# **REPORT ON**

# VERIFICATION OF MINE CLOSURE ACTIVITIES AT MOONIDIH UNDERGROUND PROJECT FROM 2013-14 TO 2017-18

## **BHARAT COKING COAL LTD**



**VERIFICATION BY** 



Indian Institute of Engineering Science and Technology, Shibpur June 2020



Dated: 10/06/2020

#### Certificate

This is to certify that the Department of Mining Engineering at Indian Institute of Engineering Science and Technology, Shibpur visited Moonidih UG Mine Colliery of BCCL and collated evidence of actual work carried out along with expenditure incurred for activities related to mine closure for the period 2013-2018.

Based on verification of documents and collection of field evidence, it is certified that the activities related to mine closure have been carried out in accordance with the Mine Closure Plan approved by the Competent Authority. It is further certified that the statements furnished by the mine management in yearly progress reports for the period 2013 to 2018 are correct. Based on sample checks of all cost figures, it is also certified that Rs. 97,44,355/- (Rupees Ninety Seven Lakh Forty Four Thousand Three Hundred Fifty Five only), the total cost as calculated for reimbursement is also reasonably correct.

The cost stated above is excluding the cost of regular active mining operation for production of coal.

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# Abbreviations and acronyms used

BCCL	Bharat Coking Coal Limited
BDL	Below Detection Limit
CCO	Coal Controller's Organisation
CIL	Coal India Limited
DB	District Board
IIEST	Indian Institute of Engineering Science and Technology, Shibpur
MMDR	The Mines and Minerals (Development and regulations) Act, 1957
MOC	Ministry of Coal
MOEF	Ministry of Environment, Forests and Climate Change
OB	Overburden
OCP	Opencast Project
UG	Underground
PSLW	Powered Support Longwall
PDIL	Projects and Development India Limited

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#### 1. INTRODUCTION

There is an increasing necessity felt worldwide to provide for 'sustainability' of ecological and social settings in which mines are developed, operated and finally closed. It is essential for sustainability of mining operations that post closure planning is carried out prior to commencement of mining operations.

Mine closure planning is a life of mine exercise that begins with the commencement of mining operations and continues till closure. Mine closure is an orderly, safe & environmentally sound conversion of an operating mine to a closed state. Areas affected by mining activity should become viable and self sustaining eco-systems that are compactable with the healthy environment with human activities.

The main objective of the mine closure planning is:

- a) To allow productive and sustainable after-use of the site, this is acceptable to the mine owner and the regulatory authorities.
- b) To protect public health and safety.
- c) To eliminate environmental damage and thereby encourage environmental sustainability.
- d) To minimize adverse socio-economic impacts.
- e) To protect the flora and fauna of the area.
- f) Effective use of the assets.
- g) Green belt development around the project area.

These objectives are often broadly discussed as the environmental impacts of a site or a closure plan. It is convenient to consider potential impacts in four groupings:

**Physical stability** - Buildings, structures, workings, pit slopes, underground openings etc. must be stable and not move so as to eliminate any hazard to the public health and safety or material erosion to the terrestrial or aquatic receiving environment at concentrations that are harmful. Engineered structures must not deteriorate and fail.

**Geochemical stability** - Minerals, metals and 'other' contaminants must be stable, that is, must not leach and/or migrate into the receiving environment at concentrations that are harmful. Weathering oxidation and leaching processes must not transport contaminants, in excessive concentrations, into the environment. Surface waters and groundwater must be protected against adverse environmental impacts resulting from mining and processing activities.

Land use - the closed mine site should be rehabilitated to pre-mining conditions or conditions that are compatible with the surrounding lands or achieves an agreed alternative productive land use. Generally the former requires the land to be aesthetically similar to the surroundings and capable of supporting a self-sustaining ecosystem typical of the area.

**Sustainable development** - elements of mine development that contribute to (impact) the sustainability of social and economic benefit, post mining, should be maintained and transferred to succeeding custodians.

Management of the above broad impacts can be achieved through both gradual/progressive mine closure carried out throughout the working life of the mine and the final mine closure, which needs to be initiated before the end of the practical life of the mine.

#### 2. MINE CLOSURE GUIDELINES

As per Memo No. 55011-01-2009-CPAM dated 7<sup>th</sup> January, 2013 issued by Ministry of Coal, Government of India, all coal mines (new and existing) are required to prepare Progressive and Final Mine Closure Plans approved by the Competent Authority as part of their Mining Plan/Project Report. The guidelines for preparation of the Progressive and Final Mine Closure Plans are also detailed in the Memo. The mine owners are also required to deposit an amount commensurate with the leasehold area of the mine, called the Closure Cost, into a designated Escrow account every year. An annual progress report of activities related to Mine Closure in the given format as per the Approved Mine Closure Plan is to be submitted to the Office of the Coal Controller (CCO). The mine owners can get back 80% of the total amount deposited as Closure Cost after every five years or the actual expenditure incurred towards mine closure over the period, whichever is less. However, for getting back this amount, the activities and expenditure incurred over the period has to be verified by an approved third party agencies as notified by CCO vide its letter no. CC/MCPS/CIL/2011-12/110 dated 27.12.2016.

The 2013 guidelines for formulation of Mining plan and Mine Closure Plan has since been amended *vide* MoC letter F. No. 34011/28/2019-CPAM dated the 16th December 2019. The CCO, *vide* its letter no. CC/MCPS/Policy/13-14/328/3 dated 31st December, 2019 saught the following clarifications:

- a) Whether the claims already received for reimbursement before the issuance of new guidelines are to be processed as per the previous guidelines or not.
- b) Some of the claims are to be returned due to some technical reasons. Whether those claims are to be treated as per old guidelines or new guidelines?

In response the MoC clarified that, henceforth, all proposals should be processed as per the new guidelines (issued on 16th December 2019) irrespective of the date of receipt of proposal.

Subsequently the CCO, through its communiqué F No.: CC/ MCPS/ Tech-Committee/ Meeting/ 2017-18/ 442 dated February 26, 2020 issued 'Standard of Operating Procedure for Mine Closure reimbursement against Mine Closure Activities in line with the new guidelines'. The CCO communiqué mentioned, inter-alia, the following:

- a) All Mine Closure Activities are Project Specific and are to be decided as per approved Mining Plan/Mine Closure Plan.
- b) Any Activity which is as per regular active Mining Operation for Production of coal/ lignite will not attract Mine Closure Reimbursement while claiming for Progressive Mine Closure Activities. While submitting claims, certification in this regard from third party authorised Government Institution is to be given.

c) The Reimbursement Amount against Progressive Mine Closure Activities will be 50% of the total deposited amount including interest accrued in Escrow Account instead of 80%. Specific Notice in this regard for existing Escrow Agreements will be issued as per Clause under Head "Amendment of the Agreement" of Escrow Agreement.

As was stipulated in para 3.1 of the mine closure guidelines issued in 2013, the company prepared progressive mine closure plan for a period of five years from 2013-14 to 2017-18. As required under section 07 of the 2013 guidelines, the company also submitted to the Coal Controller a yearly report every year setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved mine closure plans (Progressive and Final Closure Plans).

The guidelines required that these plans would be examined periodically in every five year period and would be subjected to third party monitoring by the agencies approved by the Central Government. The IIEST being one such approved agency for verification of mine closure reports (approved vide MoC memo no 55011/01/2009-CPAM dated June 29, 2016), the Bharat Bharat Coking Coal Limited (BCCL) has issued work order to the Institute (*viz.*, IIEST) (*vide* Work Order No. BCCL/ Dy.GM(envt.)/ Mine closure/ IIEST/ 2019/ 271 dated 25.11.2019, for assessment and verification of mine closure activities of several BCCL mines, including the for the five year period from FY 2013-14 to FY 2017-18. As per the terms of the work order, the third party audit is to be carried out as per the details submitted in the annual progress reports.

Para 2.2 of the revised guidelines issued on 16.12.2019 stipulates that "Progressive mine closure plan shall be prepared for a period of every five years from the beginning of the mining operations. These plans would be examined periodically in every five years period and to be subjected to third party monitoring by the agencies approved by the Central Government." Para 2.12 of the revised guidelines provide that "Up to 50% of the total deposited amount including interest accrued in the ESCROW account may be released after every five years in line with the periodic examination of the Closure Plan as per Para 2.2. The amount released should be equal to expenditure incurred on the progressive mine closure in past five years or 50% whichever is less."

#### 2.1 Scope of the Report

This report contains the statement of IIEST team upon verification of progressive mine closure activities carried out at Moonidih Underground Project as per the approved Mine Closure Plan for the period 2013-14 to 2017-18. As is usually the case with third party auditing, the third party monitoring of the activities has been thorough but, if the huge volume of work involved in mine closure and the long timeline of five years involved are kept into perspective it falls a little short of being exhaustive. However, the verification statements made are true beyond reasonable doubts. While every endeavour has been made to verify the activities claimed by field visits and visual assessment, almost all the documents furnished and the statements submitted by the mine management have been verified against furnished documents. The IIEST team exercised all practicable due diligence while verifying the activities, statements, and costs.

#### 3. BRIEF DESCRIPTION OF THE MINE

The Moonidih Underground Project is operated by the Bharat Coking Coal Limited (BCCL), - a subsidiary of the Coal India Limited. Moonidih Underground Project is well connected by

road and rail. The district town Dhanbad, which is the main city of Jharia Coalfield is about 10 Km from the mine and is connected with NH-32 passing through the north-western part of the area. A railway siding line passes through the Central part of the colliery connected with Bhojudih-Chandrapura railway line of S.E. Railway near Mohuda Railway Station.

Moonidih Underground Project is operating within the project area of 2063.45 Hectares. The colliery was under NCDC since inception (start of development work: 1964). It was undertaken in collaboration with Polan under the First Agreement, dated 7<sup>th</sup> May, 1960, on Economic Cooperation between the Government of India and the Government of Polish Peoples Republic.

This mine was designed for horizon mining system up to 500 metre to produce coking coal from seams XVIII to XV Bottom for a production capacity of 2.1 rnty. This Project was opened in 1967 by two vertical shafts namely Shaft No. 1 (depth 543.5 M) and Shaft no. 2 (depth - 560.7 M) each of 7.5 metre finished diameter & situated 80 metre apart. The infrastructural facilities for production are fully developed including pit head washery. This mine has achieved the production level of 1.2 mty. The capacity of the Project has been derated to 1.50 mty (RPR February 1983).

The Coal India (Regulation of Transfer and validation) Act 2000 came into force with effect from December 8, 2000. By virtue of the Section 4 of the Act read with the Sub-Section 3(2) of the same Act, the BCCL is deemed to have been granted a fresh lease for a period of 30 years from that date.

The present production from the mine is about 400 TPD by development through 4 no. of Roadheaders from seams XVI T and XVI B seams. The next lower XV seam has been touched at 500 Mh and at present no work is being done.

At present no PSLW(Powered Support Longwall) set is available for operation at Moonidih, as all except ML-VII have outlived their life. ML-VII PSLW set, idle at present, is stated as defective and unsafe for use due to inherent design defects and requires major refurbishment.

The present status of PSLW sets deployed at Moonidih since inception are given in Table 3.1

PSLW set	Year of commissioning	Present status
ML-I	1978	Surveyed off in 1990-91.
ML-II	1980	Surveyed off in 2001-02.
ML-III	1985	Surveyed off in 2001-02.
ML-IV	1986	Life exhausted. To be
		surveyed off.
ML-V	1988	Life exhausted. Set could not
		be salvaged from D-14A
		panel.

Table 3.1PSLW sets deployed at Moonidih

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ML-VI	1988	Modified from Plough to	
		Shearer. Limited applicability	
		due to its suitability for	
		working thin seam only.	
ML-VII	1992	Inherent design defects.	
		Unsafe for use. Idle. Requires	
		major refurbishment.	

The Moonidih Underground Project is presently producing 400 *Mte* of coal per day. The balance mineable reserve is about 151.3865 *Mte*. The coal production figures for the five financial years under consideration are furnished in Table 3.2. Some snap shots of the Moonidh Underground Project taken during the field visits by the IIEST team are provided in Figure-3.1 to 3.3.

Table 3.2	Coal Production for the last five years.	
Year	Coal Mined Out (In <i>Mte</i> )	
2013-14	0.117860	
2014-15	0.063116	
2015-16	0.352520	
2016-17	0.575100	
2017-18	0.435480	
Total	1.544076	

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Figure - 3.1 IIEST Team at Moonidih Underground Project.



Figure: 3.2 IIEST Team at the revegetated leasehold area.



Figure 3.3 Settling tank

#### 4. PROGRESSIVE MINE CLOSURE PLAN

The progressive mine closure activities will continue as envisaged in the mining plan, if any, and as enumerated in the various approvals, permits, consents etc. It is very difficult to predict the various parameters which would be prevalent at the time of final mine closure and also to foresee the likely impacts due to closure of the mining activities (when the entire block reserve would get exhausted). However, broad mine closure activities need to be identified under the various heads.

The Moonidih Underground Project is operating under the Western Jharia (W J) Area of BCCL The mine is located in the eastern part of Jharia Coalfield. Rocks of Barakar formations occur in the area are overlain by thin layer of alluvium. Barakar comprise of grits, fine to coarse grained sandstone, intercalations of sandstone and shale, sandy shale, grey shale, carbonaceous shale and coal seams. The general strike of the formation is found to be NW-SE / due SW in the major part of the area and takes a turn in the south eastern / eastern part of the area toward NE-SW / due SE. The dip of the strata varies between 7° to 12° in the entire block. Based on the available data and colliery workings, 10 nos. of faults have been interpreted to have affected the coal seams under consideration. The possibility of existence of minor faults (Throw <5) cannot be ruled out.

Total coal produced during 2013-14 to 2017-18 (was 1.544076 *Mte* and the area mined out is 1174.74 ha. The highlights of planned progressive mine closure activities as detailed in the approved mine closure plan are furnished below.

#### 4.1 Type of present and proposed land use of mining area (ha)

Moonidih Underground Project has a lease hold of 2063.586 *ha*. The type of lease area is shown in Table 4.1. The proposed post-mining land use plan vis-à-vis present land use is given below in Table 4.2

At present, the Moonidih Underground Project is being worked in development faces by 3numbers of heading machines. The machines are deployed in XVI Top and Bottom seams. The total balance mineable reserves in the seams are about 151.3865 *Mte*. Thus, keeping in view of the available reserves in the seam and present mine production, the remaining life of the underground mine has been estimated as 30 years.

Sl. No	Particulars	Mining Area (Ha)	Outside mining Area (Ha)	Total (Ha)
1	BCCL Land	1223.235	Nil	1223.235
2	Govt. Land	278.305	Nil	278.305
3	Tenancy/Private Land	481.47	Nil	481.47
4	Forest Land	80.44	Nil	80.44
	Total	2063.45		2063.45

Table 4.1: Type of lease
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#### Table 4.2 proposed post-mining land use plan vis-à-vis present land use

Sl. No	Type of land use		Present mining land	Post mining land use
			use in Ha	in Ha
1	Running Quarry	Backfilled	Nil	Nil
1.		Not Backfilled	Nil	Nil
	Abandoned	Backfilled	Nil	Nil
2	Quarry		N 714	2.74
		Not Backfilled	N1l	N1l
3	External OB Dump		Nil	Nil
4	Coal dump		Nil	Nil
5	Service Building/ Mine infrastructure		114.40	114.40
6	Homestead land		128.50	128.50
7	Agricultural land		480.75	480.75
8	Forest land		80.44	80.44
9	Plantation		33.93	52.45
10	Water body		74.25	74.25
11	Barren land		1118.52	1100.00
12	Road and rail		32.66	32.66
	Total		2063.45	2063.45

The water filled area will be handed over to State Authorities for conversion into a picnic spot with proper fencing and security. If necessary, the lagoon may also be used by the State authority for supplying water to local community after proper treatment of the same.

