



सत्यमेव जयते

File No.: J-11015/238/2010-1A.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 13/08/2024



To,

Sh. Pranab Das
M/s BHARAT COKING COAL LIMITED
Office of General Manager Kusunda Area-6 BCCL , Dhanbad, DHANBAD, JHARKHAND, Godhur
kali Mandir near Matkuria Check Post, 826116
E-mail: envkusunda@gmail.com

Subject: **Expansion of Cluster VII Coal Mining Project with rated Capacity of 11.42 MTPA in an area of 2127.70 ha, located in the East Central part of Jharia Coalfield in Dhanbad district of Jharkhand state by M/s Bharat Coking Coal Limited (BCCL) – Grant of Amendment in Environmental Clearance – regarding**

Sir/Madam,

This is with reference to your online application vide proposal No. IA/JH/CMIN/473199/2024 dated 14/06/2024 along with CAF (Part A, B and C) seeking amendment in Environment Clearance accorded by the Ministry vide letter no. J-11015/238/2010-1A.II (M) dated 12.10.2018, under the provisions of the EIA Notification, 2006 for the project mentioned above.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24A0605JH5139977A
(ii) File No.	J-11015/238/2010-1A.II (M)
(iii) Clearance Type	Amendment in EC
(iv) Category	A
(v) Schedule No./ Project Activity	1(a) Mining of minerals
(vi) Sector	Coal Mining
(vii) Name of Project	Cluster VII Coal Mining Project
(viii) Location of Project (District, State)	DHANBAD, JHARKHAND
(ix) Issuing Authority	MoEF&CC
(x) EC Date	12/10/2018
(xii) Applicability of General Conditions	NO
(xiii) Status of implementation of the project	

3. The proposal was considered by EAC (Coal) in its meeting held during July 1-2, 2024. The project activity is listed at schedule no. 1(a) - Mining of minerals under Category "A" of the schedule of the EIA Notification, 2006. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <https://parivesh.nic.in>.

4. Earlier, the Environment clearance for the project was granted under EIA Notification, 2006 vide Ministry's letter no. J-11015/238/2010-IA.II (M) dated 06.02.2013 for a capacity of 8.16 MTPA in an area of 2127.70 Ha. Thereafter, PP obtained EC for expansion from 8.16 MTPA to 11.42 MTPA without change of mining lease area vide EC letter dated 12.10.2018. EC was further amended vide EC dated 20.08.2020 for revision in calendar programme.

5. The PP has submitted for amendment of EC Generic condition no.- 4.1(a) (ii) of EC dated 12.10.2018 as shown below:

Specific/General Condition No	Details of Conditions	Amendment Sought	Justification
Generic Condition 4.1(a) (ii)	No change in mining method, calendar programme and scope of work without obtaining prior approval of Ministry of Environment, Forest and Climate Change	The proposal is for prior approval as per generic EC condition to undertake Highwall Mining in Rajapur-South Jharia OC without any change in EC Capacity and lease area. There shall be no change in Mine limit and Mine Depth.	For conservation of coal and to improve recovery of coal it is proposed to undertake Highwall Mining. The proposal will enable Highwall Mining (Blast free and Drill Free) along with OC Operation in Rajapur- South Jharia OC of Cluster VII without any change in EC Capacity and lease area. There shall be no change in Mine limit and Mine Depth. Mining Plan and Mine Closure Plan of Rajapur OC with Highwall Mining Operation for peak EC capacity of 2.56 MTPA has been approved in the 404th Board meeting of Bharat Coking Coal Limited on 05.08.2023

Deliberations of the Committee

6. The Committee deliberated on various aspects of the proposal submitted and the presentation made by PP. After detailed deliberation, the Committee noted the following:

i. Proposal is for amendment in the Generic Condition 4.1(a) (ii) of EC dated 12.10.2018 and accordingly PP applied under Form-4 on Parivesh Portal.

ii. The Committee noted that there are some technical issues in the Parivesh Portal related to the amendment log and other information, for which PP has raised the ticket TIC-24010690 dated 14.06.2024 but at the same time provided the information in its reply dated 14.06.2024.

