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भारत सरकार  
पर्यावरण एवं वन मंत्रालय  
GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT & FORESTS  
पर्यावरण भवन, सी० जी० ओ० कॉम्प्लेक्स  
PARYAVARAN BHAVAN, C.G.O. COMPLEX  
लोदी रोड, नई दिल्ली-110003  
LODI ROAD, NEW DELHI-110003

Dated 29th October, 1993.

OFFICE MEMORANDUM

Sub: Piparwar Opencast Mine and Washery Project of CCL.

Reference is invited to Ministry of Coal's O.M. No. 43011/65/86-CPA dated 25.2.1988 and subsequent letters on the subject seeking environmental clearance of the project. This Ministry had earlier rejected the proposal due to non furnishing of information pertaining to diversion of forest land, vide O.M. No. J-11015/12/85-Env.5/IA.11 dated January 12, 1990. Now, this Ministry have examined the environmental aspects of the project based on the EIA and EMP and other related project documents. Taking into consideration, The fact that the project had been recommended for clearance by the then EAC meeting held on 16.12.1988 and also examination of the supplementary and revised management plans, the Ministry hereby accords environmental clearance of the project subject to effective implementation of environmental safeguards stipulated below:-

- (i) The levels of SPM concentration should not exceed 500  $\mu\text{g}/\text{m}^3$  at any observation point within the mine lease hold. The emission of  $\text{SO}_2$ ,  $\text{NO}_x$  and CO should also be maintained below the levels prescribed by the competent authority.
- (ii) The quality of effluent finally discharged into the main water course should conform to the standards prescribed under CSR 422 (E) dated 19th May, 1993.
- (iii) Regular monitoring of air and water quality should be made in and around the core zone. The monitored, data should be furnished to this Ministry every three months.
- (iv) The rehabilitation of the project austeres should be as per the rehabilitation package proposed in the Environmental Management Plan.
- (v) No change in the method of working (including calendar plan of excavation), land use etc. be made without prior approval of this Ministry.
- (vi) The main reclamation plan and post mining land use as discussed in the EMP should be strictly implemented. No external O.M. dump should be created.

Jitendra Kumar Singh  
Project Officer  
Piparwar UG

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Project Officer  
Piparwar UG



- (vii) The green belt development and afforestation plans should be carried out in a scientific way incorporating mixed pattern species and bio-forestry techniques. A suitable scheme has to be made by involving displaced villagers and participation of local community.
- (viii) The archaeological sites of Benti, Bhagwantola as well as cave paintings at ISCO village need to be protected from the adverse impacts of mining activity. The Directorate of Archaeology, Bihar should conduct a detailed survey and suggest measures for preserving archaeologically important monuments/rockarts/paintings etc. in the area. CCL should extend all facilities and hospitality in the preservation efforts.
- (ix) No mining/industrial activity should be carried out within the area upto a radial distance of 5 kilometers from the ISCO cave to protect cave paintings from atmospheric pollution. Ambient air quality monitoring along with meteorological monitoring should be done at the site of cave paintings and the data submitted to State Pollution Control Board, State Archaeological Department and this Ministry.
- (x) The project authority should submit to this Ministry (as well as its Regional Office) quarterly progress reports on the implementation of environmental management and pollution control measures.
- (xi) A separate environmental management cell with suitably qualified personnel to effectively implement various functions related to environmental management should be set up.
- (xii) The funds (both capital and recurring) earmarked for environmental control measures should not be diverted for any other purposes.
- (xiii) The Ministry may stipulate additional conditions if so necessitated either by change in scope of the project or on the basis of feed back on the impacts.
- (xiv) The Ministry may revoke the clearance if implementation of stipulated conditions is not satisfactory.

The above conditions will be enforced inter alia under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986.

Dr. N.H. Hosabettu,  
Joint Director (S)

The Secretary,  
Ministry of Coal,  
Government of India,  
Shastri Bhavan,  
New Delhi - 110001.

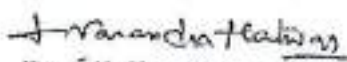
(Attention: Shri R.K. Sachdev, Adviser).

Jitendra Kumar Singh  
Project Officer  
Piparwar U/G

Copy to:

1. Chairman-cum-Managing Director, CCL, Darbhanga House, Ranchi-834001. (Bihar).
- ✓ 2. Chief Conservator of Forests (Central), Regional Office, 194, Kharvel Nagar, Bhubaneswar-751001.
3. Chairman, Bihar State Pollution Control Board, Beltron Bhavan, 2nd Floor, Bally Road, Patna-800023. (Bihar).
4. Directorate of Archaeology, Bihar.
5. Secretary, Forests and Environment Department, Government of Bihar, Third Sectt. Buildings, Patna, Bihar.

  
**Jitendra Kumar Singh**  
Project Officer  
Piparwar U/G

  
Dr. N.H. Hosabettu,  
Joint Director (S)

Jitendra Kumar Singh  
Project Officer  
Piparwar U/G



1/6  
K. Shukla,  
CGM, CIL, Delhi

No.J-11015/186/2007-IA.II(M)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan,  
C.G.O.Complex, Lodi Road,  
New Delhi-110003

Dated: 11<sup>th</sup> June 2007

To  
General Manager (Env. & F),  
M/s Central Coalfields Ltd.,  
Darbhanga House,  
RANCHI - 834001.