#### 4.2 Land Reclamation and rehabilitation

In the Moonidih Underground Project, if any cracks or void is created due to mining activities, it will be restored to original profile by filling up cracks/ voids. It is proposed that the site restoration should be kept progressive so that the restoration is more or less similar to the rate of mining.

Reclamation of forest/ vegetation and plantation: 80.44 Ha of forest land is involved in Moonidih. As the extraction will occur at depth no surface subsidence is likely to be caused. Moreover, regular plantation will be taken up during the life of the mine to create green barrier. The plant species will be selected in consultation with the state forest department.

The objective of restoration of post mining area will be determined through consultation with local community and the Government authority, so that the potential/ required end use of the mined out land is determined in advance Such usage may be agriculture, forestry, amenity development or nature reserve.

### 4.3 Water Quality Management

**Existing drainage pattern:** Moonidih Underground Project falls in Cluster XI for the purpose of EMP.The area is represented by flat to moderately undulating topography. The highest ground level (RL 201.31m) has been recorded in the eastern part of the block at borehole no. NCCJ-20. The lower ground level of around 132m has been observed along the southern limit of the block (along the left bank of the river Domodar). The general slope is toward south and south-east. The drainage of the area is controlled by Jarian nala & Damodar river.

**Post closure drainage pattern:** If in future mine is reopened and balance mineable reserves are exploited, area of the mine will be depillared with stowing. As mining of the property is associated with stowing, the general drainage pattern of the area would not get disturbed. Depression, if any, will be suitably filled with non - combustible rocks and cohesive soils, dozed and graded. If some minor alteration takes place, the natural drainage profile of the entire leasehold area would be kept maintained in a manner which will facilitate the normal run-off. Garland drain may be constructed to ensure the controlled drainage of the area.

#### 4.3.1 Water quality status of surface and groundwater

#### **Present Practice**

Regular samples of mine water as well as drinking water are collected and got tested. Results of water testing are compared with MOEF standard.

Two and a half litres of ground water from dug wells and tube wells are collected in clean PVC containers and these samples are analysed at Environmental Laboratory, BCCL, Dhanbad to check any contamination whatsoever.

#### Present status of water quality

The monitoring of water quality under Baseline Environment Data Generation for Cluster XI has been conducted by VRDS Consultancy, Chennai by collecting water samples from ground water, surface water and mine water discharge / workshop discharge (if any) for the proposed project. The various purposes of the water environment monitoring are as follows:

- a) To assess the water quality characteristics for critical parameters;
- b) To evaluate the impacts on agricultural productivity, habitat conditions, creational resources and aesthetics in the vicinity ; and
- c) To facilitate predication of impact on water quality by project activities

The results as per VRDS Consultancy, Chennai Report are given subsequently.

To assess the quality of lotic system (surface water), water samples were collected from the following locations (Refer to PDIL Report) shown in Table - 4.3:

Sl. No.	Sample	Sample	Description	Sampling	Remark
		Code		Site	
1	Surface	SW-1	Damodar	Damodar	Core Zone
	Water		River	River D/S	
2	*	SW-2	Damodar	Damodar	Buffer Zone
			River	River D/S	
3		SW-3	Katri River	Katri Nadi	
4		SW-4	Katri River	Katri Jore	
				D/S	
5	*	SW-5	Katri River	Katri Jore	
				D/S	
6	Drinking	GW-1	Groundwater	Bhagaband	Core Zone

Table-4.3: Sampling Location for Water quality monitoring in Cluster XI

Sl. No.	Sample	Sample Code	Description	Sampling Site	Remark
	Water			Dug Well	
7		GW-2	Groundwater	Beltanr	
8		GW-3	Groundwater	R. S.	Buffer Zone
				Bansjora	
				Bore Well	
9	Effluent	EW-1	Mine water	Jeenagora	Core Zone
10	Water	EW-2	Mine water	Hurriladih	Buffer Zone

#### 4.3.2 Mine Water Quality:

The pH value is found to be in the range of 7.76 to 7.86. BOD values are found to be 7.0 mg/l to 9.0 mg/l. COD values are found to be 40 mg/l to 46 mg/l. Suspended solids are found to the maximum extent of 60 mg/l. Kjeldahl Nitrogen are found to the maximum extent of 2.60 mg/l

All the values are found to be well within the MoEF Scheduled VI norms.

#### 4.3.3 Measures for Control of Pollution (Details for Pollution Control Arrangement)

#### 4.3.4 Impact due to Water Pollution and its Management

The mine discharge water may contain high-suspended solids and other pollutants. The treatment scheme thus needs to focus on the removal of suspended solids from the water. Mine water must be treated to meet the prescribed standards before being discharged into water bodies. When the water is used for agricultural or domestic work, it shall undergo further treatment, as established by Scientific Studies conducted in this regard. The important factors to be considered in selecting the appropriate method for treatment are as follows:

- (a) Settling tank will be provided to collect the mine discharged water for settling the suspended solids.
- (b) The flow and the quality of mine water vary seasonally. Therefore settling tank should be so constructed that it will be able to absorb these fluctuations.
- (c) The mine water must be neutral in nature before discharge and therefore necessary neutraliser may be provided to maintain the pH of the settling pond water.
- (d) In order to reduce the dependence on fresh water sources for meeting the demands of water in the mining related operations, the entire mining water will be utilised. The effluent free mine water will be utilised in water spraying for dust suppression, hydraulic stowing, equipment washing and other industrial requirements.
- (e) Mine water discharge and drainage in the core zone has been planned to be regulated in a manner so that impact on surface and other water bodies of the area is not affected. No major diversion of surface drainage channel is required. Expected increase of solids particles due to surface handling of coal shall be controlled by:
  - a. Construction of garland drains around the OB dump & coal stock area
  - b. Construction of settling tanks of adequate size for removal of particulate matters
  - c. De-silting of settling ponds and drains at regular intervals

d. Effluents from washing areas, garage and workshop will be collected in garlands and routed through a settling ponds and oil and grease trap. The solid wastes generated shall be treated as per the provisions of Hazardous Waste Management Rules. The water shall be recirculated for washing.

#### 4.3.5 Water Balance of the area

#### 4.3.6 Hydrogeology and Aquifer characteristics of the area

Groundwater occurrence and storage in study area are mainly controlled by the geological setup of the area. The ability of geological formation to store and transmit water is dependent on its formation parameters, such as porosity and hydraulic conductivity. Based on these two parameters, the rock formation of the area may be classified as hard and soft rocks. Hard rocks (mainly crystalline and consolidated sedimentary rocks) are characterized by very little porosity. Ground water in such rocks circulated to a limited extent through the secondary openings represented by joints, cracks, fissures and such other planes of discontinuity. Soft rocks represented by sandstone, pebbles and loose sand, posses higher degree of primary porosity and as such characterized by higher water storage capacity. As greater part of the study area is underlain by Precambrian crystalline rocks, the weathered residual of the hard rocks as well as the fractures, joints, fissures, faults and other zones of discontinuity are the principle repositories of ground water in the area. The weathered zone is usually of limited thickness, fractures and joints generally close up with depth. The thickness of weathered mantle in the hard rock zone of area is about 10-20 meter in the topographic lows. Ground water in the weathered and fracture zones of hard rocks occur under unconfined condition. Ground water circulating through fracture zone is sometimes held under pressure. Depth of the water table in the hard rock of the area generally ranges from 3.0 m to 15.0 m below ground level.

The Gondwana sediments form the semi-consolidated formations and are better water potential zone. The splintery shales of Talchir and basal pebbles bed, the variegated Barren Measure shales and the sandstones are the major litho units of the Gondwana Formations. Gondwana sandstones in general, are known to constitute good aquifers at many places. Ground water occurs under unconfined condition in the weathered mantles varying depths from 4.23 - 12.34 m as observed in the dugwells and semi-confined condition in the deeper aquifers. Depth of water level for pre-monsoon period varies from 5-12m below ground level and it stretches to a deeper depth of 7-12m in some places. The pre-monsoon water level rises due to recharge and becomes 2 - 8 m below ground level around the area during post-monsoon period.

Rainfall is the principal recharge source to groundwater. The area experiences an average annual rainfall of about 1200-1400 mm. Besides rainfall, the mine water discharge from the local mining areas and existing water bodies including water logged in abundant mine quarries are also contributed to the ground water recharge as return flow. In the study area, ground water is withdrawn usually by means of open dug wells and small diameter hand operated tube wells for domestic and irrigation purposes. The tube wells are most often deeper (25m - 58m) than the dug wells and tap the aquifer below the weathered mantle. As the area is being located in the hot-tropical belt, the temperature regime is very high, the daily maximum reaches to over  $45^{\circ}$ C in summer. Due to excessive heat, the loss of moisture through evaporation is considerably high (60-65%). During the wet monsoon seasons, the net evaporation is less than the precipitation, resulting in surplus water which loss through either surface runoff or being part of the subsurface storage. The surface run-off and sub-surface storage of water depends

upon various factors including the amount of rainfall, topography of the area, land use pattern, soil type, slope, physiographic, drainage pattern and hydro-geomorphology of the catchment/ sub-catchment. The study area is having gentle slope towards south and south east. Water received on the slopes, gets collected in low-lying area and is thus ultimately absorbed in the top soil cover and become part of the ground water flow according to the slope to form seasonal streams/nallas.

In the mining area, the water levels are bound to be affected and disturbed. The mining area of JCF area is highly disturbed and the permeability of individual geological units is spatially variable and depends on lithology, fracturing and attenuation with depth. The porous and more open-jointed sandstone members tend to form aquifers, the shaly members are aquitards, which may be leaky but are poorly permeable & form poor permeable barriers to the vertical groundwater movement.

Water quality monitoring will be done for three years after closure. The sampling stations shall be one number mine water with quarterly frequency and two numbers ground water samples in core and buffer zone with quarterly frequency.

#### 4.3.7 Acid Mine Drainage Source:

Not Applicable

#### 4.3.8 Water Management

#### Existing mine water discharge details

- a. Mine water is pumped out in a settling tank. Clean water coming out from the settling tank is used for dust suppression, stowing and other Industrial uses.
- b. Excess pumped out mine water is allowed to flow into the surface water bodies.
- c. Drains are provided around the coal stock to collect run-off for diverting into settling pond before discharge into the natural water courses.

•	Make of water (Monsoon)	: 6000 GPM
•	(Lean Period)	: 3400 GPM

• Installed capacity of main pumps discharging water to surface : 4800 GPM

#### Post closure Mine water discharge

Once the reserve is exhausted in the considered seams, the entries into the mine would be securely sealed for safety purposes. However, if for the safety of the future mine or any neighbouring mine, pumping is required from the worked seams, then the arrangements for pumping will be kept intact and the water shall be discharged into the surface water bodies after passing the same through settling tank on the surface. The accumulated water in underground workings may be utilized to meet water shortage in nearby areas.

#### 4.4 Air quality management

#### **Present practice**

At present air borne dust is suppressed by:

- i. Sprinkling water on the various roads of the mine where the vehicles ply.
- ii. Water sprinkling at the various points where coal is handled.
- iii. Proper loading of trucks to avoid any spillage of coal.

iv. Proper maintenance of I.C. engines.

The monitoring of air quality under Baseline Environment Data Generation for Cluster XI has been conducted VRDS Consultants, Chennai. The location of sampling stations are given in Table -4.5.

MET./AMBIENT	AIR LOCATION	Dir. w.r.t.site	Dist. from site (Km)
DETAILS			
Meteorology	Bussuriya	NNW	1.0
Ambient Air			
Core Zone	Moonidih UGP, - A <sub>1</sub>	-	-
	Pootkee – Balihari	-	-
	office A <sub>2</sub>		
Buffer Zone	Bansjora – A <sub>3</sub>	Ν	1.8
$Gaslitand - A_4$		NW	2.6
	Lodna – A <sub>5</sub>	ESE	2.3
	Kusunda – A <sub>6</sub>	ENE	1.2

Table – 4.4Details of Sampling Locations

#### 4.4.1 Practice after the closure of the mine

- a. As the sources of dust and fume generation would no longer be present, after the final mine closure the present practice of arresting the air pollution, will be discontinued. However, water sprinkling would be done on the roads, which remain in use after the final mine closure.
- b. Quality of air would be monitored for a period of 3 years after cessation of mining activity.
   3 samples at fortnight frequency for 3 years, one sample in core zone and one sample in upwind and downwind direction will be collected and analysed.

#### 4.5 Waste Disposal

This is an underground mine, therefore solid waste will not be generated during the mining operation.

### 5. ECONOMIC REPERCUSSIONS OF CLOSURE OF MINE

#### 5.1 Manpower of the Project:

The total manpower strength of Moonidih Underground Project is 1327 shown in the Table - 5.1.

Manpower	Strength (Nos.)
Executive	45
Non Executive	1282
Total	1327

Table - 5.1Present Manpower

#### 5.2 Post Closure Manpower

It has been proposed to monitor and implement the post-closure activities departmentally. Departmental manpower will be needed after closure of the mine for monitoring and implementation of the post closure activities. Manpower required for the same is given in Table No. 5.2.1.

Table - 5.2Manpower required for monitoring and implementation of Mine<br/>Closure Activities

Sl. No.	<b>Category of Manpower</b>	Requisite heads
1	Office-in-charge/ Manager	1
2	Overman-in-charge	1
3	Foreman-in-charge	1
	TOTAL	3

#### 5.3 Assessment of income scenario of local people

As Moonidih Underground Project is an, no surface excavation is likely to be undertaken. Moreover, the basic mining infrastructures have been made on the company acquired land. So there will no displacement of local people for this project. Later, after closure of the mine the work force will be absorbed / re-employed / rehabilitated in operative collieries of BCCL.

After the final closure of the mine, the manpower deployed in the mine will be further deployed in other mines of BCCL to make no loss of sustenance income to the eligible employee. The other secondary activities will not be affected by the closure of the mine and the mine discharge water after proper treatment will be provided to the local people for domestic and irrigational uses.

At present, it is very difficult to assess the manpower of the project, which will remain at the time of closure of mining activities in the existing project.

The local communities are being provided many civic facilities, such as educational facilities, health facilities, and drinking water. At the time of final closure after exhaustion of entire mineable reserve these facilities will be entrusted upon the local bodies/Trust of PAPs/State bodies after consultation with local people and state authorities so that same could continue even after the mine closure. If needed, a lump sum reasonable amount would also be paid to the

local bodies/Trust of PAPs/State bodies after proper approval for proper upkeep and maintenance of various community facilities.

To ensure that no financial loss due to the closure of mining activity in the presently worked seam occur to the local community engaged indirectly to the existing mine, following steps would be taken:

- It has been seen in past that in the event of closure of a mine, the local people indirectly dependent on the mine switch over their economic/professional activities in the existing/new or expansion mines located in the nearby area. Local management, if needed, extends some basic helps to them in such type of switching over. Hence, it is expected that in this project also the transition of the local people from one area to the other area for their sustenance would not be any problem.
- It is proposed that reclaimed and afforested land, if any, will be handed over to State Forest Dept for the benefit of local ecosystem. The forest wealth can also be utilised by local people in the form of fruits and fodders.