iii. The Committee observed that PP has proposed changing the mining method from Opencast to UG through Highwall Mining. PP submitted that the mine has reached the final pit limit and the amendment sought is to extract the mineral blocked in the safety barrier between the two pits. The PP also clarified that this safety barrier is not around the pit limit of the cluster rather it is between the two pits of cluster mines. PP also showed the photographs and videos of the same. PP informed that a 300-meter drive will be made into the Highwall and the length of the Highwall will be 2.5 KM.

iv. PP also showed the video of Highwall Mining and the Committee observed from the video that after cutting the coal the Highwall Miner discharged the coal at the back side of the miner and from there it is to be loaded into dumpers through loaders. The Committee asked the PP whether the re-handling could be avoided and how much time it would take to drive a 300-meter length in the coal seam. PP informed that to drive a distance of 300 meters for coal cutting, the machine requires around 3 days and also rate of discharge is very slow so there it could not be directly loaded into the dumpers. The Committee is of the view that PP shall arrange a small mobile hopper where the output of the Highwall miner can be stored and from there it could be loaded into the dumpers to avoid re-handling.

v. The Committee also asked the PP, whether the mining plan for the proposed method of mining has been approved. PP submitted that the mining plan for the same has already been approved vide letter dated 05.08.2023.

vi. The committee asked about the impact of the mining. PP submitted that there is no increase in the production level as well as the lease area for which EIA/EMP was prepared and the existing mitigation measures are sufficient to address the impact of coal cutting and transportation through Highwall mining. PP further submitted that as the coal from OC has already been removed and the mine reached the safety barrier the production would be less than the rated peak capacity.

vii. The Committee enquired if any study about safety & subsidence due to the introduction of Highwall mining technology has been done. PP submitted that no such study has been done for the present area, however, a Geotechnical study has been done in Sharda OCM of ECL. The study envisages that based on the Geo-mining parameters considered for Operation at Sharda Mine, no stability problem and any harmful surface subsidence has been experienced in the mining property so far for the last 13 years. PP also submitted a copy of the report vide email dated 01.07.2024. PP further submitted that permission for the introduction of Highwall mining equipment at ROCP will be obtained under Regulation 113 of Coal Mine Regulation, 2017 (Extraction of coal by methods other than Board and Pillar) and all conditions shall be fully complied with to ensure long term stability of the working area. The Committee also asked about the land use of barrier surfaces and asked whether any habitation is there. PP submitted that there is no habitation or structure. The Committee is of the view no mining should be done in safety zone without obtaining necessary permission from DGMS and also monitor the subsidence at regular intervals.

viii. The Committee noted that RO inspection was done on 27.04.2023 and PP submitted the copy of CCR along with ATR dated 07.08.2023. The Committee observed that there are some partially complied conditions related to i) plantation on OB dump area, PP submitted that grass seeds are being spread on active OB Dumps so that temporary grassing develops to check any airborne particles. PP further submitted that presently 1500 Avenue plantation and block plantation in 40 Ha of land has been done through the Divisional Forest Department ii) Construction of Catch drains/garland drains along the remaining OB dumps. PP submitted that Catch/garland drains and siltation ponds are prepared in the monsoon season to prevent any runoff from the mine. The toe wall is being constructed in a phase-wise manner along the finalised OB dumps. iii) Mitigation measures for suppression of fugitive emissions, PP submitted that to control fugitive emissions along roads 16 nos of Mobile Water Sprinklers, 3 nos of Truck Mounted Fog canon & 02 Trolley Mounted Fog Canons and 2 HEMM based Mist Sprinklers with 28 KL Tank capacity are operative in mines. Further, one Mechanical sweeper has been procured and one more is in the final stage of procurement vi) Installation of CAAQMS, for which PP has submitted that CAAQMS has already been installed in Cluster VII. The Committee is of the view that PP shall expedite the compliance of CCR. Further, the Committee is of the view that PP shall increase the number of fog cannons to reduce the impact of air pollution and shall ensure that all environmental equipment is in place before starting the Highwall mining operations. The Committee desired that PP should submit Geo-tagged photos of plantation areas. PP vide email dated 01.07.2024 submitted the photographs. The Committee asked PP to ensure the installation of the Wind barrier wall / Vertical Greenery System at suitable locations. The Committee desired for full compliance of existing EC conditions. Further, RO inspection be done within next 6 months and thereafter PP to submit ATR on RO report.

