nala, which flows in the west of the project boundary. Local nala meets master drainage Damodar river at a distance of more than 1500 m in the south of the block. The nallah will not be diverted in consultation with the Water Resource Department of the State Government.
- (xxvii) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to JSPCB and also to MOEF&C along with half yearly EC compliance report In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations which can be attributed to the specific local conditions during the day of sampling.
- (xxviii) No court cases, violation cases are pending against the project of the PP.
- (xxix) The project involve violation of the EIA Notification, 2006 and amendment issued thereunder. The coal production from the mine was started from the 1993-94 onwards. The project involves no R&R.
- (xxx) Total cost of the project is Rs. 102.98 Crores. Cost of production is Rs. 2,964/Tonne. CSR cost is the fund for the CSR should be allocated based on 2% of the average net profit of the

Company for the three immediately preceding financial years or Rs. 2.00 per Tonne of Coal Production of previous year whichever is higher. Environment Management Cost is Rs. 17.153 crores.

(xxx) The project has produced 0.233 MTPA in 1993-94 and operated without obtaining EC since then.

4. The Expert Appraisal Committee in its 39<sup>th</sup> EAC Meeting on 12-13 January, 2023 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 **Giddi Opencast Project of production capacity 1 MTPA (Peak) of M/s Central Coalfields Limited in the Mine lease area of 187.98 ha located at Argada Area of Central Coalfields Limited, Dadi CD block, District Hazaribag (Jharkhand)**, 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. As recommended by EAC, an amount of **Rs. 759.8 Lakh** for Remediation plan and **Rs 92 Lakh** towards Natural and Community Resource Augmentation plan should be spent within a span of 2 years.
- ii. The details of Remediation plan, Natural resource Augmentation plan and Community Resource Augmentation plan with budgetary provision are mentioned in the following table:

**Budgetary Provisions for Damage Remediation Plan**

Remediation plan & budgetary provisions				Action Plan		
S. No		Activity Proposed	Total (₹)	Year 01	Year 02	Year 03
1	Water Environment	Construction & installation of RO Plants (12 nos.) for supply of treated drinking water at 4 Revenue villages namely: Giddi 'Ka', Giddi 'Kha', Giddi 'Ga' and Kanki Panchayat with annual maintenance contract.	30,000,00	0	15,000,000	15,000,000
2		Deepening and pitch bouldering of	4,000,000	0	2,000,000	2,000,000

3		Additional Water Sampling for analysis of Ground water at 3 locations namely Tehratand village, Kurkutta village and Kendiya village @ once in a quarter	350,000	116,667	116,667	116,667
4		Renovation of ghat (Steps) along River Damodar at Shiv Mandir and beautification by Avenue plantation	3,600,000	0	1,800,000	1,800,000
<b>Total Water Environment</b>			<b>₹ 3,63,50,000</b>	<b>₹ 1,16,667</b>	<b>₹ 1,89,16,667</b>	<b>₹ 1,89,16,667</b>
1	Ecology	Distribution of 10,000 Fruit bearing plants in nearby villages viz. Jamuna Tola, Kurkutta, Tehratand, Kalai Tola, Giddi Basti etc.,	1,500,000	7,50,000	7,50,000	0
<b>Total Ecological Environment</b>			<b>₹ 1,500,000</b>	<b>₹ 7,50,000</b>	<b>₹ 7,50,000</b>	<b>0</b>
1	Air & Noise Environment	Additional Health Camps to monitor the respiratory and E&T health status of nearby villages. 1. Diabetic Camp (Quarterly) 2. Hypertension Camp (Quarterly) 3. Cancer Detection Camp (Quarterly) 4. Anaemia Detection Camp (Quarterly) 5. Cataract Detection and Treatment (Quarterly)	4,680,000	1,560,000	1,560,000	1,560,000

2	Additional avenue Plantation (2.1 Km) along with gabions and maintenance in subsequent years on village road connecting Giddi Basti and Project	4,000,000	1,500,000	1,500,000	1,000,000
<b>Total Air Environment</b>		<b>₹ 86,80,000</b>	<b>₹ 30,60,000</b>	<b>₹ 30,60,000</b>	<b>₹ 25,60,000</b>

Remediation plan & budgetary provisions				Action Plan		
SI NO		Activity Proposed	Total (₹)	Year 01	Year 02	Year 03
1	Land Environment	Providing colour coded bins in schools & hospitals in nearby villages	500,000	500,000	0	0
<b>Total Land Environment</b>			<b>₹ 500,000</b>	<b>₹ 500,000</b>	<b>0</b>	<b>0</b>
1	Socio-Economic	Skill development training programme for Motor Driving and Sewing to approx. 100 persons/year	2,000,000	666,667	666,667	666,667
2		Construction of 04 no. of toilet at Tehratand Community Hall	2,000,000	1,000,000	1,000,000	-
3		Organizing Football & Volleyball events	1,800,000	600,000	600,000	600,000
4		Construction of 2 nos. Community halls (20 m X 50 m) at Giddi Ka Panchayat (Kali Mandir Ground) & Giddi Kha Panchayat (Near Hanuman Chowk).	15,000,000	-	7,500,000	7,500,000

14

5	Providing Computers at Madhya Vidyalay & Shramik Uchh Vidyalay Giddi 'Ka', Balika Vidyalay Giddi 'Kha', Saraswati Sishu Vidya Mandir Giddi 'Ga', Saraswati Vidya Mandir Officers Colony (Total 35 nos)	1,050,000	525,000	525,000	-
6	Construction of Boundary wall at Sishu Vidya Mandir (900ft Length and 6 ft Height)	5,000,000	-	2,500,000	2,500,000
7	Additional awareness programs on Environmental protection	500,000	166,667	166,667	166,667
Total Socio-Economic Environment		₹ 27,350,000	₹ 29,58,333	₹ 1,29,58,333	₹ 1,14,33,333
<b>Total Fund for remediation measures</b>		<b>₹ 7,59,80,000</b>	<b>₹ 73,85,001</b>	<b>₹ 3,56,85,001</b>	<b>₹ 3,29,09,998</b>