Sub: Piparwar Opencast Coal Mine Project (from 6.5 MTPA to 10 MTPA) of M/s Central Coalfields Ltd. located in villages Mangardaha, Benti, Kichito, Bahera, Kanuada, Rajdhar, Kalyanpur, Karo, and Bijain, in Tehsil Tandwa, District Chatra, Jharkhand - Environmental Clearance - reg.

Sir,

This has reference to letter No. 43011/05/2007 dated 15.01.2007 forwarding your application on the above-mentioned subject. The Ministry of Environment & Forests has considered your application. It has been noted that the application is for expansion in production of coal in the Piparwar Opencast Coalmine project from 6.5 million tonnes per annum (MTPA) to 10 MTPA rated capacity. The total mine lease area is 1120.25 ha of which 163.6 ha is agricultural land, 186.5 ha is forestland, 490.80 ha is wasteland and 279.35 ha is settlements. A township is located at a distance of 10km from ML. Forestry clearance has been applied for. There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 10 km buffer zone. No endangered flora and fauna were reported in the study area. Of the total lease area, area for excavation is 540 ha, 25 ha is for OB dumps, 316.9 area for infrastructure which includes admin. buildings, workshop, CIL, roads, 182.35 ha is safety zone. The project involves modification of the mine lease area through construction of embankment along River Damodar and along Sarda river for protection against flood. R&R for the Project involving 451 PAPs has been completed. A coal washery is located within the ML. The expansion of annual rated capacity of the mine is from 6.5 MTPA to 10 MTPA by opencast mining. Mineral transportation of 27400 TPD of coal is by road using about 1500 vehicles to nearby railhead at a distance of 8km. Ultimate working depth of the mine is 110m below ground level (bgl). Present working depth is 70m bgl. Water table is in the range of 3-12 m bgl in pre-monsoon and 1-6 m bgl in the post monsoon. Mining has intersected water table. Average water requirement is 7644 m<sup>3</sup>/d, which will be met from mine pit water (3000 m<sup>3</sup>/d) and water accumulated in abandoned pits (5000 m<sup>3</sup>/d). Of this, 2200 m<sup>3</sup>/d is for coal washery. No groundwater will be used. An estimated 209 Mm<sup>3</sup> of OB will be generated in life of mine of which about 129 Mm<sup>3</sup> has been already accumulated and 80 Mm<sup>3</sup> would be generated over the balance life of mine. An estimated 93 % of the accumulated OB and the entire OB to be generate in the balance life of mine would be backfilled. OB has been dumped in one external dump of 90m max. height of 3 benches of 30m each. Life of the mine at the rated capacity is 13years. Public Hearing was held on 19.05.2006. NOC has been obtained on 29.01.2007. Project approval has been obtained on 09.09.2006. Capital cost of the project is Rs. 775.91 crores.

  
Jitendra Kumar Singh  
Project Officer  
Piparwar U/G

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned Piparwar Opencast Coal Mine Project of M/s Central Coalfields Ltd. for production of coal at 10 MTPA rated capacity over a lease area of 1120.25 ha under the provisions of the under Section 12 of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and under Para 2.1.1 of MOEF Circular dated 13.10.2006 subject to the compliance of the terms and conditions mentioned below:

**A. Specific Conditions**


- (i) No mining operations shall be undertaken in the forestland until forestry clearance has been obtained under the provisions of FC Act, 1980.
- (ii) Mining shall be carried out as per statuette at a safe distance from the Damodar River/Safi nala flowing adjacent to the lease boundary.
- (iii) The bund/embankment constructed alongside Damodar River/Safi nala shall be at least 3m higher than highest flood level, based on past data, so as to guard against mine inundation. The slope of the embankment shall be at least 2:1 towards the ML and the embankment stabilised with plantation.
- ✓ (iv) Topsoil, if any, should be stacked properly with proper slope at earmarked site(s) and should not be kept active and shall be used for reclamation and development of green belt.
- (v) No additional OB shall be dumped on the existing OB dump. The new OB generated shall be concurrently backfilled in the decoaled area. The already accumulated OB has been stacked at earmarked one external OB dumpsite(s) within ML of a maximum height of 90m and consisting of 3 benches of 30m each. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing reclaimed dumpsite shall continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional office located at Bhubaneswar on an yearly basis.
- ✓ (vi) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilised for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly.  
Garland drains (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provided adequate retention period to allow proper settling of silt material.
- ✓ (vii) Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.
- (viii) High efficiency bag filters/water sprinkling system should be provided to check fugitive emissions from the workshop, conveyor system, haulage roads, transfer points, etc.