ix. The Committee observed that the plantation in the area is not adequate; PP submitted that Jharia Coal fields have fire and due to this, it would be difficult to plant the trees. However, Miyawaki plantation in an area of 25 Ha will be taken up during the monsoon period. PP also submitted an undertaking regarding the same vide email dated 02.07.2024. The Committee agreed with the practical difficulties being faced in the Jharia Coal field due to fire but it is of the view that in the fire-free area/outside area, the plantation can be done. The Committee asked PP to carry out Concurrent planting on war footing including raising of shrubs and grasses. Further, the Committee is of the view that PP shall also carry out a study of impact on health and environment in the local area due to continuous unabated fire.

x. The committee asked about the intersection of Groundwater and its impact. PP submitted that the Groundwater level has already been intersected during the opencast mining and proposed Highwall mining will not have any further impact.

Recommendations of the Committee

7. Based on the discussion held and the document submitted as per the requirement of Generic Condition 4.1(a) (ii) the EAC **recommended** the proposal for Amendment in Environment Clearance (EC) of Cluster VII Coal Mining Project

dated 12.10.2018 with a rated capacity of 11.42 MTPA in an area of 2127.70 ha, located in the East Central part of Jharia Coalfield in Dhanbad district of Jharkhand state by **M/s Bharat Coking Coal Limited (BCCL) for change in method of mining from opencast to Opencast cum UG (Highwall Mining Method)** subject to the compliance of the additional terms & conditions / specific conditions at **Annexure-1**.

Decision of MoEF&CC

8. The undersigned is directed to inform that Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Coal) hereby decided for grant of amendment in the EC dated 12.10.2018; as detailed in Para 7 above subject to the compliance of the additional terms & conditions / specific conditions at **Annexure 1**.

9. All other terms and conditions mentioned in the Environment Clearance letter no. J-11015/238/2010-1A.II (M) dated 12.10.2018 and its amendment dated 20.08.2020 shall remain unchanged.

10. The project proponent shall obtain fresh Environment Clearance in case of change in scope of the project, if any.

11. This issues with the approval of the Competent Authority.

Copy To

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, 2nd Floor, Headquarter- Jharkhand State Housing Board, Harmu Chowk, Ranchi, Jharkhand – 834002, Ranchi
3. The Chairman, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
4. The Regional Director, Central Ground Water Board, Mid-Eastern Region, 6th& 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road, Dak Banglow, Patna- 800011, Bihar.
5. The Chairman, Jharkhand State Pollution Control Board, TA building, HEC complex, PO Dhurwa, Ranchi
6. The District Collector, Dhanbad, Government of (Jharkhand)
7. PARIVESH Portal