Budgetary provisions for Natural and Community Resource Augmentation Plan

S.N.	Head	Activity Proposed	Total (₹)	Action Plan		
				Year 01 (₹)	Year 02 (₹)	Year 03 (₹)
1	Natural Resource Augmentation	Renovation of 4 no. of wells at Giddi 'Kha' Panchayat	200000	200,000	-	-
2	Community Resource Augmentation Plan	Providing solar lamps (50 Watt) for street lighting at 5 Revenue Villages (100 Nos Approx.)	1500000	500,000	500,000	500,000
3		Arrangement of smart classes at nearby schools of Giddi A OCP	1500000	500,000	500,000	500,000
4		Construction of RWH at 4 no. of schools in adjacent villages	4000000	2,000,000	2,000,000	-



5	Construction of Shelter at Samshan Ghat	2000000	-	2,000,000	-
Total Fund for Natural & Community Resource Augmentation Plan (NCRAP)		₹ 92,00,000	32,00,000	50,00,000	10,00,000

- iii. Remediation plan shall be completed within two years from date of issue of EC only whereas bank guarantee shall be for 3 years. The bank guarantee bearing no. 0089NDLG0062823 dated 20.02.2023 will be released after successful implementation of the remediation plan and Natural and Community Resource Augmentation Plan, and after the certification by Regional office of the Ministry.
- iv. PP shall submit a proper certification after complete implementation of all conditions mentioned in the remediation plan and Natural and Community Resource Augmentation Plan along with documentary proof shall be issued by IRO for the purpose of release of bank guarantee.
- v. Any connected proposal of expansion/amalgamation of this mine with others mines shall only be considered after 75% compliance of existing EC conditions along with compliance of Remediation plan and Natural & Community Resource Augmentation plan for amount **Rs. 851.8 lakhs** are accomplished.
- vi. PP shall implement in-pit conveyor system with silo loading facility till railway siding and No road transportation shall be allowed.
- vii. PP to submit the tree implementation plan along the internal /approach road side of transportation route including mine periphery area within 2 months from date of issue of EC to IRO, MoEF&CC. A detailed report with GIS images of every 3 months subsequently be submitted in every six monthly report to justify the adequate tree plantation.
- viii. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- ix. The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- x. State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition(Civil) No.114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- xi. PP shall engage third party independent expert agency for monitoring/auditing of compliance of EC conditions every year.

- xii. No village road shall be used for transportation of coal and no road transport route shall be adopted, which is passing through any sensitive location such as schools, hospitals etc. PP shall take legal undertaking from its consumers accordingly.
- xiii. Effective dust suppression system shall be adopted at the transportation site and in the other parts of the mining lease to arrest the fugitive dust emission.
- xiv. Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
- xv. PP shall install CAQMS for air monitoring and online water quality monitoring system for checking the quality of mine water and display outside main gate of colliery before discharge from its settling pond.
- xvi. In pursuance to the Ministry's OM dated 30.09.2020, Project Proponent shall take up the activities for community development under EMP.
- xvii. PP must obtain 4.5-star rating of MoC in the year 2024-25 and report shall be submitted to IRO.
- xviii. Periodical health check-up shall be conducted to monitor the impact of heavy metals present in core zone & buffer zone air quality and also to prepare an action plan to reduce heavy metals concentration and also report to be submitted to concerned regional office of MoEF&CC.
- xix. 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 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".
- xx. The implementation report of the above said condition shall be sent to the Regional Office of the MoEF&CC.

**4.1** The grant of Environment Clearance (EC) is further subject to compliance of the Standard EC conditions as under:

**(a) Statutory compliance**

(i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

(ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

(iii) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of Schedule-I species in the study area).

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

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

(vi) Solid/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.

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

(i) Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.

(ii) The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.

(iii) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM<sub>10</sub>/PM<sub>2.5</sub>) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.

(iv) The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.

(v) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.

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

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

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

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

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

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

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

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

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

(vii) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).

(viii) Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.

(ix) The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.

(x) The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.

(xi) The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

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

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

(ii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.

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

**(e) Mining Plan**

(i) Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.

(ii) Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).

(iii) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.

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

**(f) Land reclamation**

(i) Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).

(ii) The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27<sup>th</sup> August, 2009 and subsequent amendments.

(iii) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/" post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.

(iv) Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.

(v) Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.

(vi) The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

**(g) Green Belt**

(i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.

(ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species

(endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

**(h) Public hearing and Human health issues**

(i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six-monthly basis.

(ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.

(iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.

(iv) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.

(v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

**(i) Corporate Environment Responsibility**

(i) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.

(iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

(iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

(v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

**(j) Miscellaneous**

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, 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.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
- (vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (viii) The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- (ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (xi) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.
- (xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.



(xiv) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

(xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

(xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules made their under 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 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, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi

2. The Additional Principal Chief Conservator of Forests, Regional office (ECZ), Ministry of Environment & Forests, Bungalow No. A-2, Shyamali Colony, Ranchi - 834002
3. The Chairman, Jharkhand State Pollution Control Board, TA Building, HEC Complex, PO Dhurwa, Ranchi
4. The Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
5. The Chairman, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
6. The District Collector, **Hazaribaug**, Government of Jharkhand
7. Monitoring File/Guard File/Record File.                      9. PARIVESH Portal



**(Lalit Bokolia)**