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- (x) Vehicular emissions should be kept under control and regularly monitored. Vehicles used for transporting the mineral should be covered with tarpaulins and optimally loaded. The road used for transportation to railway head shall be metal topped.
- (xi) Railway siding under construction with Rapid Loading System to replace transportation of coal by road, shall be constructed in a time bound manner and have adequate arrangements for dust suppression.
- (xii) Drills should be wet operated.
- (xiii) Controlled blasting for OC operations should be practiced only during daytime with use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.
- (xiv) Area brought under afforestation shall not be less than 976 ha and shall include reclaimed external O&D dump, backfilled area, along ML boundary, along roads and green belt (426 ha) within the lease area by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.
- (xv) A Progressive Closure Plan shall be implemented by reclamation of quarry area of 540 ha of which shall be backfilled, stabilised and afforested by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. The balance decolled void of 15 ha being converted into a water body shall be gently sloped and the upper benches shall be stabilised with plantation.
- (xvi) The company shall obtain prior approval of CGWA/CGWB Regional Office for use of groundwater if required, for mining operations.
- (xvii) Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity should be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected should be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.
- (xviii) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- (xix) Wastewater from coal washery shall be treated to prescribed standards and recycled for mining operations to the maximum extent possible.
- (xx) ETP should also be provided for treating workshop effluents and excess mine water to meet prescribed standards and recycled for mining operations to the maximum extent possible.

  
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- (xx) An STP shall be provided in the township for treating domestic wastewater to meet the prescribed standards and recycled for mining operations to the maximum extent possible.
- (xxi) For monitoring land use pattern and for post mining land use, a time series of landuse maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bhubaneswar.
- (xxii) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests for approval 5 years in advance of final mine closure for approval.
- (xxiii) Consent to Operate shall be obtained before starting mining operations after fulfillment of conditions imposed in NOC.

**B. General Conditions**

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral coal and waste should be made.
- (iii) Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for SPM, RPM, SO<sub>2</sub> and NO<sub>x</sub> monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.
- (iv) Fugitive dust emissions (SPM and RPM) from all the sources should be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, dump trucks (loading and unloading) points should be provided and properly maintained.
- (v) Data on ambient air quality (SPM, RPM, SO<sub>2</sub> and NO<sub>x</sub>) should be regularly submitted to the Ministry including its Regional Office at Bhubaneswar and to the State Pollution Control Board and to the Central Pollution Control Board once in six months.
- (vi) Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc should be provided with ear plugs/muffs.
- (vii) Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May 1993 and 31<sup>st</sup> December 1993 or as amended from time to time before discharge. Oil and grease trap should be installed before discharge of workshop effluents.

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(vii) Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.

(ix) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance programme of the workers should be undertaken periodically to observe any contraindications due to exposure to dust and to take corrective measures, if needed.

(x) A separate environmental management cell with suitable qualified personnel should be set up under the control of a Senior Executive, who will report directly to the Head of the company.

(xi) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to this Ministry and its Regional Office at Bhubaneswar.

(xii) The Regional Office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.

(xiii) A copy of the will be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.

(xiv) State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.

(xv) The Project authorities should advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at <http://envfor.nic.in>.

3. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

4. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.

5. 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)

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6/6

Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.



(Dr. T. Chandini)  
Director

**Copy to:**

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A/3 Chandrasekarpur, Bhubaneswar - 751023.
4. Chairman, Jharkhand State Pollution Control Board, TA Building, HEC Complex, PO Dhurva, Ranchi.
5. Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi-110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
7. District Collector, Chatra, Government of Jharkhand.
8. Monitoring File 9. Guard File 10. Record File



**Jitendra Kumar Singh**  
Project Officer  
Piparwar U/G

Jitendra Kumar Singh  
Project Officer  
Piparwar U/G

No. J-11015/240/2011-IA.II(M)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan,  
CGO Complex,  
New Delhi-110510.

To

Dated: 28<sup>th</sup> February 2012

Chief General Manager (E&F),  
**M/s Central Coalfields Ltd.,**  
Darbhanga House, Ranchi.

### MODIFICATION OF EC

**Sub: Introduction of a peak production capacity of 11.5 MTPA in the Environmental Clearance granted to Piparwar OCP (10 MTPA (nominal) of M/s Central Coalfields Ltd., located in Piparwar Area, Dist. Chatra, Jharkhand – reg.**

Sir,

This is with reference to letter No. CIL/DLI/ENV/2011 from CIL dated 29.09.2011 enclosing your TOR application for introduction of a peak capacity of 11.5 MTPA in the environmental clearance granted to Piparwar Opencast Coalmine Expansion Project for 10 MTPA and subsequent letters dated 02.12.2011, 12.01.2012 and e-mailed dated 13.01.2012 on the aforesaid subject. It is noted that Piparwar OCP was granted environmental clearance on 11.06.2007 for a production capacity of 10 MTPA. The proposal is for introduction of a peak capacity of 11.5 MTPA for the existing OCP of 10 MTPA without any change/increase in leasehold area, change in technology. The existing land use of the ML area of 1120.25 ha, consists of 63 ha is agriculture & fallow land, 630 ha area is under forest/plantation, 52.25 ha is waste land, 30 ha is water body, 249 ha is mining and 96 ha is under settlements and infrastructure. The total area to be brought under afforestation is 976 ha. Balance area is to be developed with plantation using native species. Forestry Clearance for the 186.50 ha of forestland has been obtained – 101.87 ha obtained on 13.01.2004, 43.30ha obtained on 03.01.1995, 13.11 ha obtained on 02.12.1992 and 28.22 ha obtained on 21.09.2001. There would be no external OB dump. Coal transportation is presently by use of 22-T capacity (250) dumpers. Transportation of coal from mine to washery is by conveyor system after in-pit crushing. Silo loading bulk loading facilities cum railway siding is under construction, which is to be commissioned by March 2013. The status of compliance of earlier EC has been furnished. The compliance status of the Public Hearing held on 19.5.2006 for the 10 MTPA project has also been furnished.