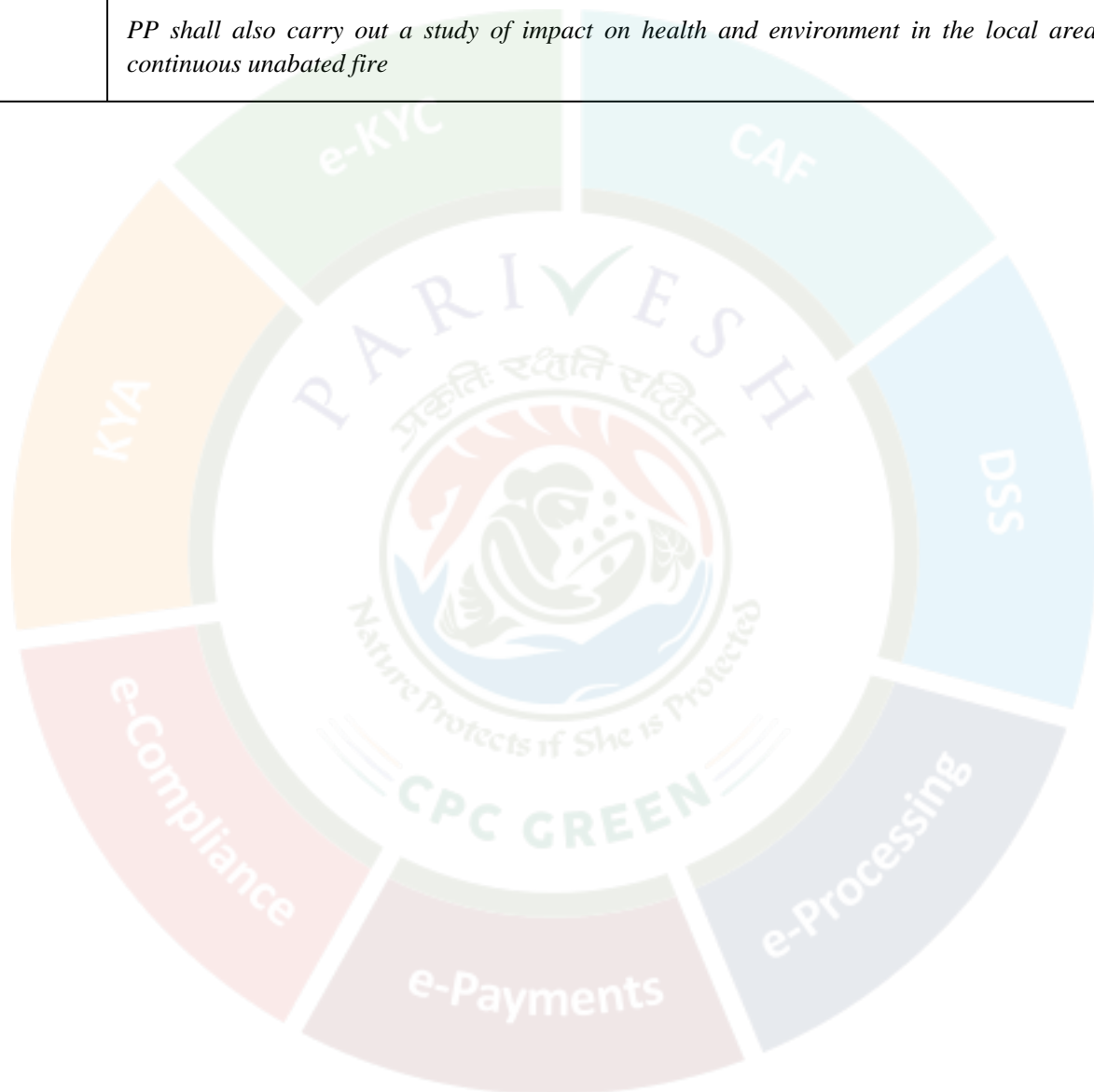
Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Specific Conditions

S. No	EC Conditions
1.1	PP shall expedite the full compliance existing EC Conditions and submit the ATR after the inspection RO within next 6 months
1.2	<i>The plantations done by the PP need to be adequately densified during the current monsoon season and audited by a third party preferably a forestry institution of MoEFCC (e.g. ICFRE) to assess their efficacy</i>
1.3	<i>PP to ensure installation of Wind barrier wall / Vertical Greenery System at suitable locations</i>
1.4	<i>Miyawaki plantation in an area of 25 Ha will be taken up during the current monsoon period</i>

S. No	EC Conditions
1.5	<i>The other terms and conditions of earlier granted ECs and EC amendments shall remain the same</i>
1.6	<i>No Mining should be done in Safety zone</i>
1.7	<i>PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report</i>
1.8	<i>PP shall also carry out a study of impact on health and environment in the local area due to continuous unabated fire</i>





To

The General Manager

M/s Bharat Coking Coal Limited,

Kusunda Area, Koyla Bhawan,

Koyla Nagar, Dhanbad - 5 (Jharkhand). E-mail: gmenv.bccl@coalindia.in

Sub: Expansion of Cluster VII Coal Mining project from 8.16 MTPA to 11.42 MTPA in mine lease area of 2127.70 ha of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand) – Amendment in Environmental Clearance - reg.