## 6. YEARLY PROGRESS REPORT OF MINE CLOSURE ACTIVITIES

BCCL has submitted yearly progress report of mine closure activities to CCO from 2013-14 to 2017-18. These reports are included in **Annexure-III**. The Green belt development around the mine project area and preparatory arrangement such as dozing of the goaved area, laying of approach roads, arrangement of water supply to the roads, arrangement of proper drainage, providing protective boundary, Fencing, compound wall around mine working boundary etc carried out for future afforestation at barren land within the leasehold area as per mine closure plan.

#### 7. VERIFICATION OF MINE CLOSURE ACTIVITIES:

IIEST team visited the Moonidih Underground Project, greenbelts created by the mine management, setting ponds & tanks and other facilities during December 19, 2019 for verification of the progressive mine closure activities as reported by the mine management through yearly progress reports. First, reference was made to the activities to ascertain whether they conform to the approved mine closure plan or not. However, some activities, which may not have been mentioned explicitly in the mine closure plan but the team felt that these were relevant for meeting the mine closure objectives have also been considered.

The observation of IIEST team on the mine closure related activities from 2013-14 to 2017-18 reported by the mine are summarized in Table No. 7.1.

#### Table No. 7.1: Verification of yearly progress of mine closure activities

Name of the Mine: Moonidih Underground Project, BCCL

			Reported by the mine			Observation
Activity	2013-14	2014-15	2015-16	2016-17	2017-18	s by IIEST, Shibpur
Reserves of coal	152.876 Mte	152.75814 Mte	152.695024 Mte	152.342504 Mte	151.767404 Mte	As reported by the mines
Area mine out (ha)	1125.01	1132.82	1142.632	1165.189	1174.74	As reported by the mines (Annexure- III).
Area reclaimed (Physical)	Nil	Nil	Nil	Nil	Nil	Moonidih is
Area reclaimed (Biological)	Nil	Nil	Nil	Nil	Nil	an underground mine
Details of afforestation	No. of Plants & Trees within leasehold-2.6 lacs (approx.)	No. of Plants & Trees within leasehold-2.6 lacs (approx.)	No. of Plants & Trees within leasehold-2.605 lacs (approx.)	No. of Plants & Trees within leasehold-2.61 lacs (approx.)	No. of Plants & Trees within leasehold-2.615 lacs (approx.)	Could be verified, some snapshots is provided in Annexure- VI
Details of water quality management	Settling Ponds & tanks - 2 nos. of ponds of 6000 KL (each), 2 nos. of ponds of 6000 KL (each)& two nos. of tanks of 3000KL capacity (each).	Settling Ponds & tanks - 2 nos. of ponds of 6000 KL (each), 2 nos. of ponds of 6000 KL (each)& two nos. of tanks of 3000KL capacity (each).	Settling Ponds & tanks - 2 nos. of ponds of 6000 KL (each), 2 nos. of ponds of 6000 KL (each)& two nos. of tanks of 3000KL capacity (each).	Settling Ponds & tanks - 2 nos. of ponds of 6000 KL (each), 2 nos. of ponds of 6000 KL (each)& two nos. of tanks of 3000KL capacity (each).	Settling Ponds & tanks - 2 nos. of ponds of 6000 KL (each), 2 nos. of ponds of 6000 KL (each)& two nos. of tanks of 3000KL capacity (each).	Could be verified
Details of air quality management	CMPDI is monitoring Air quality parameters. Control- by water	Could be verified				

	sprays on haul road & every dispatch points. Direct feed to washery through skip & conveyor belts. Transportation by tarpaulin covered trucks/dumpers. Yearly plantation.	sprays on haul road & every dispatch points. Direct feed to washery through skip & conveyor belts. Transportation by tarpaulin covered trucks/dumpers. Yearly plantation.	sprays on haul road & every dispatch points. Direct feed to washery through skip & conveyor belts. Transportation by tarpaulin covered trucks/dumpers. Yearly plantation.	sprays on haul road & every dispatch points. Direct feed to washery through skip & conveyor belts. Transportation by tarpaulin covered trucks/dumpers. Yearly plantation.	sprays on haul road & every dispatch points. Direct feed to washery through skip & conveyor belts. Transportation by tarpaulin covered trucks/dumpers. Yearly plantation.	
Waste management	NA	NA	NA	NA	NA	
a) Quantity of overburden removal	NA	NA	NA	NA	NA	
b) Quantity of coal waste generated	NA	NA	NA	NA	NA	
c) Utilization of waste material done	NA	NA	NA	NA	NA	
d) Protective measures taken for prevention of siltation, erosion, and dust generation from waste material	NA	NA	NA	NA	NA	Moonidih is
e) Quantity of waste material rehandled/back-filled	NA	NA	NA	NA	NA	an underground
f) Height of dump and its stability measures taken	NA	NA	NA	NA	NA	mine
Top soil management	NA	NA	NA	NA	NA	
Subsidence management (for UG Mine)	Being done	Monitoring by NRSA	Monitoring by NRSA	Monitoring by NRSA	Monitoring by NRSA	
a) Top soil available at site	NA	NA	NA	NA	NA	
b) Utilization of top soil during the year (Year)	NA	NA	NA	NA	NA	
Infrastructure: Existing and its Future Utilization and Maintenance:	NA	NA	NA	NA	NA	

(Roads, Aerial Ropeway, Conveyor Belts, Railways, Bridges, Culverts, Power Lines, Buildings & Structures, Water Treatment Plant, Water Supply Sources, Gas Pipeline, Sewer						
Underground Tanks, Electric						
Cables, Transformers etc.)						
Disposal of Machinery: Decommissioning of Mining Machinery and their possible post mining utilization:	NA	NA	NA	NA	NA	Moonidih is an underground mine
Safety measures implemented to prevent access to surface opening for UG working (barbed wire fencing line)	All surface opening for UG working are already fenced.	All surface opening for UG working are already fenced.	Could be seen			
Safety measures implemented to prevent access to surface opening for excavation (OPC)	NA	NA	NA	NA	NA	Could be seen
Arrangement made up to the site being opened for general public	Working Site is a restricted area as per Coal Mines Regulation.	Working Site is a restricted area as per Coal Mines Regulation.	Working Site is a restricted area as per Coal Mines Regulation.	Working Site is a restricted area as per Coal Mines Regulation.	Working Site is a restricted area as per Coal Mines Regulation.	Reported by the mines
Sealing of mine entries	NA	NA	NA	NA	NA	NA
Number of local residents employed in the mine	400	400	400	139	177	As reported by the mine
Compensation given to the employees concerning their sustenance	Being given	As reported by the mines				
Vocational/skill development training for sustainable income of affected people	Being done	Being given	Being given	Being given	Being given	As reported by the mines.

### 8. COST OF MINE CLOSURE

As required under the 2013-guidelines for closure of coal/ lignite mines, the mine was required to estimate, at the time of preparation of Project Report/ Mining Plan, the abandonment cost based on the activities such as barbed wire fencing all around the working area, dismantling of structures/ demolition and cleaning of sites, rehabilitation of mining machinery, plantation, physical/biological reclamation, landscaping, biological reclamation of left out OB dump, filling up of decoaled void, post environmental monitoring for 3 years, supervision charges for 3 years, power cost, protective and rehabilitation measures including their maintenance and monitoring, miscellaneous charges etc. No such separate abandonment cost estimation has been made. Escrow amount to be deposited for the mine may be estimated as below:

In Moonidih Underground Project, the existing leasehold area is 2063.586 *ha*, out of which 1820.586 *ha* project area. Thus, 1820.586 *ha* area is considered for calculation of closure cost as per underground norms.

At present, the Moonidih Underground Project is being worked in XVI Top and Bottom seams by three numbers of heading machines. There are no operational PSLW sets at the mine. It is proposed to deploy two new PSLW Sets in Moonidih in XVI Top and XV seams respectively. The modus operandi has already been firmed up through the process of Global Tendering. The remaining life of the UG mine has been estimated as 30 years.

C1	Particulars		Unit
No	Name of the Mine	MOONIDIH UNDERGROUND PROJECT	
1	Lease hold area	2063.586	На
2	Leasehold area not part of the project	243.00	На
3	Project area (A)	1820.586	На
4	Closure cost per ha in Aug 2009	100000 (UG)	Rs
5	WPI in August 2009	129.6	
6	WPI in April 2013	1.35417	
7	WPI in July 2013	175.5	
8	Closure cost per ha in April 2013 (B)	1.35417	(10^5) Rs
9	Balance Life of the Mine (C)	30	yr
10	Total Closure Cost (AxB)	2465.383	(10^5) Rs
11	Annual Closure cost in 2013-14 (AxB/C)	82.179	(10^5) Rs
12	Amount to be deposited in Escrow Account For FY 2013-14	82.179	(10^5) Rs

Table-8.1Estimation of Escrow amount for FY 2013-14

#### 8.2 Estimation of Escrow amount for FY 2013-14 to FY 2017-18

Sl. No.	FY	Amount to be deposited per year (Rs. In Lakhs)
1	2013-14	82.179
2	2014-15	86.288
3	2015-16	90.603

4	2016-17	95.133
5	2017-18	99.889
TOTAL AMOUNT TO BE DEPOSITED		454.092

For financial assurance the BCCL has opened an escrow account, bearing the account number 00150100008943, with the Bank of Baroda (a Scheduled Bank), - with the Coal Controller Organisation (on behalf of the Central Government) as exclusive beneficiary. For every financial year, BCCL has caused payments to be deposited in the Escrow Account as per the details furnished below:

Sl. No	FY	Amount (Rs. in lakhs)
1	2013-14	82.179
2	2014-15	86.288
3	2015-16	90.603
4	2016-17	95.133
5	2017-18	99.889
TOTAL AN	OUNT DEPOSITED	454.092

8.3 Closure Cost deposited in Escrow Account for FY 2013-14 to FY 2017-18

#### **Closure Costs incurred**

Costs actually incurred, during FY 2013-14 to FY 2017-18, for carrying out activities specifically pertaining to mine closure have been estimated by the mine management and the same was provided to the IIEST team. Costs claimed included, *inter-alia*, the following:

**Machinery charges-** The total costs incurred for running of different machinery like dozers, backhoes, shovels, etc., for carrying out work specific to environmental protection and progressive-closure works. The costs included part-cost of ownership and actual operating costs and maintenance costs. While operating costs included fuel (diesel) costs, the maintenance costs included costs of spare parts and other consumables for repair and maintenance.

**Manpower charges-** The manpower charges were calculated on the basis of actual salary/wages paid to departmental executives and non-executives engaged in works relating to mine closure and environmental protection.

**Dismantling**/ **shifting of infrastructure-** Quarters, hospital, regional store, mine office, HEMM workshop etc., from the severely fire affected area shifting to safe place.

The grand total of all the above charges has been claimed as the cost of mine closure.

An abstract of the cost of mine closure is furnished in Table No.8.1. The total cost of mine closure as claimed by the mine management, shown in the table, is 97.44355 (Lakhs of Rs.) relevant documents are given in **Annexure-IV**. The activity under the miscellaneous and other mitigative head: The EPI Stoppings are performed contractually the relevant documents are attached in **Annexure-V** 

Table-8.4	Moonidih Underground Project mine closure cost for the period 2013-14 to
	2017-18

	Ac	Total mine	
Year	E. Plantation over leasehold	H. Miscellaneous and other	closure cost in
	area and other space (Rs.)	mitigative (Rs.)	Lakhs of Rs.
2013-14	362899.00	2164048.32	25.26947
2014-15	405562.00	880599.56	12.86162
2015-16	443931.00	129605.94	5.73537
2016-17	-	1147451.81	11.47452
2017-18	-	4210257.50	42.10257
Total	1212392.00	8531963.13	97.44355

## 8.1 VERIFICATION OF COST DATA

### Year 2013-14

Sl.	Activity	Cost (Rs.)	Work Order
No.			
1.	E. Plantation over leasehold area and	362899.00	-
	other space		
2.	H. Miscellaneous and other mitigative		
	i) Construction of three nos. of EPI		
	Stoppings at 5 <sup>th</sup> , 6 <sup>th</sup> & 7 <sup>th</sup> connection	1612633.43	WJA/MND/Stoppings
	between B.G. D-12 & T. G. D-13	(Contractual)	5 <sup>th</sup> , 6 <sup>th</sup> & 7 <sup>th</sup> VI (Top)
	XVI (T) Seam – 500 M.H. at		S/500M.H./29/2012-
	Moonidih Colliery.		13/1596 DT-
	ii) Construction of three nos. of EPI		07.12.2012
	Stoppings at 5 <sup>th</sup> , 6 <sup>th</sup> & 7 <sup>th</sup> connection	551414.89	WJA/SUR/EPI
	between B.G. D-12 & T. G. D-13	(Contractual)	Stoppings/2nd & 1st
	XVI (T) Seam – 500 M.H. at		conn /D - 12/XVI(T)
	Moonidih Colliery.		/500 M.H./2013-
	Total (Rs.)	2526947.32	14/1175 DT –
			18/19.09.2013

Table-8.5Expenditure for the financial year April 2013-2014

### Year 2014-15

S1.	Activity	Cost (Rs.)	Work Order
No.			
1.	E. Plantation over leasehold area and	405562.00	-
	other space		
2.	H. Miscellaneous and other mitigative		
	Construction of two nos. of EPI		
	Stoppings at 3 <sup>rd</sup> and 4 <sup>th</sup> connection	880599.56	WJA/MND/Stoppings
	between B.G. D-12 & T. G. D-13	(Contractual)	3 <sup>rd</sup> & 4 <sup>th</sup> Conn/D-
	XVI (T) Seam – 500 M.H. at		12/XVI (Top)
	Moonidih Colliery.		S/500MH/24/2013-
			14/176 DT-
	Total (Rs.)	1286161.56	08/10.02.2014

Table-8.6Expenditure for the financial year April 2014-2015

#### Year 2015-16

Sl.	Activity	Cost (Rs.)	Work Order
No.			
1.	E. Plantation over leasehold area and	443931.00	-
	other space		
2.	H. Miscellaneous and other mitigative		
	Construction of two nos. of EPI		
	Stoppings (Left out Work) Single	129605.94	WJA/MND/SUR/EPI
	Wall and packing at T.G. & B.G. D –	(Contractual)	Stoppings/B.G. D-9/6 <sup>th</sup>
	9 from 6 <sup>th</sup> dip side X-VI(T) Seam –	· · · · ·	dip side/XVI(T)
	400 M.H. at Moonidih Colliery .		Seam/17/2014-15/1035
			- 13/15.09.2014
	T (1(D))	<b>FROED</b> ( 0.4	_
	I otal (Ks.)	5/3536.94	

Table-8.7	Expenditure for the financial year April	2015-2016
	Experientare for the infancial year reprin	2015 2010