2. The Ministry of Environment & Forests has examined the application in accordance with the EIA Notification 2006 and under the provisions thereof, has approved the **modification of the Environmental Clearance letter dated 11.06.2007 granted to Piparwar OCP of M/s Central Coalfields Ltd.** under the provisions of the Environmental Impact Assessment Notification, 2006 and amendments thereto and Circulars issued thereon and subject to the compliance of the additional terms and conditions mentioned below:

- (i) The rated capacity of the Piparwar Opencast Coalmine Project shall be 10 MTPA normative and 11.5 MTPA peak capacity. The mine shall not exceed 11.5 MTPA production capacity.
- (ii) Mechanised silo and wagon loading shall be commissioned by March 2013 and a railway siding shall be established for coal transportation to reduce the dust pollution in the area.
- (iii) Native plant species including fruits trees shall be planted under the afforestation plan for mine reclamation.

  
**Jitendra Kumar Singh**  
Project Officer  
Piparwar U/G



- (iv) There shall be no new external OB dumps.
- (v) Clean drinking water shall be provided to adjoining villagers under CSR.
- (vi) Monitoring of air quality parameters SPM and RSPM shall be replaced with air quality parameters  $PM_{10}$  and  $PM_{2.5}$ .
- (vii) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$  and  $NO_x$ . Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, in  $PM_{10}$  and  $PM_{2.5}$  etc. shall be carried out at least once in a year.
- (viii) Data on ambient air quality ( $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$  and  $NO_x$  and heavy metals such as Hg, As, Ni, Cr, etc) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bhopal and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EP Rules, 1986 shall be furnished as part of the compliance report.
- (ix) Fugitive dust emissions ( $PM_{10}$ ,  $PM_{2.5}$  and heavy metals such as Hg, Pb, Cr, As, etc) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, dump trucks (loading and unloading) points shall be provided and properly maintained until coal transportation is by road.

(Dr T.Chandini)  
Director

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrashekarapur, Bhubaneswar - 751023.
4. Chairman, Jharkhand State Pollution Control Board, T.A. Division Building (Ground Floor), H.E.C., Dhurwa, Ranchi - 834004.
5. Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
8. Dr.R.K.Garg, Advisor, M/s Coal India Ltd., SCOPE Minar, New Delhi.
9. District Collector, Chatra, Government of Jharkhand.
10. Monitoring File 11. Guard File 12. Record File.

**Jitendra Kumar Singh**  
Project Officer  
Piparwar U/G

**Jitendra Kumar Singh**  
Project Officer  
Piparwar U/G

No. J-11015/76/2013-IA.II (M)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan,  
CGO Complex, Lodhi Road,  
New Delhi-110003

Dated: 20<sup>th</sup> May, 2014

To,

General Manager (Env. & Forests)  
M/s Central Coalfields Ltd.,  
Darbhanga House, PO- Ranchi,  
Dist- Ranchi,  
Jharkhand

**Sub. : Expansion, under 7(ii) of EIA Notification 2006, of Piparwar Opencast project (Normative capacity 10 MTPA to 12.50 MTPA and Peak capacity 11.5 MTPA to 14.375 MTPA in an ML area 1120.25; Latitude 23° 42' 38" N to 23° 44' 45" N & Longitude 85° 01' 34" N to 85° 03' 15" E) of M/s Central Coalfield Ltd., Dist. Chatra, Jharkhand – Environment Clearance - reg.**

Sir:

This is with reference to letter no. CIL/DLI/EMP/2013/24 dated 08.03.2013 with the application for **under 7(ii) of EIA Notification 2006** and subsequent letter nos. dated 23.07.2013; 22.10.2013; 28.12.2013 and 28.01.2014 for environmental clearance on the above-mentioned subject.