Sir,

This has reference to your online proposal no. IA/JH/CMIN/142279/2020 dated 2nd March, 2020, on the above-mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for amendment in Environment Clearance dated 12th October, 2018, to the expansion of Cluster VII Coal Mining project (Group of 14 OC/UG mines) from 8.16 MTPA (peak) to 11.42 MTPA (peak) in total mine lease area of 2127.70 ha of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand).

3. The amendment has been sought for approval of revision of Calendar Program/Production Schedule of Cluster VII i.e. increase in production capacity at Rajapur/South Jharia OC mine from 1.69 to 2.56 MTPA with the overall production capacity remaining the same and without any change in mine lease area.

During operation at Rajapur/South Jharia OC mine, it was observed that coal excavation rate needs to be enhanced for further spread of fire. Accordingly, Mining Plan along with Mine Closure Plan of Rajapur/South Jharia OC (1.97 MTPA i.e. peak capacity 2.56 MTPA), in lease hold area of 207.48 ha, has been approved in the 363rd BCCL Board meeting held on 24.04.2020.

4. With the restructuring/revision so proposed, the combined production capacity and mine lease area of the overall Cluster would remain the same i.e 11.42 MTPA (Peak), details as under:-

S.N o.	Name of Mine	Type of Mine	Leasehold Area (in Ha)	Balance Life of Mine (in years)	Peak Producti on Capacity (in MTPA)	Production Schedule (As per Peak Capacity)				
						Year-I	Year-II	Year-III	Year-IV	Year-V
1.	Amalgamated Dhansar-Industry Colliery	OC	276.62	30	2.07	2.00	2.00	2.00	1.60	1.60
2.	Ena OC	OC	216.00	25	3.00	3.00	3.00	3.00	2.00	2.00
3.	Amalgamated East Bhuggatdih Simlabahal OC	OC	420.75	15	2.30	1.00	1.30	1.43	1.43	1.43
4.	Rajapur/S-Jharia OCP	OC	207.48	10	2.56	2.56	2.56	2.30	1.50	1.50
5.	Kusunda OC	OC	247.70	23	2.00	2.00	2.00	2.00	2.00	2.00
6.	Bhutgoria UG (to be reopened)	UG	131.67	23	0.36	0.20	0.36	0.36	0.36	0.36
7.	Alkusa UG	UG	101.77			Inoperative till fire dealing at Kusunda				
8.	Hurriladih UG	UG	127.17			Inoperative till fire dealing at AEBS Colliery				
9.	Burragarh UG	UG	147.83			Inoperative till fire dealing at AEBS Colliery				
10.	Kustore UG	UG	250.71			Inoperative till fire dealing at Kusunda				
	Total		2127.70		11.42*	10.76	11.22	11.09	8.89	8.89

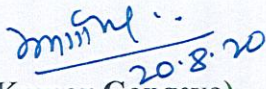
5. The sectoral Expert Appraisal Committee for coal in its 55th meeting held on 29th May, 2020 has recommended for grant of amendment in Environment Clearance (as para above) considering the critical situation in Jharia Coalfields due to persistent mine fire. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval for the amendment in the Environment Clearance **“Expansion of Cluster VII Coal Mining project from 8.16 MTPA to 11.42 MTPA (peak) of M/s Bharat Coking Coal Limited in total mine lease area of 2127.70 ha” located in Jharia Coalfields, District Dhanbad (Jharkhand)**, under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the additional condition for environmental safeguards as under:-

- (i) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.
- (ii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (iii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (iv) Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (v) Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- (vi) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (vii) A third party assessment of EC compliance shall be undertaken once in three years through reputed Government Institutes or any other expert agency identified by the Ministry.
- (viii) Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
- (ix) Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (x) The Project Proponent shall comply 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. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xi) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of anti-snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xii) Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-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”.