### Year2016-17

Table-8.8	Expenditure	for the fina	ancial year A	April 2016-2017

Sl. No.	Activity	Cost (Rs.)	Work Order
1.	H. Miscellaneous and other mitigative		
	<ul> <li>i) Construction of two nos. of EPI Stoppings at S-X-cut near 4<sup>th</sup> connection 400 M. H. at Moonidih Colliery.</li> </ul>	131011.13 (Contractual)	BCCL/WJA/MND/SUR/2016- 17/340 DT- 04/08.07.2016
	<ul> <li>ii) Construction of two nos. of EPI Stoppings (Left out Work)</li> <li>Single Work and Packing at T.G. &amp; B.G. D-9 from 6<sup>th</sup> dip side XVI(T) Seam – 400 M.H. at Moonidih Colliery</li> </ul>	114047.76 (Contractual)	WJA/MND/SUR/Stoppings/B.G. D-9/6 <sup>th</sup> dip side/ XVI (Top) Seam/500M.H./17/2014-15/1035 DT-13/15.09.2014
	<ul> <li>iii) Construction of one EPI Stopping at 2<sup>nd</sup> connection &amp; one preparatory EPI Stopping at 1<sup>st</sup> connection (at salvage gallery) between B.G. D-12 &amp; T.G. D-13, XVI(T) Seam 500</li> <li>M.H. at Moonidih Colliery</li> </ul>	229432.09 (Contractual)	MND/SUR/EPI Stopping/2 <sup>nd</sup> & 1 <sup>st</sup> Conn/B.G. D-12/XVI(T) Seam/500 M.H./17/2013- 14/1175 DT-18/19.09.2013
	<ul> <li>iv) Construction of two nos.</li> <li>EPI Stoppings one at CCS-II gallery XVI(T) Seam 280 M.H.</li> <li>and other at Comp to S-X-cut near triangular Pillar at 500 M.H. at Moonidih Colliery.</li> <li>v) Construction of two nos. EPI Stopping at 3<sup>rd</sup> &amp; 4<sup>th</sup> connection between B.G.</li> <li>&amp;T.G. D-13, XVI(T) Seam –</li> </ul>	261076.10 (Contractual)	BCCL/WJA/SUR/MND/2016- 17/341 DT- 04/08.07.2016
	<ul> <li>500 MH. at Moonidih</li> <li>Colliery.</li> <li>vi) Construction of two nos.</li> <li>EPI Stopping at B.G. E-7 &amp;</li> <li>Comp to B.G. E-7 XVI(B)</li> <li>Seam – 500 M.H. at Moonidih</li> <li>Colliery</li> </ul>	173141.20 (Contractual)	WJA/MND/UG Cont Work/EPI Stopping/3 <sup>rd</sup> & 4 <sup>th</sup> connection/D- 12/XVI(T) S/500 M.H./24/2013- 14/176 DT- 08/10.02.2014

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Sl.	Activity	Cost (Rs.)	Work Order
No.			
		238743.53	WJA/MND/SUR/EPI
		(Contractual)	Stopping/B.G. E-7 & Comp to
			B.G. E-7/XVIB S/500
	T (1(D))	1145451.01	M.H./36/2015-16/2334 DT-
	l otal (Rs.)	1147451.81	27.01.2016
### Year 2017-18

Sl. No.	Activity	Cost (Rs.)	Work Order
1.	H. Miscellaneous and other mitigative		
	i) Construction of two nos. of EPI Stoppings at S-X-cut near 4 <sup>th</sup> connection 400 M. H at Moonidih Colliery.	170080.52 (Contractual)	BCCL/WJA/MND/SUR/2016- 17/340 DT- 04/08.07.2016
	<ul> <li>ii) Construction of two nos. of EPI Stoppings (Left out Work) Single Work and Packing at T.G. &amp; B.G. D-9 from 6<sup>th</sup> dip side XVI(T) Seam – 400 M.H. at Moonidih Colliery</li> </ul>	100088.20 (Contractual)	WJA/MND/Stoppings/B.G. D-9/6 <sup>th</sup> dip side/ XVI (Top) Seam/500M.H./17/2014- 15/1035 DT-13/15.09.2014
	<ul> <li>iii) Construction of two EPI</li> <li>Stopping at South-X-cut near 4<sup>th</sup></li> <li>connection at 400 M.H. at</li> <li>Moonidih Colliery</li> </ul>	323790.67 (Contractual)	BCCL/WJA/MND/SUR/2016- 17/340 DT-04/08.07.2017
	iv) Construction of three nos. EPI Stoppings (Left out Work) at 1 <sup>st</sup> connection/ Salvage gallery – B.G. D-12 & T.G. D-13 and T.G. and B.G. D-12, XVI(T) Seam – 500 M.H. at Moonidih Colliery.	1086698.99 (Contractual)	BCCL/WJA/SUR/MND/16- 01/2017-18/1508 DT – 23.12.2017
	v) Construction of three nos. EPI Stoppings (Left out Work) at 1 <sup>st</sup> connection/ Salvage gallery – B.G. D-12 & T.G. D-13 and T.G. and B.G. D-12, XVI(T) Seam – 500 M.H. at Moonidih Colliery.	400711.90 (Contractual)	BCCL/WJA/SUR/MND/16- 01/2017-18/1508 DT – 23.12.2017
	vi) Construction of two nos. EPI Stopping at 2 <sup>nd</sup> & 3 <sup>rd</sup> connection between B.G. D-13 & T.G. D-14 (B) XVI(T) Seam – 500 M.H. at Moonidih Colliery vii) Construction of two nos. EPI Stopping at CCS-II gallery XVII(T) Seam – 280 M.H. &	1480346.67 (Contractual)	BCCL/WJA/SUR/MND/25- 02/2017-18/1014 DT – 07.09.2017
	Other at Comp to S-X-cut near triangular pillar at 500 M.H. at Moonidih Colliery		

Table-8.9Expenditure for the financial year April 2017-2018

Department of Mining Engineering Indian Institute of Engineering Science and Technology, Shibpur, Howrah – 711 103

Sl.	Activity	Cost (Rs.)	Work Order
No.			
	viii) Construction of two nos. of	324104.65	BCCL/WJA/SUR/MND/2016-
	EP Stoppings at CCS-II gallery	(Contractual)	17/341 DT - 04/08.07.2017
	XVII(T) Seam – 280 M. HOR		
	and other at comp to S-X-Cut		
	near Triangular Pillar – 500		
	M.H. at Moonidih Colliery		
		324435.90	BCCL/WJA/SUR/MND/2016-
		(Contractual)	17/341 DT - 04/08.07.2016
	Total (Rs.)	4210257.50	

## 9. CONCLUDING REMARKS

The head wise expenditures incurred by the mine are presented in tabulated format in the above paragraphs (§8). The approved mine closure plan of Moonidih Underground Project provides for break-up of the progressive mine closure into various activities. The item-wise break up of costs estimated by the company for the periods under review are given in Table-9.1. In this connection it is worthwhile to note that the accrued amount in the Escrow Account for the deposits made during the financial year 2013-14 to 2017-18 period is Rs 5,25,15,789/- (Rupees Five Crore Twenty Five Lakh Fifteen Thousand Seven Hundred Eighty Nine only).

In this connection it may be recalled that Para 2.12 of the revised guidelines for coal mine closure issued by the MoC on 16.12.2019 provides that "Up to 50% of the total deposited amount including interest accrued in the Escrow account may be released after every five years in line with the periodic examination of the Closure Plan as per Para 2.2. The amount released should be equal to expenditure incurred on the progressive mine closure in past five years or 50% whichever is less". As such the claim for refund by BCCL for the Moonidih Underground Project cannot be more than Rs. 2,62,57,894/-(Rupees Two Crore Sixty Two Lakh Fifty seven Thousand Eight hundred Ninety Four only).

Table-9.1	Estimated	Costs	vis-á-vis	the	incurred	costs	for	various	progressive	mine	closure
	activities du	uring 2	2013-18								

Sl.No	Activity	Cost as per approved mine closure plan (Rs. in lakhs)	Cost as claimed by the mine (Rs. In lakhs)	Net claim (Rs. in Lakhs)
1	Plantation over the cleared area obtained after dismantling and on other barren spaces	709.786	12.12392	12.12392
2	Miscellaneous and other mitigative measures	797.144	85.31963	85.31963
			Total Claim	97.44355

The mine has made a net claim of Rs. 97,44,355/- (Rupees Ninety Seven Lakh Forty Four Thousand Three Hundred Fifty Five only) towards reimbursement of progressive mine closure costs incurred during the five year period 2013-14 to 2017-18.

The IIEST team has verified the cost figures furnished by the mine following standard protocol. It may not be practically possible to verify all these costs. Ample evidences were found to corroborate the cost figures relating to the activities claimed in the yearly progress reports.

Firstly, the machinery deployed exclusively for reclamation activities were found working at site. Dedicated manpower in all categories mentioned was also found working in the mine reclamation site. All these evidences lead to a confidence that the cost figures are correct.

Based on the checks and verifications made, the IIEST team now certify that the costs of progressive mine closure for Moonidih Underground Project of BCCL shown in the annual mine closure reports for the period 2013-14 to 2017-18 are true beyond reasonable doubt. As such fifty percent of the accrual made out of deposits in Escrow Account during the period 2013-14 to 2017-18 may be refunded to the company. In other words it is recommended that the company may be allowed to draw an amount of Rs. 97,44,355/- (Rupees Ninety Seven Lakh Forty Four Thousand Three Hundred Fifty Five only) from the Escrow Account no. 00150100008943 held with the Bank of Baroda.



(a) "Coal India" means the Coal India Limited, a Government company incorporated under the Companies Act, 1956 having its registered office at Calcutta and includes its predecessor Government company, namely, the Coal Mines Authority Limited;

1 of 1956.

0	(b) "subsidiary company" means the following subsidiary companies of Coal India namely:	
	(i) the Central Coal Fields Limited, Ranchi and includes its predecessor Government company, namely, the National Coal Development Corporation Limited, Banchi:	
	(ii) the Bharat Coking Coal Limited Dhanhad:	18
	(iii) the Western Coal Fields Limited Narpur:	
	(iii) the Fastern Coal Fields Limited Sanctoria:	
	(iv) the Castel Mine Planning and Design Institute Limited Penchi-	
	(v) the Central Mille Flamming and Design Institute Lamited, Kaneni,	
	(V) the South-Eastern Coal Fields Limited, Blaspur,	
	(vii) the Northern Coal Fields Limited, Singrauli;	
	(viii) the Mahanadi Coal Fields Limited, Sambalpur.	
	and includes such other subsidiary company of Coal India as may be incorporated under the Companies Act, 1956 from time to time;	1 of 19
	(c) words and expressions used herein and not defined but defined in the Coking Coal Mines (Nationalisation) Act, 1972 or the Coal Mines (Nationalisation) Act, 1973, shall have the meanings, respectively, assigned to them in those Acts.	36 of 197 26 of 197
ower of Ientral Sovernment to irect transfer f land, rights, tle or interest.	3. (1) Notwithstanding anything contained in any other law for the time being in force, the Central Government may, if it is satisfied that a subsidiary company is willing to comply, or has complied, with such terms and conditions as that Government may think fit to impose, direct, by notification in the Official Gazette, that the land or rights in or over such land or the right, title and interest in relation to a coal mine, coking coal mine or a coke oven plant vested in the Coal India shall, instead of continuing to vest in the Coal India, vest in that subsidiary company or, where such land or right, title or interest vests in a subsidiary company, in another subsidiary company.	
	(2) Where the land or tights in or over such land or the right, title and interest in relation to a coal mine, coking coal mine or a coke oven plant vest in a subsidiary company under sub-section (1), such subsidiary company shall, on and from the date of such vesting, be deemed to have become the lessee in relation to such coal mine or coking coal mine as if a fresh mining lease in relation to such coal mine or coking coal mine had been granted to it under the Mineral Concession Rules, 1960 made under section 13 of the Mines and Minerals (Development and Regulation) Act. 1957 for the maximum period for which such lease could have been granted under those rules, and all the rights and liabilities of Coal India or, as the case may be, the subsidiary company in relation to such coal mine or	67 of 19
	coking coal mine shall, on and from the date of such vesting, be deemed to have become the rights and liabilities, respectively, of subsidiary company first-mentioned.	
lidation of tain asfers.	4. A subsidiary company which was operating, or was in control of, any coal mine, coking coal mine, or coke oven plant which was vested in the Coal India or any other subsidiary company immediately before the commencement of this Act, shall be deemed to have been vested with the land or rights in or over such land or the right, title and interest in relation to such coal mine, coking coal mine or coke oven plant and such vesting shall be	
	deemed to have been valid and effective at all material times as if a direction had been made by the Central Government under sub-section $(1)$ of section 3 and accordingly no	
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suit or other proceeding shall be instituted, maintained or continued in any court on the ground that such subsidiary company was not competent to operate or control such coal mine, coking coal mine or coke oven plant.

SUBHASH C. JAIN, Secy. to the Govt. of India.

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MGIP(PLU)MRND-5515GI-04.01.2001.



ANNEXURE-II

Bharat Coking Coal Limited (A Subsidiary of Coal India Limited) Office of the Director(Technical) OP Koyla Bhawan CIN:U10101.1H1972GO100918 Ref: No. BCCL:D(T)OP:F- 3 Dated:21.08.2015 737 To The Under Secretary, Ministry of Coal, Government of India, Shastri Bhawan New Delhi. PIN- 110001 Attention:-Mr. Kishore Kumar Sub - Renewal of mining leases by /in favour of Bharat Coking Coal Limited under the provisions of Mineral Concessional Rule 1960. Ref - Your office letter no. 13016/4/. 2014-CA-II dated New Delhi 20 April, 2015 ) and our reply Dear Sir. Kindly refer to our earlier letter no BCCL: D (T) OP: F-36/695 dated 25:07:2015 We are enclosing the opinion of Additional Attorney General of India on captioned subject The crux of the opinion is as appended below:-"BCCL by virtue of the Section 4 of the Coal India(Regulation of Transfer and Validation) Act 2000 read with Section 3(2) of the said Act shall be deemed to have been granted a fresh lease for a period of 30 years from the date of commencement of the said Act i.e. December 8, 2000. In view of the aforesaid the application for renewal of lease made by the BCCL in the year 2005 and the steps taken in furtherance thereafter becomes inconsequential as the tenure of the lease has further been automatically extended up to 7<sup>TH</sup> DEC, 2030 by operation of the said act." As such you are requested kindly to advise the concerned state officials to do the mi needful accordingly. Encl. As above Yours faithfully Director (Technical) Operation Bharat Coking Coal Limited. Copy for kind information: (1) CMD BCCL (2) Director (Mines), Dept. of Mines & Geology, Sovit Of Jharkhand for needful action (3) Director (Tech) P&P, BCCL. 11 (4) General Manager (legal), CIL

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#### Department of Mining Engineering, Indian Institute of Engineering Science and Technology, Shibpur, Howrah - 711 103