2. The Ministry of Environment & Forests has considered the application. It is noted that the proposal is for grant of Environmental Clearance for Expansion, under 7(ii) of EIA Notification 2006, of Piparwar Opencast project (Normative capacity 10 MTPA to 12.50 MTPA and Peak capacity 11.5 MTPA to 14.375 MTPA in an ML area 1120.25 ha; Latitude 23° 42' 38" N to 23° 44' 45" N & Longitude 85° 01' 34" N to 85° 03' 15" E) of M/s Central Coalfield Ltd., Dist. Chatra, Jharkhand. The proposal was considered in the 75<sup>th</sup> EAC held on 03<sup>rd</sup>-04<sup>th</sup> June, 2013; 5<sup>th</sup> EAC held on 25<sup>th</sup> - 26<sup>th</sup> November, 2013 and reconsidered in the 9<sup>th</sup> EAC meeting held on 20<sup>th</sup> - 21<sup>st</sup> January, 2014. The proponent has informed that:

- i. It was noted that EC was granted for Piparwar Opencast vide letter no. J-11015/186/2007-IA.II (M) dated 11.06.2007 for expansion in normative production capacity from 6.5 MTPA to 10.0 MTPA without increase in lease area. The introduction of peak capacity @ 11.5 MTPA was granted vide letter No.J-11015/240/2011- IA. II (M) dt. 28.02.2012 without increase in lease area. Now application submitted under 7(ii) of EIA Notification, 2006 for expansion.
- ii. M/s CCL is requesting for expansion in production capacity from **10 MTPA to 12.50 MTPA and Peak capacity 11.5 MTPA to 14.5 MTPA** in ML area 1120.25 ha under 7(ii) of EIA Notification 2006 with 25 % expansion.
- iii. The land usage of the project will be as follows:

Piparwar\_OCP\_EC

Page 1 of 11

  
**Narendra Kumar Singh**  
Project Officer  
Piparwar-113

Project Officer  
Piparwar-113



Pre-mining:

S No.	Particulars	Land Area (Ha)
1	Agriculture	163.60
2	Forest	186.50
3	Waste Land	490.80
4	Grazing	0.00
5	Surface Water Bodies	0.00
6	Others	279.35
Total		1120.25

Post-mining:

Particulars	Area(Ha)
Plantation On Backfilled Area	481.26
Decoaled void	58.74
Plantation	25.00
Industrial Area	372.90
Road	7.00
Lagoon	3.80
Nala	5.00
Settlement	45.00
Plantation	73.00
Undisturbed Area	38.55
Total Area	1120.25

Core Area:

Land-use of Core Zone During Different Stages of Mining					
Pre mining		During Mining		Present Status	
Particulars	Area (Ha)	Particulars	Area(Ha)	Particulars	Area(Ha)
Agriculture	163.60	Quarry	481.26	Agriculture	63.00
		Decoaled void	58.74		
Forest	186.50	Industrial Area	372.90	Forest/ Plantation	630.00
Waste Land	490.80	OB Dump	25.00	Waste Land	52.25
Grazing	0.00	Safety Zone & others	173.55	-	0.00
Surface Water Bodies	5.00	Surface Water Bodies	8.80	Surface Water Bodies	30.00
Others	274.35	0	0.00	Mining	249.00
-	0.00	0	0.00	Settlement & Infrastructure	96.00
	1120.25	Total	1120.25	Total	1120.25

- iv. The total geological reserve is 244 MT. The mineable reserve is 48.80 MT.
- v. The coal grades are E & F having stripping ratio of 0.75 (Cum/Tonne). The average Gradient is 2-5 deg.
- vi. There will be total two seams with thickness ranging from 2.25 -21.37 m.
- vii. The run-off within the area controlled by the diverted courses of Benti and Mangardaha

  
**Jitendra Kumar Singh**  
 Project Officer  
 Piparwar U/G

nallas. These two nallas are tributaries of the Damodar river and are seasonal water courses. Small streams near the southern part of the area flow directly into Damodar river. The main drainage pattern of the block is from the north to south. Garhi River, a tributary to river Damodar, flows on eastern side.

- viii. The total estimated water requirement is 1427 m<sup>3</sup>/d. The level of ground water ranges from 0.9 -7.0 m.
- ix. The Method of mining would be mechanized opencast by shovel dumper combination requiring drilling and blasting.
- x. There will be no external OB dumps. Presently, two internal dumping over an area of 481.26 ha. The height for the dumps would be at ground level. The total quantity of 28.33 4.20 mm<sup>3</sup>. The final mine voids will have an area of 58.74 ha, and depth 90 m which is proposed to be converted into a water body. Backfilled quarry area of 481.26 ha shall be reclaimed with plantation.
- xi. The seasonal data for ambient air quality has been documented for the summer season (March 2010 to June 2010) and all results at all stations are within prescribed limits.
- xii. The **life of Mine** is 35 years (original PR) 13 years from 2007.
- xiii. **Transportation:** Transportation of coal in pit by belt conveyor. Surface to siding by trucks and siding to loading by mechanised loading.
- xiv. **Rehabilitation** of all 370 PAFs of Piparwar OCP has been completed.
- xv. **Cost:** Total capital cost of the project is Rs. 1093.65 Crore. The cost of production would be Rs. 518.10 Tonne at 100% Production level and Rs. 531.38 Tonne at 85% production level. R&R Cost Rs. 16.05 crores. Environmental Management Cost is Rs. 666.44 lakh.
- xvi. **Approvals:** Application under preparation for ground water clearance. The Mine Closure plan 24.02.2012. The Mining Plan was approved on 09. 09. 2006 by the Ministry of Coal. The Board's Approval was accorded on 09.09.2006.
- xvii. **Wildlife issues:** There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xviii. **Forestry issues:** Total forest area involved for mining 186.50 Ha for which Stage-I FC has been obtained.