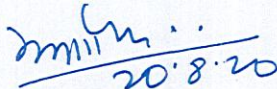
- (xiii) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise 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.
- (xiv) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- (xv) Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent”. The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.

4. All other conditions stipulated in EC dated 12th October, 2018 shall also be applicable.


(Manoj Kumar Gangeya)
Director

Copy to:

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
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 Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi
4. The Advisor, Coal India Limited, SCOPE Minar, Core-I, 4th Floor, Vikas Marg, Laxmi Nagar, New Delhi
5. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
6. The Member Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
7. The Member Secretary, Jharkhand State Pollution Control Board, TA Building, HEC Complex, PO Dhurwa, Ranchi
8. The District Collector, Dhanbad, Government of Jharkhand
9. Monitoring File 10. Guard File 11. Record File 12. Notice Board


(Manoj Kumar Gangeya)
Director

F. No. J-11015/238/2010-IA.II (M) Pt
Government of India
Ministry of Environment, Forest and Climate Change
IA-II (Coal Mining) Division

Indira Paryavaran Bhawan
Jorbagh Road, N Delhi - 3
Dated: 12th October, 2018

To

The General Manager
M/s Bharat Coking Coal Limited,
Kusunda Area, Koyla Bhawan,
Koyla Nagar, Dhanbad - 5 (Jharkhand)

E-mail: gmenv.bccl@coalindia.in

Sub: Expansion of Cluster VII Coal Mining project from 8.16 MTPA to 11.42 MTPA in mine lease area of 2127.70 ha of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand) - Environmental Clearance - reg.

Sir,

This has reference to your letter No. BCCL/GM Kusunda/F-EC/18 dated 8th August, 2018 and online proposal No. IA/JH/CMIN/8042/2010 and subsequent letter dated 31st August, 2018 on the above mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for environmental clearance to the expansion of Cluster VII Coal Mining project (Group of 14 OC/UG mines) from 8.16 MTPA (peak) to 11.42 MTPA (peak) in total mine lease area of 2127.70 ha of M/s Bharat Coking Coal Limited, located in Jharia Coalfields, District Dhanbad (Jharkhand).

3. The proposal was considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Sector in its 36th meeting held on 31st August, 2018. The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

(i) The project is located in Kusunda village, Dhanbad District (Jharkhand) between coordinates 23°44'42.00" to 23°43'7.16"N and 86°25'40.67" to 86°23'27.23"E.

(ii) Earlier, the Cluster VII coal mining project of capacity 8.16 MTPA in an area of 2127.70 ha was granted environmental clearance by the Ministry on 6th February, 2013 based on public hearing conducted on 25th January, 2012.

(iii) Proposal involves amalgamation of existing mines as well as increase in the production capacity as per detail given below:

(a) Net increase of 4.754 MTPA in production capacity has been proposed in Ena OC (from 0.22 to 3.0 MTPA) and Amalgamated Simlabahal UG and East Bhuggatdih Mines (from 0.325 to 2.30 MTPA).

(b) Similarly net decrease of 1.56 MTPA has been proposed in mines viz. amalgamation of Dhansar UG, Dhansar OCP, Vishwakarma OCP and Industry UG coal mines (2.434 MTPA to 2.07 MTPA = 0.364 MTPA), Alkusa UG by 0.150 MTPA, Bhutgoria UG by 0.108 MTPA (from 0.468 MTPA to 0.36 MTPA), Hurriladih UG mine by 0.117 MTPA, Burragarh UG by 0.221 MTPA.

(c) No increase/decrease in the capacity of Kustore UG mine has been effected as it is remained a suspended mine in past and no production is proposed in future also.