#### ANNEXURE-II

CIN:UI0101.JH1972/G0168118 Ref: No. BCCL:D(1)OP:F-3.6.   5 m 5 Dated:25.07.2015 To The Under Secretary, Ministry of Coal, Government of India, Shastri Bhawan New Delhi. PIN- 110001 Sub Renewal of mining leases by /in favour of Bharat Coking Coal Limited under the provisions of Mineral Concessional Rule 1960. Ref: - Your office letter no. 13016/4/2014-CA-II dated New Delhi 20 April 2015 Attention: Mr. Kishoro Kursar,		(A Subsidiary of Coal Int (A Subsidiary of Coal Int Office of the Director(Te Koyla Bhawa)	d'a Limited) cennicat) OP
Ref: No. BCCL:D(T)OP:F-3 & jort 5 To The Under Secretary, Ministry of Coal, Government of India, Shastri Bhawan New Delhi. PIN- 110001 Sub Renewal of mining leases by /in favour of Bharat Coking Coal Limited under the provisions of Mineral Concessional Rule 1960. Ref: - Your office letter no. 13016/4/2014-CA-II dated New Delhi 20 April,2015 Attention: Mr. Kishoro Kurtar.	7	(1N-1110101 H1107)	294166018
Ref: No. BCCL:D(1)OP:F-3.6 [6:15] Dated:25.07.2015 To The Under Secretary, Ministry of Coal, Government of India, Shastri Bhawan New Delhi. PIN- 110001 Sub Renewal of mining leases by /in favour of Bharat Coking Coal Limited under the provisions of Mineral Concessional Rule 1960. Ref: - Your office letter no. 13016/4/2014-CA-II dated New Delhi 20 April 2015 Attention: Mr. Kishoro Kumar.		<u>C.1(), O 1010 10121 77.</u>	777157516
To The Under Secretary, Ministry of Coal, Government of India, Shastri Bhawan New Delhi. PIN- 110001 Sub - Renewal of mining leases by /in favour of Bharat Coking Coal Limited under the provisions of Mineral Concessional Rule 1960. Ref: - Your office letter no. 13016/4/2014-CA-II dated New Delhi 20 April 2015 Attention: Mr. Kishoro Kursar.		Ref. No. BCCL(D(T)OP.F-3 & 65%5	Dated:25.07.2015
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Ministry of Coal, Government of India, Shastri Bhawan New Delhi. PIN- 110001 Sub Renewal of mining leases by /in favour of Bharat Coking Coal Limited under the provisions of Mineral Concessional Rule 1960. Ref Your office letter no. 13016/4/2014-CA-II dated New Delhi 20 April 2015 Attention: Mr. Kishoro Kursar.		The Under Secretary,	
Government of India, Shastri Bhawan New Delhi. PIN- 110001 Sub Renewal of mining leases by /in favour of Bharat Coking Coal Limited under the provisions of Mineral Concessional Rule 1960. Ref: - Your office letter no. 13016/4/2014-CA-II dated New Delhi 20 April.2015 Attention: Mr. Kishoro Kursar.		Ministry of Coal,	
Sub Renewal of mining leases by /in favour of Bharat Coking Coal Limited under the provisions of Mineral Concessional Rule 1960. Ref: - Your office letter no. 13016/4/2014-CA-II dated New Delhi 20 April.2015		Sovernment of India, Shastri Bhawan New Delhi.	
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Ref: - Your office letter no. 13016/4/2014-CA-II dated New Delhi 20 April 2015		Limited under the provisions	of Mineral Concessional Rule 1960.
Attention: Mr. Kishoro Kumar.	7	Ref: - Your office letter no. 13016/ April 2015	4/2014-CA-II dated New Delhi 20
Attention: Mr. Kishoro Kumar.		Sectors of the sector of the s	•
PARTONICOLI DILL'INDIALO INDIALI		Sub Renewal of mining leases b Limited under the provisions Ref: - Your office letter no. 13016/ April 2015	y /in favour of Bharat Coking Coal of Mineral Concessional Rule 1960. 4/2014-CA-II dated New Delhi 20

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The issue of renewal of mining leases, of child vested in Coal Mines Authority Limited/ Coal India Limited by virtua of the Nationalisation Acts 1972/1973 and being worked by BCCL, on the supposed expiry of the same in the year 2002 (for coking coal) and 2003 (for non-coking coal) is hanging fire since long. The Government of Bihar and subsequently Jharkhand has been pressing hard for renewal of the leases and insisting on BCCL's filing of applications in Form – J of the MC Rules. Our company too presented some applications which were not complete in all respect as required by the mineral Concession Rules, 1960. The reason of such incomplete applications was the lack of documents including lease deeds originating during pre-nationalisation period at the end of private owners and the State Government concerned.

Since then the issue has been examined in detail and it transpires that the subject mining leases supposed to have excited in 2002 and 2003 have not actually expired and there is no need, in law, for SCCI. In mean explications in Form – J of the MC. Pulses nor for the State of Practication or revealed source under the NC. Pulses

We would like to draw your attention to the clinching legar position thus

The Mines and Mineral (Development & Regulations') Act, 1957 was enacted to provide for the development and regulations of minos and minerals under the control of the Union.

As per Section 8 of the said Act mining lease could be granted for a maxiammum period of 30 years

By virtue of the Coking Coal mines Nationalisation Act, 1972 & coal mines Nationalisation Act, 1973 the coal mining industry was taken over from the private coal mines owners and the same stood vested in Central Government.

Subsequently, Central Government by different notifications directed vesting of all rights in the existing mining leases in favour of coal Mines Authority Limited which which the existing more day. Coal most have '

Coal india Limited used to damy out the mong activities through its subsidiary companies located in the different states. Bharm Coking Coal Limited is a subsidiary company of Coal India Limited

As the maximum lease period was 30 years, the mining leases under the control of Coal India Limited and its subsidiaries in respect of coking coal was due to expire in 2002 and in case of non-coking coal it was due to expire in the year 2003.

BCCL applied for the renewal of leases in terms of the Minerals Concessional Rules, 1960 only in the year 2005. Series of correspondence were made with the concerned authorities for such renewal but as on date the same has not been renewed

But in the meantime, the Coal India (Reculation of Fransfers and Validation) where after referral seas the same set "mad come with operation with effect from December 08,2000

Section 3 & 4 of the said Act is set out here under

3(1) Notwitestanding anything contained in any other law for the tinte being in force, the Optimal Government may, if it is satisfied that a subsidiery company is willing to

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comply, or has complied, with such terms and conditions as that Government may think fit to impose, direct, by notification in the official Gazette, that the land or rights in or over such land or the right, title and interest in relation to all coal mine, coking coal mine or a coke oven plant vested in the Coal India shall, instead of continuing to vest in the Coal India vest in that subsidiary company or where such land or right, title or interest vests in a subsidiary company, in another subsidiary company

3 (2) VVhere the land or rights in or over such land or the right title and interest in relation to a coal mine, coking coal mine or a coke oven plant vest in a subsidiary company under sub-section(1), such subsidiary company shall, on and from the date of such vesting, be deemed to have become the lessee in relation to such coal mine or coking coal mine as if a fresh mining lease in relation to such coal mine or coking coal mine as if a fresh mining lease in relation to such coal mine or coking coal mine as if a fresh mining lease in relation to such coal mine or coking coal mine had been granted to it under the Mineral Concession Rules, 1960 made under section 13 of the Mines and Minerals (Development and Regulation) Act, 1957 for the maximum period for which such lease could have been granted under those rules, and all the rights and liabilities of Coal india or, as the case may be, the subsidiary company in relation to such coal mine or coking coal mine shall, on and from the date of such vesting, be deemed to have become the rights and liabilities, respectively, of subsidiary company first-mentioned.

A Subsidiary company which was operating, or was in control of any coal mine coking coal mine, or coke oven plant which was vested in the Coal Iridia or any other subsidiary company immediately before the commencement of this Act shall be deemed to have been vested with the land or rights in or over such land or the right, title and interest in relation to such coal mine, coking coal mine or coke oven plant and such vesting, shall be deemed to have been valid and effective at all material times as if a direction had been made by the Central Government under sub-section (1) of section 3 and accordingly no suit or other proceeding shall be instituted, maintained or continued in any court on the ground that such subsidiary company was not competent to operate or control such coal mine, coking coal mine or coke oven plant

The above quoted two sections were incorporated with two fold objects

(a) To empower Central Government with a power to transfer rights/interest in relation to a Coal Mine to a subsidiary company of CIL by notification in Official Gazette [Section 3(1)] and

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(b) to validate the transfer of datases whereas is relation to a Geni Mine by a deeming provision in favour of \$(15\$idiaty company which was de facto operating or was in control of any Coul Mine vested in Coal india before the commencement of the said act (Section 1).

Section 3(2) of the said Act deals with deal ownod of leade which says that on and from the date of vesting the subsidiary company shall be deemed to have become lessee as if a fresh mining lease has been granted to it under Mineral Concession Rules, 1960 for a maximum period, it may be reiterated that in the present case the said maximum period is 30 years by virtue of Section 8 of Mines and Minerals (Development & Regulations) Act, 1967

The said period as mentioned in Section 3(2) of the said Act is also applicable the cases covered under Section 4 of the said Act

BCCL being a subsidiary company which was operating and in control of Coar Mines before the commencement of the said Act stands covered under Section 4 of the said Act

Therefore BICC by entre of the Section 4 of the said A mead with pertion of the said Actistical be deemed to have been granted trash leases for a period of 30 years from the date of commencement of the said Active December 8, 2000.

In view of the aloresaid the application for renewal of lease made by the BCCL in the year 2005 and the steps taken in furtherance thereafter becomes inconsequential as the tenure of the lease has further been automatically extended by operation of the said Act

We shall be thankful, if the aforesaid legal position is communicated to the authorities of the State of Jharkhand

Yours faithfully Diopeter (Technical) (Di

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Comptainkind intermation.

(I) GMD, BUCK

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(2) Director (Mores). Dept. of block of Gordogy, Gost on incretend for seedful astion

... on altor (Tech) P&P\_BCCL

(i) General Manager (legal) CH



Department of Mining Engineering, Indian Institute of Engineering Science and Technology, Shibpur, Howrah - 711 103

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#### ANNEXURE-II



been granted under Section 4 of the Coal India (Regulation of Transfer and Validation) Act, 20007

4. Generally as to the case.

The hackdrop of the case in short may be summarised as follows:

The Mines and Minerals (Development & Regulations) Act, 1957 was enacted to provide for the development and regulations of mines and minerals under the control of the Union.

As per Section 8 of the said Act mining lease could be granted for a maximum period of 30 years.

By virtue of the Coking Coal Mines (Nationalisation Act, 1972) and the Coal Mines (Nationalisation Act 1973) the coal mines industries were taken over from the private coal mines owners and the same stood vested in Central Government.

Subsequently, Central Government by different notifications directed vesting of all rights in the existing mining icases in favour of Coal Mine Authority Limited which was subsequently renamed as Coal India Limited.

Coal India Limited used to carry out the mining activities through its subsidiary companies located in the different states. Bharat Coking Coal Limited is a subsidiary company of Coal India Ltd.

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121003 कौशिक चन्दा अंधर महा-सालिसिटर Kausik Chanda भारत IONAL SOLICITOR GENERAL OFINDIA Office riel Floor, Calcutta High Court-700001 Tel. / Fpx:: 033-2248 4980 Mobile : 9831081822

As the maximum lease period was 30 years, the mining leases under the control of Coal India Limited and dts subsidiaries in respect of coking coal was due to expire in 2002 and in case of non coking coal it was due to expire in the year 2003.

The BCCL applied for the renewal of lease in terms of the Minerals Concessional Rules, 1960 only in the year 2005. Series of correspondence were made with the concerned authorities for such renewal but as on date the same has not been renewed.

In the meantime, the Coal India (Regulation of Transferred Validation) Act, 2000 (hereinafter referred to as the "said act") came into operation with effect from December 08, 2000,

The answers to the queries raised require to be traced out from the import of the said act.

Section 3 & 4 of the suid Act is set out hereunder:

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3(1) Notwithstanding anything contained in any other law for the time being in force, the Central Government may, if it is satisfied that a subsidiary company is willing to comply, or has complied, with such terms and conditions as that Government may think fit to impose, direct, by notification in the Official Gazette, that the land or rights in or over such land or the right, title and interest in relation to al coal mine, coking coal mine or a coke? Even plant vested in the Coal India shall, instead of

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अपर महा-सारिगसिंहर भारत ADDITIONAL SOLICITOR-GENER OF INDIA Office : 2nd Floor, Calculta Tigh Court-700001 Tel /Fax : 033-2248 4980 Mobile 9831081822

concountry to set if used cash her is set **in that subsidiary company or**, where such lond as right fills, or increativests in a subsidiary company, in another subsidiary company.

3(2) Where the land or rights in a over such land or the right, tille and interest in relation to a coal mine, coking coal mine or a coke oven plant vest in a subsidiary company under sub-section (1), such subsidiary company shall, on and from the date of such vesting, be desined to have become the lessee in relation to such coal amine or coking coal mine had been granted to it under the Mineral Concession Rules, 1960 made under section 13 of the Mines and Minerals (Development and Regulation) Act, 1957 for the maximum period for which such lease could have been granted under those rules, and all the rights and liabilities of Coal India or, as the case may be, the subsidiary company in relation to such coal mine or coking cord raise shalls or and from the date of such vesting, be deemed to know become the rights and liabilities, respectively, of subsidiary company, as i-mentioned.

A subsidiary company which was operating, or was in control of, any coal mine, coking coal mine, or coke oven plant which was vested in the Coal India or any other subsidiary company immediately before the commencement of this Act, shall be deemed to have been vested with the land or rights in or over such land or the right, title and interest in relation to such coal mine, coking coal mine or coke oven plant and such

Page 4

.6 12:10 FAX 03322306287 LEGAL DEPT. 2005 शक चन्ट अपर महा-सॉलिसिटर भारत Kausik Chundo VI THONALSOLICITOR-GENERAL **QFINDIA** Office 2nd Floor, Calcutta High Court-700001 Tel./Fax: 033-2248 4980 Mobile : 9831081822 vesting shall be deemed to have been valid and effective at all material times as if a direction had been made by the Central Government under sub section (1) of section 3 and accordingly no suit or other proceeding shall be instituted, maintained or continued in any court on the ground F that such subsidiary company was not competent to operate or control such coal mine, coking coal mine or coke oven plant The aloresaid two sections are incorporated with two folds object -(a) To empower Central Government to a fresh transfer rights/interests in relation to a Coal Mine to a subsidiary company by notification in Official Gazette [Section 3(1)] and a (b) to valuate transfer rights or interests in relation to a Coal Mine by a deeming provision in favour of a subsidiary company which was operating or

of the said act (Section 4).

was in control of any Coal Mine vested in Coal India before the commencement

Section 3(2) of the said Act deals with the period of lease which says that on and from the date of vesting the subsidiary company shall be deemed to have become lessee as if a fresh mining lease has been granted to it under Minerals Concession Rules, 1960 for a maximum period. It may be reiterated that in the present case the said maximum period is 30 years by virtue of Section 8 of

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Mines and Minerals (Development & Regulations) Act, 1957

#### Department of Mining Engineering, Indian Institute of Engineering Science and Technology, Shibpur, Howrah - 711 103

12:10 FAX 03322306247 LEGAL DEPT. कौशिक चन्दा अपर महा-सॉझ्निसिटर Kausik Chanda भारत ADDITIONALSOLICITOR-GENERAL OFINDIA Office : 2nd Plcor, Calcutta High Court-700001 Tel. /Fux: 033-2248 4980 Mobile: 9831081822 the and period as mentioned in Section 3(2) of the said Act is also applicable to the cases covered under Section 4 of the said Act. The BCCL being a subsidiary company which was operating and in control of Coal Mines before the commencement of the said activate be covered under Section 4 of the said Act. Therefore, BCCL, by virtue of the Section 4 of the said Act read with Section the said Act shall be deemed to have been granted a fresh lease for a Lease. period of 30 years from the date of commencement of the said Act i.e. December 8, 2000. In view of the afteress'd its application for renewal of lease made by the BCCL in the year 2005 and the steps along in furtherance thereafter becomes inconsequential as the court of the lease has further been automatically extended by operation of the said act. دم of the dreassion of the aforesaid, my answers are as follows: Question No.1 is answered in negative. Question No.2 is enswered in affirmative. Question No.3 is answered in negative. Kaunth Chante (Kausik Chanda) Dated. 231 1.02, 2015 Additional Solicitor Ocneral of India Page 6

#### YERLY REPORT OF MINE CLOSER ACTIVITIES

(As per clause 7 of annexure of the Guidelines for preparation of mine closure plan; No. 55011-01-2009-CPAM

Dated 07.01.2013 to be submitted before 1st July of every year).