Stage-II FC issued vide letter no. & date	Area (in ha)
8-172/89-FC, Dated 2/12/1992	13.11 ha
8-172/89-FC, Dated 03/01/1995	43.3 ha
8-148/98-FC, Dated 21/09/2001	28.22 ha
8-54/2003FC, Dated 13/01/2004	101.87 ha
Total	186.50 ha

- xix. Total **afforestation** plan shall be implemented covering an area of 589.26 ha at the end of mining where reclaimed external OB dump is 25 ha and Internal OB Dump 481.26 ha. Green Belt over an area of 108 ha. Density of tree plantation 2500 trees/ ha of plants.
- xx. **Court cases/violation:** There are no court cases/ violation pending with the project proponent.
- xxi. **Public hearing:** The last public hearing was held on 19.05.2006. The issues raised were regarding employment, railway siding, water pollution, air pollution drinking water facility, control of pollution due to transportation, etc.

3. The project proponent further informed on the compliance report of the MoEF's Regional Office (vide their letter no. 106-102/EPE dated 08.07.2013) and noted, inter alia, the following:

- i. Gap plantation need to be developed at certain portions along the bund for which Action

**Jitendra Kumar Singh**  
Project Officer  
Piparwar U/G



- Plan be submitted.
- ii. Proper sloping and benches should be made on the OB dumps located along the conveyer system and plantation should be developed.
  - iii. Black topping of remaining portion of about 15 km of coal transportation road is yet to be completed. All the vehicles engaged in the mining activity including contract vehicles should obtain "Pollution under Control Certificate".
  - iv. Project is yet to obtain prior approval of CGWA/CGWB Regional Office for use of groundwater for which immediate action be taken.
  - v. Monitoring of ground water to assess the seasonal changes in ground water level has not been carried out. No Piezometers have been constructed for monitoring ground water level and quality.
  - vi. Efforts should be made for ground water recharging in the villages.
  - vii. Project authorities should obtain 'Consent to operate' from Jharkhand State Pollution Control Board and apply for renewal subsequently within the time.
  - viii. The cause(s) for higher value of  $PM_{10}$  be ascertained and necessary measures be taken to comply with the prescribed standards.  $PM_{2.5}$  should also be monitored as per the national ambient air quality standards.
  - ix. Overloading of the trucks should be avoided in order to stop spilling of coal.
  - x. It has been noticed that both the Environment Officer at Project and area level are in additional charge. It is necessary that the Nodal Environment Officer at Project as well as Area Environmental Officer should be employed on full time basis and should not be given additional duties.
4. The Committee deliberated on the Report of the RO MOEF vis- a-vis the commitments made by the Proponent which are as follows. The proponent has further informed that:
- i. All vehicles have valid PUC certificate.
  - ii. Two Railway Siding shall be completed by June, 2014 at an estimated cost of Rs 15.0 Lakh.
  - iii. All sets (4 nos.) of piezometers will be installed by 15<sup>th</sup> Feb. 2014.
  - iv. All vehicles have valid PUC certificate. Vehicles engaged in coal transportation also have valid PUC certificate. One Engineer has been authorized to check the road-worthiness & mandatory requirements for each of the trucks deployed.
  - v. 36 dug wells are routinely monitored by CMPDI in pre & post monsoon seasons in the surrounding villages. The monitoring records are maintained.
  - vi. Areas have been identified for plantation. Pits for plantation will be dug by 28th Feb. 2014. 300 nos. of fruit bearing species (mango, jackfruit, guava etc.) will be planted during July, 2014. The estimated cost shall be Rs. 0.25 Lakh.
  - vii. The OB dump along the conveyer system is about 1.0 km in length. Formation of benches with proper sloping (at 280) has been completed for 125 m. Benches with proper sloping for remaining length (875 m) will be completed by March, 2014 and plantation will be done during monsoon season.
  - viii. 9.6 km long concrete coal transportation road completed. Concretization of remaining 4.2 km long coal transportation road will be completed by June 2014. Estimated cost: Rs. 18.90 Crore.
  - ix. Efforts have been made for ground water recharge by construction of ponds. 22 nos. of ponds constructed in villages Behera, Billari, Kisto, Karo, Kalyanpur, Rajdhan, Bijan, Benti. Construction of check dams have been made at Benti nallah - 3 nos; Mangardaha nallah - 1 no. Additional construction of 2 check-dams on Kalyanpur Nallah, one check-dam each on Benti & Mangardaha nallah will be done by March 2014.