- (iv) No additional direct employment will be generated. Indirect employment will be generated with establishment of ancillary industries around the mines. However, quantitative detail of the same has not been submitted by the PP.
- (v) Likely benefits to be generated from the project include conservation of natural resources by excavating the fiery coal, reducing imports of coking coal, development of ancillary industries, development of social infrastructure like school, hospitals, etc., growth benefits sharing with the Society through CSR.
- (vi) The status of approval of Mining Plans and Mine Closure Plans of various mines of the Cluster is as below:-
- (a) Ena Colliery - Mining Plan approved in 344th meeting of the BCCL Board held on 5th July, 2018.
- (b) Amalgamated East Bhuggatdih Simlabahal Colliery - Approved in 345th meeting of BCCL Board held on 3rd August, 2018.
- (vii) The PP, vide application dated 4th May, 2018, has applied for prior approval of Central Groundwater Board for withdrawal of ground water.
- (viii) Kari Jore flows along western boundary of Ena colliery. No other nallah/water bodies have been reported in the mine lease area of the PP.
- (ix) Total geological reserve reported in the mine lease area is 232.96 MT with 209.68 MT mineable reserve, out of which 209.68 MT of reserve is extractable reserve with 90 % extraction of reported geological reserve.
- (x) Ground water table varies between 0.70 m - 19.20 m during pre-monsoon and 0.10 m to 15.63 m during post-monsoon season. Existing water requirement for the project is 27,251 KLD while additional water of 1,720 KLD will be required for the proposed expansion.
- (xi) Mining method envisages opencast mining using shovel-dumper combination.
- (xii) Life of mines varies from 15 years to 30 years.
- (xiii) Transportation of coal has been proposed through railways and road.
- (xiv) Land use details is as under:

S. No.	Land Use		Present land use (ha)	Post-mining land use (ha)
1	Running Quarry	Backfilled	235.77	0
		Not Backfilled	143.63	424.01
2	Abandoned quarry	Backfilled	41.97	5.39
		Not Backfilled	26.09	0
3	External OB dump		35.80	0
4	Service building/ Mine Infrastructure		23.29	11.76
5	Coal dump		11.82	6.46
6	Rail and Road		65.39	45.11
7	Homestead Land		268.19	128.62
8	Agricultural Land		0.00	0.00
9	Forest Land		0.00	0.00
10	Plantation / reclamation		242.21	1028.68
11	Water Body		25.43	63.30
12	Barren Land		1008.11	385.12
13	Others (Peripheral haul road)		0.00	29.25
Total			2127.70	2127.70

- (xv) No forest land is involved in the project.
- (xvi) No National Park, Wildlife Sanctuaries, Eco-sensitive Zones are located within 10 km from the mine lease boundary.

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- (xvii) Total capital investment of the project as per approved Project Report is Rs.18,947.63 lakh. However, detail of cost proposed to be incurred on environment management, CSR, etc has not been submitted by the PP.
- (xviii) Information on R&R, if any, involved in the proposal, has not been furnished by the PP.
- (xix) As per detail provided by the PP, the proposal is not subjected to any investigation.
- (xx) No court cases, violation cases are pending against the project of the PP.
- (xxi) The Regional Office, Ranchi has conducted site inspection of the area to assess the status of compliance of conditions stipulated in the environment clearance dated 6th February, 2013 and submitted the inspection report on 1st June, 2016 along with their observations. The project proponent, vide letter dated 10th August, 2018 has submitted the action taken report on observations of the Regional Office.

4. The sectoral Expert Appraisal Committee in its 38th meeting held on 31st August, 2018, in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006, has recommended the project for grant of environmental clearance. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **Expansion of Cluster VII Coal Mining project (Group of 14 OC/UG mines) from 8.16 MTPA to 11.42 MTPA (peak) of M/s Bharat Coking Coal Limited in total mine lease area of 2127.70 ha located in Jharia Coalfields, District Dhanbad (Jharkhand)**, under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms & conditions and environmental safeguards as under:-

- (i) The project proponent shall obtain Consent to establish from the State Pollution Control Boards of Jharkhand for the proposed peak capacity of 11.42 MTPA prior to commencement of the increased production.
- (ii) Transportation of coal from face to coal heap shall be carried out by truck. Further, the coal transportation from coal heap to Coal Handling Plant shall be carried out through covered trucks.
- (iii) Mitigative measures to be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers.
- (iv) Sufficient coal pillars shall be left un-extracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.
- (v) Solid barrier shall be left below the roads falling within the block to avoid any damage to the roads and no depillaring operation shall be carried out below the township/colony.
- (vi) Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains.
- (vii) Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rain fall.
- (viii) The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 11.42 MTPA.
- (ix) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (x) The fire dealing operations by excavating out fire should be expedited.