To The coal controller, Office of the coal controller, 1, council House Street <u>Kolkata -700001</u>

#### Sir,

Please find herewith the yearly report of mine closer Activities for the year 2013-14 for the <u>Moonidih mine</u> of BCCL of CIL Company as given below:-

1	Name of the coal / lignite mine / block :	Moonidih colliery
	Type : OPC / UG / Mixed	UG
	Total life of the mine :	100 years
	Balance life of the mine :	50 years
2	Name and address of the owner :	DT (OP),BCCL Koyla Nagar , Distt – Dhanbad
3	i )Leasehold Area of the mine : ii) Project Area of the mine :	2063.45 На 2063.45 На
4	Mine closure plan approved by 303 <sup>rd</sup> BCCL ( Board ) on date 04.01.2014	Approval letter no. BCCL /GM (P&P) / F -76/13/529 Dated 28.01.2014.
5	Escrow Account number	00150100008943
6	Name & address of Escrow Again :	Project Officer , At – Moonidih Colliery P. O Moonidih , District – Dhanbad , pin - 828129
7	Annual Closure cost deposited for the year 2013-14	Rs 82.179 in lakh
8	Progressive Balance including interest in the escrow a/c upto 31.03.2014	Rs 83.429 in lakh
9	<ul> <li>(i) Reserves of coal / Lignite ( as per mining plan         ):         (ii) Coal / Lignite actually mined out during last         year (2012-13)</li> </ul>	152.876 Million te 0.11786 Million te
10	Area mined out (Ha.):	1125.01 Ha

C

## ANNEXURE-III

11	Area reclaimed			
12	Details of afforestation :	Nil		
		No. of plants & trees -2.6 lacs		
13	Details of water Quality Management	(approx.) within leasehold.		
	t and management	Setting ponds & tanks – 2 nos .oj		
- 7		ponds of capacity 6000 KL (each)		
1		& 2 nos. of tanks of capacity		
		of 2000 kl canacity ( each )		
14	Details of Air Quality Management	CMPDL is monitoring Air quality		
		parameters Control - by water		
		sprays on haul road & every		
		dispatch point. Direct feed to		
. 1	the second s	washerv through skip & bell		
		conveyor. Transportation by		
_ 1		tarpaulin covered		
	the second se	Trucks / dumpers. Yearly		
		plantation.		
15	Waste Management	Not Applicable		
	Quantity of overburden removal :	NA		
_	Quantity of coal / Lignite rejects generated :	NA		
_	Quantity of overburden removal:	NA		
	Quantity of Coal/Lignite rejects generated:	NA		
	Utilization of Waste Material done:	NA		
	Protective Measures taken for prevention of siltation,	NA		
	erosion and dust generator for waste materials:	and the second		
	Quantity of waste materials re-handled/back-filled:	NA		
	Height of dump and its stability measures taken:	NA		
	After backfilling if left out area is filled with water or not	NA		
	( at the time of final closure)			
	Top Soil Management	Not Applicable		
	Top Soil available at site:	NA		
	Utilization of the top soil during the year 2013-14	NA		
	Details of Coal Beneficiation facilities adopted:	NIL		
	Subsidence management (for UG mine)	Being done		

19. Infrastructure: Existing and its Future Utilization & Maintenance:-(Roads, Conveyor Belts, Bridge, Culverts, Power lines, Building & Structures, Water Treatment Plant, Water supply sources, Telephone Cables, Underground sumps, Electric Cable, Transformers etc.)

20	Disposal of Machinery: Decommissioning of Mining Machinery	Nil
	and their possible post mining utilization:	

21. Safety and Security:

of affected people:

а	Safety measure implemented to prevent access to surface opening for UG working (barbed wire fencing done):	All surface opening for UG working are already fenced.
b	Safety measures implemented to prevent access to surface opening for excavation (OPC)	N/A
c	Arrangement made up to the site being opened for general public:	N/A
d	Sealing of mine entries:	N/A
22.	Economic Repercussions of Closure of Mine	
а	Number of local residents employed in the mine:	400 approx.
b	Compensation given to the employees concerning their sustenance:	Being given
C	Vocational/skill development training for sustainable income	Being done

23. Any other closure activities as per approved Mine Closure Plan: - NA

24. Post Environment monitoring for 3 years (to be given after closing of mine): Yes, will be done

The above information given is true to the best of my knowledge.

(Signature of the second secon

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## YEARLY REPORT OF MINE CLOSURE ACTIVITIE

(As per clause 7 of annexure of the Guidelines for preparation of Mine Closure Plan; No. 55011-01-2009-CPAM dated 07.01.2013 to be submitted before 1<sup>st</sup> July of every year).

To,

The Coal Controller,

Office of the Coal Controller

1, Council House Street,

Kolkata-700001.

Sir,

Please find herewith the yearly report of Mine Closer Activities for the year 2014-15 for the Moonidih mine of BCCL of CIL company as given below:-

	Name of the coal/lignite mine/block:	Moonidih Colliery
1	a) Type:OPC/UG/Mixed	UG
	b) Total life of the mine:	100 years
-	c) Balance life of the mine:	50 years
	Name and address of the Owner:	Sri D.C. Jha, DT(OP), BCCL Koyla Bhawan At & PO Koyla nagar, Distt- Dhanbad
1	I)Leasehold Area of the Mine: II)Project Area of the Mine:	2063.45 Ha 2063.45 Ha
1	Mine Closure Plan approved by 303 <sup>rd</sup> BCCL (Board) on date 04.1.2014	Approved letter no.BCCL/GM(P&P)/F- 76/13/529 dt.28.1.14
	Escrow Account number	00150100008943
6	Name & address of Escrow Agent:	J.S.Mahapatra,At - Moonidih Colliery,P.O Moonidih,District- Dhanbad,828129
7	(i)Amount including fresh deposit	Rs 175.53769 Lacs
	(II)Outstanding balance in Escrow A/C as on 31.3.15	Rs 177.56812 lacs
0	(י) ואוצרעהו וא נאצ באראש מלה עודע 22.3.19	Rs 9.10112 lacs

. ..

1	(ii) Interest from 1.1.15 to 31.3.15	D- 1 000431
	(II) Mine Closure Cost upto 31.3.15	Rs 168.467 lacs
9	Reserves of coal/Lignite(as per Mining Plan): Coal /Lignite actually mined out during last year (20)	152.75 Million te
10	Area Mined out (Ha):	1133.82 Ha
11	Area reclaimed	NB
12	Details of afforestation:	No. of Plants & Trees- 2.6 Lacs (approx.)
13	Details of Water Quality Management	Settling Ponds & tanks-2 no. of ponds of capacity 6000 KL (each) ,2no. of tanks of capacity 6000 KL (each) & 2 no. of tanks of 3000 KL capacity (each)
14	Details of Air Quality Management	CIMFR is monitoring Air quality parameters. Control- by water sprays on haul road & every dispatch point . Direct feed to washery through skip & belt conveyor belts . Transportation by tarpaulin covered trucks/dumpers. Yearly Plantation
15	Waste Management	Not Applicable
-	a) Quantity of overburden removal:	NA
-	b) Quantity of Coal/Lignite rejects generated:	NA .
-	c) Utilization of Waste Material done:	NA
-	d) Protective Measures taken for prevention of siltation,	NA
-	erosion and dust generator for waste materials. e) Quantity of waste materials re-handled/back-filled:	NA
-	f) Height of dump and its stability measures taken:	NA
-	g) After backfilling if left out area is filled with water or not ( at	NA Sector

3

Too Soll Management	
	Not Applicable
a) Top Soli available at site:	NA
b) Utilization of the top soil duals at	RA
by standaring the year 20	NA
Details of Coal Beneficiation facilities adopted	
pieu.	NIL
g Subsidence management (for UG mine)	March I Lawrence
	Monitoring by NRS/

19. Infrastructure: Existing and its Future Utilization & Maintenance:

Roads, Conveyor Belts, Bridge, Culverts, Power lines, Building & Structures, Water Treatment Plant, Water supply sources, Telephone Cables, Underground water lodgements, Electric Cable, Transformers etc)

-	at and a fille and block and block at a second se				
20	Disposal of Machinery: Decommissioning of Mining Machinery and their possible post mining utilization:	NII			

#### 21. Safety and Security:

1.

a	Safety measure implemented to prevent access to surface opening for UG working (barbed wire fencing done):	Done
b	Safety measures implemented to prevent access to surface opening for excavation (OPC)	N/A
c	Arrangement made up to the site being opened for general public:	N/A
d	Sealing of mine entries:	N/A
22	Economic Repercussions of Closure of Mine	-
a	Number of local residents employed in the mine:	400 approx.
b	Compensation given to the employees concerning their sustenance:	Being given
c	Vocational/skill development training for sustainable income of affected people:	Being done

23. Any other closure activities as per approved Mine Closure Plan: -

24. Post Environment Monitoring for 3 years ( to be given after closing of mine): Yes , will be done The above information given is true to the best of my knowledge.

(Signature of Competent Authority) Name: J.S.Mahapatra Designation: Agent, Moonidih Colliery, W.J.A.

Date with sea

# YEARLY REPORT OF MINE CLOSURE ACTIVITIE

(As per clause 7 of annexure of the Guidelines for preparation of Mine Closure Plan; No. 55011-01-2009-CPMA dated 07.01.2013 to be submitted before 1" July of every year). To,

The Coal Controller, Office of the Coal Controller 1, Council House Street, Kolkata-700001

Date: 30/06/2016

Sir,

Please find herewith the yearly report of Mine Closer Activities for the year 2015-16 for the Moonidih mine of BCCL of CIL company as given below:-1

1	Name of the coal/lignite mine/block:	Magnidih Colliery
	a) Type :OPC /UG/Mixed	comery
-	h) Total life of the	UG
-	of focal the of the mine :	100 Years
-	c) Balance life of the mine :	49 Years
2	Name and address of the Owner:	Sri D.C. Jha, DT (OP), BCCL Koyla Bhawan At & PO
3	I) Leasehold Area of the Mine : II)Project Area of the Mine :	2063.45 Ha
4	Mine Closure Plan approved by 303rd BCCL (Board on date 04.01.2014	Approved letter no .BCCL /GM(P&P)/
5	Escrow Account number :	P-70/13/529 dt-28.01.14
6	Name & address of Escrow Agent :	J.S. Mahapatra, At- Moonidih Colliery P.O. – Moonidih, District- Dhanbad 828129
7	Annual Closure Cost deposited for the year 2015-16	Rs 90.603 lacs
8	Progressive Balance including interest in the Escrow a/c. (Rs)	283.4529 lacs of rupay
9	Reserves of coal /Lignite (as per Mining Plan ): Coal /Lignite actually mined out during last year(2015- 2016):	152.39748 Million te 0.35252 Million te
10	Area Mined out (Ha);	1142 632 Ha
11	Area reclaimed :	NI
12	Details of afforestation :	No. of Plants & Trees - 2.605 Lacs (approx.)
13	Details of water Quality Management :	Setting Ponds & tanks -2 no. of ponds of capacity 6000 KL (each )& 2 no. of tanks of capacity 6000 KL (each) &2

T		no . of tanks of 3000 KL capacity (each)
	Details of Air Quality Management :	CMPDI is monitoring Air quality parameters. Control – by water sprays on haul road & every dispatch point. Direct feed to washery through skip & belt conveyor. Transportation by tarpaulin covered trucks /dumpers. Yearly Plantation.
5	Waste Management	Not Applicable
	a) Quantity of overburden removal :	NA
	b) Quantity of coal/ Lignite rejects generated :	NA
	c) Utilization of Waste Material done :	NA
	D) Protective Measures taken for prevention of siltation , erosion and dust generation for waste materials :	NA
	e) Quantity of Waste materials re- handled /back -filled	NA
	f) Height of dump and its stability measures taken	NA
	g)After backfilling if left out area is filled with water or not (at the time of final closure )	NA
16	Top soll Management	Not Applicable
	a) Top soll available at site	NA
	b) Utilization of the top soli during the year 2015-16	NA
1	7 Details of coal Beneficiation facilities adopted:	NIL
1	8 Subsidence management (for UG mine)	Monitoring by NRSA

19. Infrastructure: Existing and Its Future Utilization & Maintenance:

(Roads, Conveyor Belts, Bridge, Culverts Power Lines, Building & Structure, Water Treatment Plant, Water supply sources, Telephone cables, Underground water lodgements, Electric Cable, Transformer etc.)

	and the second		
20	Disposal of Machinery: Decommissioning of Mining	NIL	
	Machinery and their possible post mining utilization.		

#### 21. Safety and Security:

a)	Safety measure implemented to prevents access to surface pending for UG working (barbed wire fencing done) :	Done
b)	Safety measure implemented to prevents access to surface pending for excavation (OPC)	N/A
C)	Arrangement made upto the site being opened for general public:	N/A
d)	Sealing of mine entries:	N/A

## 22. Economic Repercussions of Closure of Mine

9	Number of local residents employed in the mine:	139 approx.
b	Compensation given to the employees concerning their sustenance:	Being given
c	Vocational/skill development training for sustainable income of affected people:	Being done

23. Any other closure activities as per approved Mine Closure Plan:

24. Post Environment monitoring for 3 years (to be given after closing of mine): Yes, will be done

The above information given is true to the best of my knowledge.

(Signature of Competent Authority)

02

Date: - 01/07/2017

03

## YEARLY REPORT OF MINE CLOSURE ACTIVITIES

(As per clause 7 of annexure of the Guidelines for preparation of Mine Closure Plan; No. 55011-01-2009-CPAM dated 07.01.2013 to be submitted before 1<sup>st</sup> July of every year).

To,

The Coal Controller,

Office of the Coal Controller,

1, Council House Street

Kolkata-700001

Sir,

Please find herewith the yearly report of Mine Closer Activities for the year 2016-17 for the Moonidih mine of BCCL of CIL company as given below:-

Na	me of the coal/lignite mine/block:	Moonidih Colliery
Ty	pe:OPC/UG/Mixed	UG
To	tal life of the mine:	100 years
Ba	alance life of the mine:	48 years
N	ame and address of the Owner:	Shri D.Gangopadhayay, D(T) P& ,BCCL Koyla Bhawan At & PO Koyla Nagar, Distt-Dhanbad
1)	Leasehold Area of the Mine: I)Project Area of the Mine:	2063.45 Ha 2063.45 Ha
1	Mine Closure Plan approved by 303 <sup>rd</sup> BCCL (Board) on date 04.01.2014	Approval letter no BCCL/GM(P&P)/F-76/13/529 dated 28.01.2014
	Escrow Account number	00150100008943
	Name & address of Escrow Agent:	J.S.Mahapatra, At- Moonidih Colliery P.O Moonidih, District- Dhanbad, Pin- 828129
	Annual Closure Cost deposited for the year 2016-17	Rs 95.133 in lakh
3	Progressive Balance including interest in the Escrow a/c upto 31.03.2017	Rs 400.92 in lakh
9	(i)Reserves of coal/Lignite(as per Mining Plan): (ii)Coal /Lignite actually mined out during last year (2016-17)	151.822 Million te 0.5751 Million te
10	Area Mined out (Ha):	1165.189 Ha
11	Area reclaimed	NI
12	Details of afforestation:	No. of Plants & Trees – 2.61 Lacs (approx.)
13	Details of Water Quality Management	Setting Ponds & tanks - 2 nos. of ponds of capacity 6000 KL (each) & 2 nos. of tanks of capacity 6000 KL (each) & 2 nos. of tanks of 3000 Kl capacity(each)
14	Details of Air Quality Management	CMPDI is monitoring Air quality parameters. Control- by water sprays on haul road & every dispatch point. Direct feed to washery through skip & beit conveyor. Transportation by tarpaulin covered trucks/dumpers. Yearly Plantation
1	5 Waste Management	Not Applicable
F	Quantity of overburden removal:	NA
L	Quantity of Coal/Lignite rejects generated:	NA

	Utilization of Waste Material done:	NA
	Protective Measures taken for prevention of siltation, erosion and dust generator for waste materials:	NA
	Quantity of waste materials re-handled/back-filled:	NA
	Height of dump and its stability measures taken:	NA
	After backfilling if left out area is filled with water or not ( at the time of final closure)	NA
16	Top Soil Management	Not Applicable
	Top Soil available at site:	NA
-11	Utilization of the top soll during the year 2016-17	NA
17	Details of Coal Beneficiation facilities adopted:	NIL
18	Subsidence management (for UG mine)	Monitoring by NRSA

19. Infrastructure: Existing and its Future Utilization & Maintenance:

(Roads, Conveyor Belts, Bridge, Culverts, Power lines, Building & Structures, Water Treatment Plant, Water supply sources, Telephone Cables, Underground sumps, Electric Cable, Transformers etc)

20	Disposal of Machinery: Decommissioning of Mining Machinery and their	Nil
	possible post mining utilization:	

#### 21. Safety and Security:

a	Safety measure implemented to prevent access to surface opening for UG working (barbed wire fencing done):	N/A
b	Safety measures implemented to prevent access to surface opening for excavation (OPC)	N/A
C	Arrangement made up to the site being opened for general public:	N/A
d	Sealing of mine entries:	N/A
22.	Economic Repercussions of Closure of Mine	1.4.
a	Number of local residents employed in the mine:	177 200702
b	Compensation given to the employees concerning their sustenance:	Complied
c	Vocational/skill development training for sustainable income of affected people:	Complied

23. Any other closure activities as per approved Mine Closure Plan:

24. Post Environment monitoring for 3 years (to be given after closing of mine): Yes, will be done The above information given is true to the best of my knowledge.