  
**Narendra Kumar Singh**  
 Project Officer  
 Pigawar UG

- x. Application for Consent to operate submitted on 04-04-2013 for the period 01-04-2013 to 31-03-2014.
- xi. Higher PM<sub>10</sub> values in dry months are due to fugitive emissions from mining operations like coal transportation. Necessary measures have been taken that include: entire coal transportation road is being concretized.
- xii. In order to avoid coal transportation by road, the Railway Siding Project is being monitored on priority basis so that it is completed by June, 2014. Introduction of Rail transportation of coal will drastically reduce PM<sub>10</sub> concentration.
- xiii. CMPDIL has procured PM<sub>2.5</sub> samplers and monitoring of PM<sub>2.5</sub> will start from April, 2014.
- xiv. Overloading of trucks has been stopped completely.
- xv. Separate executives have been posted at Project and Area level exclusively as Environment Officers.

5. The proposal was reconsidered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 9<sup>th</sup> EAC meeting held on 20<sup>th</sup> - 21<sup>st</sup> January, 2014 for granting Environmental Clearance. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Expansion, under 7(ii) of EIA Notification 2006, of Piparwar Opencast project (Normative capacity 10 MTPA to 12.50 MTPA and Peak capacity 11.5 MTPA to 14.375 MTPA in an ML area 1120.25 ha; Latitude 23° 42' 38" N to 23° 44' 45" N & Longitude 85° 01' 34" N to 85° 03' 15" E) of M/s Central Coalfield Ltd., Dist. Chatra, Jharkhand** under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments thereto subject to the compliance of the terms and conditions mentioned below:

**A. Specific Conditions:**

- i. The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC.
- ii. The validity of EC is coterminous with life of the mine.
- iii. No mining operations shall be undertaken in the forestland until clearance has been obtained under the provisions of FC Act, 1980.
- iv. Two Railway Sidings shall be completed by June, 2014.
- v. No coal transportation by road shall be permitted thereafter.
- vi. Approval of CGWA/CGWB be taken for use of groundwater.
- vii. All piezometers shall be installed by 15th Feb. 2014 and report sent to Central Ground Water Board and the RO, MOEF.
- viii. All vehicles shall have valid Pollution Under Control Certificates.
- ix. Benches with proper sloping for remaining length (875 m) will be completed by March, 2014. A progressive action plan on these issues be submitted to the RO, MOEF by August 2014.
- x. 9.6 km long concrete coal transportation road shall be completed within four months. Progressive action on these issues be submitted to the RO, MOEF by December, 2014 along with expenditure and photographic evidence.
- xi. Check-dams on Benti & Mangardaha nallah shall be constructed by March 2014.
- xii. Monitoring of PM<sub>2.5</sub> shall start from April, 2014 and report submitted to the SPCB and RO, MOEF.
- xiii. Plantation shall be completed by July, 2014. A status report in this regard be submitted to the RO, MOEF by August, 2014.
- xiv. The proponent should appoint environment engineers/ecologist for monitoring environment issues.

  
**Jitendra Kumar Singh**  
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 Piparwar U/G



- xv. Proponent should expeditiously take up the matter with the Coal India to create an Environment Cadre for future employment in Coal India and its subsidiaries.
- xvi. Transportation of coal in pit by belt conveyor. Surface to siding by trucks and siding to loading by mechanised loading.
- xvii. The production shall be within the same Mining Lease area.
- xviii. The OB shall be completely re-handled at the end of the mining.
- xix. Final mine void depth will not be more than 40 m. The void area will be converted into waterbody. The rest of the area will be back filled upto the ground level and covered with about a meter thick top soil and put to use.
- xx. Garland drains be provided.
- xxi. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine.
- xxii. The land after mining shall be brought back for agriculture purpose.
- xxiii. Mine water should be treated for discharge into the lagoon. The quality of lagoon water shall be regularly monitored and mitigation measures taken.
- xxiv. The CSR cost should be Rs 5 per Tonnes of Coal produced which should be adjusted as per the annual inflation.
- xxv. Mining shall be carried out as per statuette at a safe distance from the Damodar River/Safina flowing adjacent to the lease boundary.
- xxvi. Topsoil, if any, should be stacked properly with proper slope at earmarked site(s) and should not be kept active and shall be used for reclamation and development of green belt.
- xxvii. Waste water from coal washery shall be treated to prescribed standards and recycled for mining operations to the maximum extent possible.
- xxviii. ETP should also be provided for treating workshop effluents and excess mine water to meet prescribed standards and recycled for mining operations to the maximum extent possible.
- xxix. An STP shall be provided in the township for treating domestic wastewater to meet the prescribed standards and recycled for mining operations to the maximum extent possible.
- xxx. Consent to Operate shall be obtained before starting mining operations after fulfilment of conditions imposed in NOC.
- xxxi. Everybody in the core area should be provided with mask for protection against fugitive dust emissions.
- xxxii. Dust mask to be provided to everyone working in the mining area.
- xxxiii. The supervisory staff should be held personally responsible for ensuring compulsory regarding wearing of dust mask in the core area.
- xxxiv. People working in the core area should be periodically tested for the lung diseases and the burden of cost on account of working in the coal mine area.
- xxxv. The mining area should be grounded by green belt having thick closed thick canopy of the tree cover.
- xxxvi. The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilised with plantation so as to withstand the peak water flow and prevent mine inundation.
- xxxvii. There shall be no overflow of OB into the river and into the agricultural fields and massive plantation of native species shall be taken up in the area between the river and the project.
- xxxviii. OB shall be stacked at no external OB dumpsite(s) only. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its concerned Regional office on yearly basis.