4.1 The grant of environmental clearance is further subject to compliance of the generic conditions as under:

(a) Mining

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



(ii) No change in mining method, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forest and Climate Change.

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

(iv) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.

(b) Land reclamation and water conservation

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

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

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

(iv) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the Ministry of Environment, Forest and Climate Change/Regional Office on six monthly basis.

(v) The top soil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized for long. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office on six monthly basis.



(c) Emissions, effluents, and waste disposal

- (i) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of $PM_{10}/PM_{2.5}$) 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.
- (ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area in a phased manner. The green belt comprising a mix of native species shall be developed all along the major approach/ coal transportation roads.
- (iii) The transportation of coal shall be carried out as per the provisions and route proposed in the approved Mining Plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- (iv) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- (v) Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- (vi) Coal handling plant shall be operated with effective control measures viz. bag filters/water or mist sprinkling system etc to check fugitive emissions from crushing operations, conveyor system, transfer points, etc.
- (vii) Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- (viii) Catch/garland drains and siltation ponds of appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression measures and green belt development. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.
- (ix) Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Oil and grease trap shall be installed and maintained fully functional with effluents discharge adhering to the norms. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste.

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

(d) Illumination, noise & vibration

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

(ii) Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

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

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

(e) Occupational health & safety

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

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

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

(f) Ecosystem and biodiversity conservation

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

(g) Public hearing, R&R and CSR

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

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

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

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

(h) Corporate environment responsibility

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

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

(iii) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions should be displayed on website of the Company.

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

(v) Action plan for implementing EMP and environmental conditions 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.

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

(i) Statutory Obligations

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

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

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



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

(j) Monitoring of project

(i) Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ 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 25.9.2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.

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

(iv) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-IA.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.

(v) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area 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 Ministry of Environment, Forest and Climate Change/Regional Office.

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

(vii) The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental conditions to the Ministry of Environment, Forest and Climate Change/Regional Office. For half yearly monitoring reports, the data should be monitored for the period of April to September and October to March of the financial years.

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

(k) Miscellaneous

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



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

(iii) A copy of the environmental clearance shall be marked to concerned Panchayat. A copy of the same shall also be sent to the concerned State Pollution Control Board, Regional Office, District Industry Sector and Collector's Office/Tehsildar Office for information in public domain within 30 days.

(iv) The EC shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain.

(v) The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of this clearance, informing that the project has been accorded environmental clearance and a copy of the same is available with the State Pollution Control Board and also at website of the Ministry.

(vi) The environmental statement for each financial year ending 31 March in Form-V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the Company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF&CC by e-mail. Concerns raised during public hearing.

(vii) The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter.

5. The project 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 project proponent shall obtain all necessary clearances/approvals required before 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 lies 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 judgment 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.

11. This issues in supersession of the earlier EC granted vide letter No.J-11015/238/2010-IA.II (M) dated 6th February, 2013, with approval of the competent authority.


12/10/2018
(S. K. Srivastava)
Scientist E

Copy to:

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
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 Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi
4. The Advisor, Coal India Limited, SCOPE Minar, Core-I, 4th Floor, Vikas Marg, Laxmi Nagar, New Delhi
5. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
6. The Member Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
7. The Member Secretary, Jharkhand State Pollution Control Board, TA Building, HEC Complex, PO Dhurwa, Ranchi
8. The District Collector, Dhanbad, Government of Jharkhand
9. Monitoring File 10. Guard File 11. Record File 12. Notice Board


12/10/2018
(S. K. Srivastava)
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