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87

(Signature of Competent Authority)

Name: S. K. KUNDU Designation: Agent, Moonidile Golifery AGEN Date & Seal: PROJECT OFFICIERY MOONIDIH COLLIERY B.C.C. LTD.

## YEARLY REPORT OF MINE CLOSURE ACTIVITIES

(As per clause 7 of annexure of the Guidelines for preparation of Mine Closure Plan; No. 55011-01-2009-CPAM dated 07.01.2013 to be submitted before 1<sup>st</sup> July of every year).

To,

The Coal Controller,

Office of the Coal Controller, 1, Council House Street Kolkata-700001.

Sir,

Please find herewith the yearly report of Mine Closer Activities for the year 2017-18 for the Moonidih mine of BCCL of CIL company as given below:-

1	Name of the coal/lignite mine/block:	Moonidih Colliery		
	Type:OPC/UG/Mixed	UG		
	Total life of the mine:	100 years		
	Balance life of the mine: (As per MCP)	25 years		
2	Name and address of the Owner:	Shri D. Gangopadhayay, D(T) P&P, BCCL Koyla Bhawan At & PO- Koyla Nagar, Distt- Dhanbad		
3	i)Leasehold Area of the Mine:	2063.45 Ha		
-	ii)Project Area of the Mine:	2063.45 Ha		
4	Mine Closure Plan approved by 303 <sup>rd</sup> BCCL (Board) on 04.01.2014.	Approval letter no. BCCL/GM(P&P)/F-76/13/529 dated 28-01-2014		
5	Escrow Account number	00150100008943		
6	Name & address of Escrow Agent:	R.K.Sharma , At – Moonidih Colliery P.O Moonidih, District- Dhanbad, Pin- 828129		
7.	Annual Closure Cost deposited for the year 2017-18	Rs 99.89 in lakh		
8	Progressive Balance including interest in the Escrow a/c upto 31.03.2018	Rs 525.15 in lakh		
9	(i)Reserves of coal/Lignite(as per Mining Plan):	151.3865 Million te		
_	(ii)Coal /Lignite actually mined out during last year (2017-18)	0.43548 Million te		
10	Total Area Mined out (Ha):	1174.74 Ha.		
11	Area reclaimed	Nil		
12	Details of afforestation:	No of Plants & Trees - 2.615 Lakhs (approx)		
13	Details of Water Quality Management	Setting Ponds & tanks - 2 nos. of ponds of capacity 6000 KL (each) & 2 nos. of tanks of capacity 6000 KL (each) & 2 nos. of tanks of 300 KL capacity (each) and two nos. of pressure filter.		
14	Details of Air Quality Management	CMPDI is monitoring Air quality parameters. Control by water sprays on haul road & every dispatch point. Direct feed to washery through skip & belt conveyor. Transportation by		

		tarpaulin covered trucks/dumpers. Yearly plantation.
15	Waste Management	Not Applicable
	Quantity of overburden removal:	NA
	Quantity of Coal/Lignite rejects generated:	NA
	Utilization of Waste Material done:	NA
	Protective Measures taken for prevention of siltation, erosion and dust generator for waste materials:	NA
	Quantity of waste materials re-handled/back-filled:	NA
_	Height of dump and its stability measures taken:	NA
	After backfilling if left out area is filled with water or not ( at the time of final closure)	NA
16	Top Soil Management	Not Applicable
	Top Soil available at site:	NA
	Utilization of the top soil during the year 201718	NA
17	Details of Coal Beneficiation facilities adopted:	NIL
18	Subsidence management (for UG mine)	Monitoring by NRSA

19. Infrastructure: Existing and its Future Utilization & Maintenance:

(Roads, Conveyor Belts, Bridge, Culverts, Power lines, Building & Structures, Water Treatment Plant, Water supply sources, Telephone Cables, Underground sumps, Electric Cable, Transformers etc)

20	Disposal of Machinery: Decommissioning of Mining Machinery and	Nil	
	their possible post mining utilization:		

#### 21. Safety and Security:

3

-	are of and becamer.	
9	Safety measure implemented to prevent access to surface opening for UG working (barbed wire fencing done):	All Surface opening for UG working are already fenced.
b	Safety measures implemented to prevent access to surface opening for excavation (OPC)	N/A
c	Arrangement made up to the site being opened for general public:	N/A
d	Sealing of mine entries:	N/A
22.	Economic Repercussions of Closure of Mine	
а	Number of local residents employed in the mine:	177 approx.
b	Compensation given to the employees concerning their sustenance:	Complied
c	Vocational/skill development training for sustainable income of affected people:	Complied

23. Any other closure activities as per approved Mine Closure Plan: -

24. Post Environment monitoring for 3 years (to be given after closing of mine): Yes, will be done The above information given is true to the best of my knowledge.

(Signature of Competent Syltidoty) Name: R.K.Sharma) Designation: Agent, Mercial OFFICER/AGENT Date & Seal - PROJECTIOFFICER/AGENT Date & Seal - ROJECTIOFFICER/AGENT B.C.C. LTD.

151		BCCL MOONIDIH COLLIERY	F .		
1200	Sub-	Res gressive wine closure Distriction for	under gro	und Mine for the year	- 2013-14.
Year	SL NO	ACTIVITIES		Name of Wark.	Work order NO BILLED
2013-14	A	Dismontalling of structure .			A D AND A PARA
		Service building	1		
		Residential Building	[		the second secon
		Industrial Structure like CHP, work Shop	sub station	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A contraction with
	8	Parmament Sealing of Mine entraises (Indine	mouth & Air She	yt) +	
		Sealing of Indine mouths and Air Shaft			in the second second
-	c	Supertense Management			have a spanninger
	D · ·	Land Scaping			land
1.1		Land Sea him of the cleaned land for improving	ih esthetic	A SHE WELL	
	E	Plantakion		-	\$362899/55
		Plantation over leashale area and on other openspe	e years.	·····································	
	<b>F</b> ·	A:	-		and the second s
		the guarder		-	
	G	Entre Landong Still Douglabount (Vecational) Skill	deve lopment	A hard and a second	the later and the second
		Triving the Subtationable income of alleghed	people		and the second second second
	u	thatming for subjective many of affects		4) Construction of these non EPT	NETA/MNO/EPE-Stational & 1612622 42
		Mis cellaneous and other magance	1	Stopping at SM, 6th fith Connection	sth, 6th + 7th Conn / Contractual
			1	between B.G. D-12 & T.S. D-13	500m 4/29/2012-13/
				XVI(T) Stam-SovM.H. at Marrides	1276 01-04-12-2012
			1	(1) Construction of one EPI stopping	W3A/SUR/EPIStorting/ & SSIAIA.89
		and the second sec		at and connection & one prepare	2nd flateonn (D-12/ Contractual
	1000		No. 1 August	connection (At Salvage gallent)	2013-14/1175
27				between B.S. D-12 + T.S. D-13, XVI(T) Seam - SDOM, H. at Manualth Colling.	57 - 18/19.09.2013
A.C.	1.	Manpower Cost for Supervision.	t <u>.</u>	-	
- million	1.1.1		k	Le the state of the	
CALL.			for the for	Tail tobe of	in a filler and and
	A La	. 9	(Plantagen )	andred 1	The standing of the
A. C. L. P.	Par jok	Hundrath Hundrath	endered > 4	8.10	Dave
Su	AVEY OFFIC	Ef Mounder Descar Decise	- Nodel office	L(ENV) AFM	SEDTER MANAGE
· Meo	nidit Colli	and appointight Collienzy MooNID 14 Collienzy	W.3. AR	ED W-J. ARED	W.S. AREA.
A COLORADO	Contraction of the				

	Sub -	B.C.C.L. Moonidit allient Progressive mine closure Distrition for	under ground	. Mine for the year	- 2014-15	
YEAR.	SLNo	ACTIVITIES		NAME OF WORK	WORK ORDER NO	BILLED
2014-15	A	Dismentalling of structure		-		IN RS
6 - 1		Service building		and the second s	alle and	
10000		Residential Building			0.00	1
	1	Industrial Structure like CHP, Work Ship, SubShip			A1. 19 6	
	-8	Parmament Sealing of mine entries (Indime mark	+ Air Shalt )		dente state	
		Sealing of Ineline months and An Shaft.		The state of the s	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	1	Schuldman Management			and the second second	
-		Land Sechia		The second second	in had to	
		land Galing of the elegend land for any improvement		-	a the	
		DI LAW	its esthetic	and the second pully second	3 4	
		The in the the start of the start	-	-	and the second	4705562/-
		Thantation over Learchold area + on other of the	Years.	and the second second	All and	18
	F	Air guentity			A. 1	2
		hater quantity	<u></u>		10 A 41	
	۹.	Entrepreneur ship Development (Vocational) SKM	. development	the states of the	and the second	
1		Training for subside subtainable income of affected	people.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	H	Miscellaneous and mitigative		Contraction of the him FOT	· · · · · · · · · · · · · · · · · · ·	State of the second sec
· · ·				Stopping at 3nd tath convertion	3nd fath comm/ D-12	L 880599 C
		a state of the second of the		between at BS. D-12 + TG. D-13,	XVIES/SOOMH/24	(Cubuchal)
h	and the state	· · · · · · · · · · · · · · · · · · ·		XVI(T) Seen, soom. II. at	2013-14 /176 DT -	(contraction)
*.		in the second		Moomidik Gillienz.		
1.	I	Manpower cost for supervision				
			1	the second second	- Aller and a second	in such as
A start and				his work the second		Chr. 3
1		and the second s	*	the second se		
					1 2 2 2 3	Part
the states	- And	the second se	Toutton deta	il to be carlored	- hert	ar.
	-		-testo	( g <sup>NT</sup>	161	- Lip-
	- 82	where the state the sub-	-entres Sol	AT THE		~
	- Hall	ANTI ART ARTICLER	T_NODEL OFFICE	ER(ENIX) AFM	GENERAL	MANAGE
	SURVE	DUL OLLIERY MOONTOIN GULIERY	WIJ. AREA	W.J. AREA	W.5. A	REA .
	NOTED INT	MONTUL COLLEN	1		E Satur .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
N	Employ and			the second s	the same of the	

		Moonidik Collivery	cude som	L Mine 6 H.		
	Sub 1	r Progressive Mine closure bissin dim for		Jon the year	· 2015-16,	·
YEAR	SLNO	ACTIVITIES		Name or Walk	Work orden No	AMOUNT
2als-16	A	Dismentalling of Structure		2 1 1 1.	1 4 1 1 2 2 W ( )	
a success		Service Bailding	Charles In	and a lot of a lot	- dames P. G. (c)	
1.1.1	1 and	Ravidential Building	1 1 - 1	Carl Contract	Les galance pro-	1.
- 10	N 10 12 -	Industrial Structure like CHP, Work Shop, SubStation	1. 1. A. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	here and the particular	38 A. 64	A State of State of State
	B.	Paromenient Sealing of mine entrates (Incline mouth	Air Shaft)	and which a the way of a	The contract of the second	· · · · · · · · · · · · ·
		Sealing of Indine months and Ain Shaft.	A with any	and the second second second	The martine	and the second se
	C.	Subvidence Management		T 20 1	Sec. Andres	
1.1	1 D.	land Scaping				and the second second
n Witz		Land Scapping of the cleaned Land for improving	its esthickie			
16.20	I.E.	Plantarion	parameter h	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 10	1++3931/
***		Plantation over Leave have area & de other open space	Home Years			
	E	An augustichy			Contraction in the	
		histor Quankity				
	G	Earthe bre news ship Development (Voca timal) skille	development	Chaftout Werk) Single hall and pres	T WJA/ MUD/SUR/ENTShif T BG. D-9/GH.dep.mide/	H & 129 605.94
		They be Sub etain Boble meanse of affected	people	XVI(+) Seam - goom + + Normideh Colle	1035 07- 14/15-09. 2014	
1	ц.	intering and and it and transfile				
A SHARE	A CONTRACT	Miscellancous and mar part				a Toute
Lang and	1 Him	W L C. Silve arbien			1. 2	1
	-	Manpower Cart for Super-				
		and the second s				
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1	1		Str		in the second second	
	-	· · · · ·	1		1.1.1.1.2	
	14 12		1		- 1-1	P
-	-	ford son a frage	- + P - 1	this to be enclosed)		
-	11.3	10	(phantaryon) of	( gip		
-	50	the state the state	ender V	A. m	Mart Sale	2Stra
	- Kons	WILL WE ARE PROVED	NODEL OF	ALEL (ENV) AFM	GEN	CAR MANAGER
1	SURIE	AGE MANAMER PERMER OFFICE	- W. 3 AR	EA W. J.AR	EA W.	S. AREA.
A M	HONIDH	GLLIERY MOONIGIH WILTERY MOONIGING GLLINET	1	and the second line of	in the second second	in the second