  
**Atendra Kumar Singh**  
 Project Officer  
 Piparwar U/G



- xxxix. Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilised for watering the mine area, roads, green belt development, etc. The drains shall be regularly desilted and maintained properly. Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.
- xl. Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.
- xli. Crushers at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.
- xl.ii. Drills shall be wet operated.
- xl.iii. The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads.
- xl.iv. Controlled blasting shall be practiced with use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.
- xl.v. A Progressive afforestation plan shall be implemented covering an area of 589.26 ha at the end of mining, which includes reclaimed External OB dump area (25 ha), Internal OB dump area (481.26 ha), and Green belt (108 ha) and in township located outside the lease by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. Massive plantation shall be carried out in open spaces in and around the mine and a 3-tier avenue plantation along the main approach roads to the mine.
- xl.vi. An estimated total 28.33 Mm<sup>3</sup> of OB will be generated during the entire life of the mine. There are no external OB Dumps. 28.33 Mm<sup>3</sup> of will be two internal OB dump in covering an area of 481.26 ha. The maximum slope of the dump shall not exceed 28 degrees. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self-sustaining and compliance status shall be submitted to MOEF and its Regional Office on yearly basis.
- xl.vii. The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- xl.viii. Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- xl.ix. The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.
- i. No groundwater shall be used for mining operations.
  - ii. Of the total quarry area of 540 ha, the backfilled quarry area of 481.26 ha shall be reclaimed with plantation and a void of 58.74 ha at a depth of 40 m which is proposed to be converted into a water body shall be gently sloped and the upper benches shall be terraced and stabilised with plantation/afforestation by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.
  - iii. Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus



- collected shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.
- lii. The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring indicates a decline in water table. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
  - liv. Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
  - lv. Besides carrying out regular periodic health check-up of their workers, 10% 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, through an specialised agency /institution within the District/State and the results reported to this Ministry and to DGMS.
  - lvi. A project specific R&R prepared for the project shall be implemented. R&R for a cost of not less than Rs 666.44 lakhs for the 375 PAFs shall be completed within an agreed time schedule. Land oustees shall be compensated as per the norms laid out R&R Policy of CIL, or the National R&R Policy or R&R Policy of the State Government whichever is higher.
  - lvii. For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its concerned Regional office
  - lviii. A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests within 6 months of grant of Environmental Clearance.
  - lix. The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.
  - lx. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent.
  - lxi. Corporate Environment Responsibility:
    - a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
    - b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
    - c) The hierarchical system or Administrative Order, of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
    - d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

#### **B. General Conditions:**

- i. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.
- ii. No change in the calendar plan of production for quantum of mineral coal shall be made.
- iii. Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally

  
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 Piparwar U/G



and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.

- iv. Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EPA rules, 1986 shall be furnished as part of compliance report.
- v. Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.
- vi. Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May 1993 and 31<sup>st</sup> December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.
- vii. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.
- viii. Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EPA Rules, 1986.
- ix. Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.
- x. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.
- xi. A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.
- xii. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.
- xiii. The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at <http://envfor.nic.in>.
- xiv. A copy of the environmental clearance letter shall be marked to concern Panchayat/Zila Parishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.
- xv. A copy of the environmental clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.
- xvi. The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project

Jitendra Kumar Singh  
Project Officer  
Piparwar U/G



authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.

- xvii. The project proponent shall submit six monthly compliance reports on status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the Ministry, respective Zonal Office s of CPCB and the SPCB.
- xviii. The Regional Office of this Ministry located in the Region shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
- xix. The Environmental statement for each financial year ending 31 March in For -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 by e-mail.

6. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.

7. The proponent is required to 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.

8. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

9. The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.

10. This EC superseded ~~denied~~ **denied** ~~case of washery~~ **case of washery**, vide letter no. J-11015/186/2007-IA.II (M) dated 11.06.2007 for expansion in normative production capacity from 6.5 MTPA to 10.0 MTPA and modified EC granted vide letter No.J-11015/240/2011- IA. II (M) dt. 28.02.2012 for peak capacity @ 11.5 MTPA within same mining lease area.

11. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.

12. 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.

13. 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

  
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with their amendments and Rules. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.

(Dr. Manoranjan Hota)  
Director

**Copy to:**

1. Secretary, Ministry of Coal, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrashekarpur, Bhubaneswar - 751023.
4. Member-Secretary, Jharkhand State Pollution Control Board, T.A. Division Building (Ground Floor), H.E.C., Dhurwa, Ranchi - 834004.
5. Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi -110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
7. Dr. R.K. Garg, Advisor, Coal India Limited, SCOPE Minar, Core-I, 4<sup>th</sup> Floor, Vikas Marg, Laxmi Nagar, New Delhi.
8. District Collector, Chatra, Government of Jharkhand.
9. Monitoring File    10.    Guard File    11.    Record File.    12. Notice Board

(Dr. Manoranjan Hota)  
Director

  
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