100	Jab.	- Programine Mine closure Distribution for	under ground	Mine for the year	- 2016-17.	
YEAR	SL No	ACTIVITIES		Name of Work	WORK ORDERNO	BILLED
S. Jak 1	A.	Disovertalling at Stonetare				104.1
3	1818	Service building		1		1
P. Standard		Residential Building		1		
and the state		Industrial structure like CHB work bloop,	Babstation			
02313	B.	parmanent Sealing of Mine entry (Incline	Houth & Air Shept)	C. M. D. C. C. C.	1	
2.20	1.1.	Sealing of Inchine Mouths and Arr shaft		A. H. P.	the second se	
11-1	c.	Sabsidence Management		ALL TANK I		
100	D.	Land Scoping				the second second
Sec. 1		Land Sopping of the cleaned hand for in	paring in esthetic	ALCONT OF THE		
Press in	E.	Plastation			1	-
1		plantation over Learchala grea and on the	ppen space		Part and	
100	1.	parameter for these year.	1. 1. · · · · · ·		J TITE	
	F	Air Quantity.		CINE & CONTRACT	The first	
	4 1 1	klates Quantity		and the second s		
1 1 1 1	(11.	Entrepresien shipe Daulyponent (Vocational)	Skill development.	The second s		
The second		Training for Subtainable become of offerded	§ 1			
	H.	Miscellaneous and other mitigaline		" Construction of him and ERT	and Incolourateures	CA 131011.12
1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Shipping at Cratoria	OLL INSAIMALISULI	-
45.7 1	1			Ath Convection at ADM. H at	2010-14/ 3400- 70	
N				Moomidik Colliers	t	
			1	9. Complexition of Land Car	hera laundour IEPT	+
	11			Children Cietres to and the	dille I BE LAIM AL	6 1140 03.71
11	112			Link of Paking) -L	ut ( sich Can have	1
S	1.2		-	The has and locary at	Inter / NULO County South &	12.1
				when were a former of	17/ 2014-15 /1033	1
a second			1	of Mandel Collins	DI- 19/15 1001 2011	
. 26.20	A		1	Linda when A one for	and a stor Ash	1
1	Sta.		1.1.1.1.1	Stopping at 2nd Connection	MNOI SURJEPT STUDI	A 229432-0
	the market	and the set of the set of the set of the		Stopping at 1st connection	KVILT Seem / See M. HI	Hard State
1.2.1			·	RE D-12 & The P-13, swift Ja	17/ 2013-14/1125	
		an your front the formation of the	V.s (12.147 - 13.) -	and an and a state of the second s	ant shore a	· 4
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YEAR	SL No	Activities		NAME OF WORK	WORK ORDER	BILLED
	No. A.	and the second s		5. Construction of two mes	Barilingalad	TUDWINT
		A TO A STATE AND A	100	EPI stopping one at	MNO/ 2016-12/2014	E 261076.10
1111				CCS-IL galling KVI(T)	DT- 44/68-07. 2016	
	1.1	and the second sec	NID THE THE	Seam - 280 M. H. and other	the bushest	1
	and the second	The protocol of the pain of the	Exa. Do	at comp to S-X-cut orean	The grant .	3
		The second s		Mill at Moon dit Collins	S. Caller E.	
		The second s		e. In second wall	10 St 10 St 10	
				Construction of two non EP1	WSA /MIND /US GAT	17244in:
		The second s	44 - 1 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	All Connection between	Work / EPI Shippingt	M 1+3141.10
				89. 0-12 + TS. 0-13 , XV((1)	0-12 / XVICT) 5/500M.1	1
		Patrick and a set of the set		Collienzy	24/2013-14/176	
		the second se	asteria har	an ilineal in	DT- 08/10.02-2014	
				6. Construction of the man EPT	WJA/MNO/SUR / EP2	1 . 30 T .T
				Compto B.G. E-7 XVICE	Stopping / BG. 6-7 +	16 2 50 449.5
		The second second second second	1 · · · ·	Moonidik Colling	500 m. H. /36/2015-16/2334	A Carrow
	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		a francisco de la		-07- 29-01-2016	a contra con
					08 TOTAL 2	6114949.8
1.11012	7	Man power Cost for supervision		and the second of the	Charles and the second	
	and the P	was an an a parties		then the second	and detailed	A Barres of a
		1 91 91 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9				and the state
Se migral		Constantine a				
	1.20	and the second start of the				
7464 9	464 64 1	and the standing the second			all and a second second	A plan a
· ·	10000	Charles A balance				
1.1.1.	A Start	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			and make good	aller -
	ALL REP 1	Martin Martin Martin Company		1	· · · · · · · · · · · · · · · · · · ·	Sec
0	2					lau
	01.00	Panja-	- at	mille	Щ <u>і                                    </u>	6-10-18
SEPT SURVE	EVAR	MANAGEL PROJECT NOFFICER	NODEL OFFICER (ENV) AFM GENERAL MANAGER			
MOON	CON COLLENY	MOONINH COLLERY MOONINH COLLERY	W.J. BREA W.J. ARBA. W.J. ARBA			
and the second	あるとうが			t-9.9.	8	in the second
	The Parameters and		12	211		

Sei	b - pro	gravive Mine clasure Distribution for under	ground	Mine for the year	2017-18	
AR	SLNO	ACTIVITIES		Name of work	liter and an and	BILLED ALED
Road and Street	A.	Dissonentalling of Stouchure			Non osaet NO.	BILLED AMOUN
in the second	S 1.2	Service building			and the second second	
TV.		Rendential Beilders			A STATE OF	
a	1.1.1	Industrial stoueture. like ette, workshop,	Sub Station	and the second second	10000	and the second
-	. B.	permanent sealing of Mine entries (Incline 2	Air Shaft)	a.1	1 1 1 1 1	the second s
1		Scaling of Incline Months & Air sheft	1		the second	and the second second
194	c.	Subsidince Management	No.		· · ··································	
1.74	D .	Land Scoping	100000			h
	1 23 40	Land seaping of the cleand Land for the	mpares			
	(x +	in esthurtic.	1			the start
-	E.	Plantation,	122 6	the second second		the second second
	- W	Platation over Leaschele area and on the	open	the second s		and a second and a second
LAPSE	1. S. M.	Spece parameter for there year.	1	the second s	er more at a fair	
1.1.4 6.4	Enas	Air Quality	1	and the second s	provide and have been a	and a second second second
100		2 date Quartity	1.1	and the second part of	••••••••••••••••••••••••••••••••••••••	the state of the s
TIT	6	Emprehance and shale David America (Maca Mond)	ENIL dents			and a second
1-1E	har a.	Traindres & Or to the all and aller the	brobl.	*		me as an
-	н.	Mina la sub second de more of agreen	- mm	1 Court in 12	and the second second	· · · · · · · ·
	1 7 1 1 1	wise haneous and mitigative	-	" construction of two mos EPI	-BEEL/WJA/MNO/	-
100	1 1 24		1	Stopping, at S-X-cut mean	SUR/ 2016-12/840	B 1700 80.52
	A man and		1	Am connection at 400 m.H.	07. 04/08.07.2016	- A
-	1.15		-	at moonidih Callienz	to service a service of	
	-	the second s	1	K. Construction of two nos EPI	WIA/MND/SUR /EPS_	a Tuncon ar
A		The second se	5	Stopping (Left out Work)	dip nide / XVICT) Sum/	M 100088.20
. 15	The second		-	single walk and backing at	DT - 13/15 + 10. 9014	- Andrews
				Th. 4 BG. D. 9 from Ghalphil	the sector	Provelle.
	H BL			Colling.		- and part
-	Part Ser	the second second		at Souther - cut man Ath	BOLL NJA/MNO/SUR	1
1.0	der trans	Barris Barris Hard	12 . 515	Mondah Colling	2016-17/ 340 01-	n 323790.67
2	1. B. J.		1	marke the part of	4/08: 07. 2017	- et
		Bring the second	-		their amount	1

4. Constra	4. Construction of three Non GPI Stopping Cleft out clene) are BCCL/MSA/SUR/MNO/ vat 1st commention / Selmage 16-01/2017-18/1508, R.Vo gelling - BG D-12 & TS. D-13 and DT-23.12.2017	B6698.9
** 1	vat 217 commention 1 Salmage 16-01/2017-18/1508, R.Vo galleng - BG D-122 TS. D-13 and DT-23.12.2017	86698.9
	gallers - BG D-12 & TS. D-13 and DT- 23.12.2017	
	TG. and BG. D-12, XVI(T) Seam	
	5 Do- 1 + Do- 1 , R 40	0711.90
	6. Construction of for mas EPI Bick / WITA/SUR/	111
	stipping at and fighed compution MND / 25-02/ Borra	80346-6
	between B.G. P-13 & 76. D-14(8), DT- DT 00 9017	.0.1
	XVI(T) Seam - 500 M.H. at	n.C.
	moonigih Calling	M.1
	7. Construction of two nos . Bal (NJB/ SUR/MND) EPI Stopping at CCS-12 2016-17/341 Pr 32	4104-6
R	1: galleng XVII. (2): Seam - DT- 109/08-07, 2017	in
a log haid and the set that and	280 M. H. & other at comp to him and	ige.
and the second s	S=x-quit near tringular 1 1 12 19	No.
	Piller at 500 m. H. at Moonidy.	30
The second and the second second with	8. Construction of two mas FPT Back (NISA/SUR) 639	4435.0
e. as and in the second s	Shipping at als I pating MNO' 2016-17/341	1.
and a second	and other at comp to Dr-04/08.07.2016	n 11
and the second se	S-K-ent mean Tringular	ing
and an an advertise to see a start of the second	prime to soom that	a la
- Section 127 - Section Provide - Commence of the Section of the	Wiscold Pi	1
	SUB - TOTAL - PO4210	257-59
Z Man bower Cast de Supervision	- Can A marson & what he what he have	018 20
and the second s	l l l l l l l l l l l l l l l l l l l	9
	Mar anticities	-

		B	ank of l	Baroda		
	-			- un o u u		
To,						
The C	oal Controller,					
Coal	Controller Organization,			1.1	Date: 0	05.04.2018
I, Co Kolka	uncil House Street,				54	
Dear	Sir,					
We	are sending herewith rep	ort of Flexi Recurring	Deposit alon	g with paid in	nterest as follow:	
SL.	Name of Mine	Account No.	Interest on	TDS	Interest after	Outstanding
INO.			which TDS applied	AMOUNT	TDS from 01.01.2018 to 31.03.2018	Balance as o 31.03.2018
1	Dobari Colliery	00150100008935	646207	64621	581586	59334889
2	Ghanoodih OCP	00150100008936	649351	64936	584415	50067787
3	Rajapur/South Jharia	00150100008937	611727	61173	550554	47166822
4	Busserya UG Mine	00150100008944	370207	37021	333186	. 23799628
5	Ena OCP	00150100008938	395063	39507	355556	30461030
6	Amalgamated Dhansar Industry	00150100008939	762653	76266 .	686387	58803903
7	Barari Colliery	00150100008940	506779	50678	456101	31642479
8	Kujama Colliery	00150100008941	377061	37707	339354	29072985
9	Lodna Colliery	00150100008942	239350	23935	215415	14944643
10	Moonidih Underground Projec	00150100008943	681101	68111	612990	52515789
11	Katras chotidih mine	00150100010086	647244	64725	582519	41634799

वैंक ऑफ बड़ीया, राजहंस पेनशन, प्रथम तल, झरिया रोड, बैंक मोड़, मनबाय-826001 (झारखण्ड) हरमाम 2302618 (D): 2303188: मो० : 07542032058: ई-मेल : dhanba@bankofbaroda.com Bank of Baroda, Raihans Mansion, 1st Floor, Jharia Road, Bank More, Dhanhad Docest or the

Chief Manufet

भारत कोकिंग कोच चिकीच	Bharat Coking Coal Limited
एक मिनी रत्न कम्पनी (पहारत्न वाप्पनी कोत इंडिया का एक उपक्रम) प्रजीवृत्त कार्यात्मक को स्थान नगर,	A Mini Ratna Company (A Subsidilary of Coal India Limited: A Muharutna Company) Regd. Off.: Koyla Bhawan, Koyla Nagar Dhanbad - 826005
रीआवेषमः पार्वातामा १७२६ ठाव००७। ह परियोजना पदाधिकारी का कार्यालय गुठ्रीडीख कोतिरयूरी भो. राुनीधीम, निप्ताः धनयाव (ज्ञारखण्ड)-828129 धने ४.0326 2273354; देख: 0326 227345 ई-मेत्र: comwi@bcd.cov.is	CIN: U101011/H1972C01000918 OFFICE OF THE PROJECT OFFICER MOONIDIH COLLIERY PO: MOONIDIH, DISTE: DHANBAD (JHARKHAND) - 828129 PO: MOONIDIH, DISTE: DHANBAD (JHARKHAND) - 828129 PO: MOONIDIH, DISTE: DHANBAD (JHARKHAND) - 828129
in the second se	PROME NO SHEET
V.U. NO BCCL/WJA/SUR/MND/2016-17/ 341	/Dated: 04.07.2016
o, rí Santosh Kr. Mishra	
Contractor.	
Aoonidih Colliery.	
Subject: Construction of two nos, EPI Stopping one :	at CCS-II sallery XVII(T) Seam-280MH and other at Comp. to
. S-X-Cut near triangular pillar at 500MH at	Moonidih Colliery.
'ear Sir,	
As per F-Tender Id: 2015 BCCI 20110 2 5	SUB AND A SUB AN
G/25-01 Dated:21.12.2015 has been accepted by the compe he value of Rs.9, 72,126.00 (Rupees nine lakhs seventy ubmitted by you. The rate and bill of quantity will be as follow	etent authority and you are hereby awarded the entire work for two thousand one hundred twenty six only) at the quotated rate ws:
The date of commencement will be reckoned fro which ever is earlier. The date of completion will be 240 and penalty up to 10% of the value of the contract may	om seven days from issue of this work order or as per actual 0.00(two hundred forty) days after the date of commencement be imposed if you fail to complete the job as per schedule.
he company has received a sum of Rs.7, 044.00 vide Di which has been adjusted against your security deposit ( work and balanced performance security deposit of Rs, mly) shall be submitted within 28 days of issue of this w A Bank Guarantee in prescribed form. Gover Securities EDR	D No.753296 dt.18.01.2016 of UCO Bank, Moonidih (Dhanbad) first part of security deposit) for the above mentioned subject , 41, 562.00 (Rupees forty one thousand five hundred sixty two vork order in any of the form given below:
Demand draft in favour of M/S Bharat Coking Coal Limi	ited of any Nationalised Bank payable at Dhanabad.`
Il running on account bills shall be paid at 95 %( ninety owards Retention Money will be the second part of sec	y five percent) of work value. This 5 %( five percent) deduction urity deposit.
% performance security should be refunded within wer certificate with a list of defects). Betention M	14 days of the issue of defect liability certicate (taking loney/2nd part of security deposite will be refunded after
isue of No Defect Certificate & satisfactory con ompletion of work.	npletion of work by project authority after six months of
The work is awarded to you on the basis of the equired for the job including the tools and tackles will his use of materials will be your responsibility and cost of	abour rate including Bricks, Cement & Sand; other materials be issued from the dept. on surface but loss of any materials or of lost or misused materials will be recovered from your bills.

Contractor have to abide by the CMPF rules as applicable in respect of the contractor workers to be engaged job and will be responsibility of the contractor workers to be engaged for the job and will be responsibility of the contractor to ensure submission of prescribed form for allotment of account no. to CMPE office important of the contractor to ensure submission of this should be given to account no. to CMPF office immediately the workers becomes eligible for this, a copy of this should be given to Manager (Personnel) Moonidib Call Manager (Personnel), Moonidih Colliery.

You will have to make payment to your workers on payment counters of the area in presence of deptt. representative and a copy of the payment sheet will be submitted along with each bill of the contract. In case of accident you will be representative and a copy of the payment sheet will be submitted along with each bill of the contract. In case of accident you will be responsibly for compensation under Labour Compensation Rules or any other similar law inforce.

You will have to spare new workers for training on Job at our training centre.

The contractor may be fined up to Rs.10, 000.00 accordingly to seriousness of the default if:

- III) They send lobours in ug without proper attendance.
- li) They employed untrained labours in ug.

On termination of work order/ composition of the work you shall have to dispose off labous after making full and final payment of their legal due and the management shall not take any responsibility of any discrepancy including deployment of workmen employed by you.

You are requested to deposit Non Judicial stamp paper of Rs.1, 000.00 only to the office of undersigned for the agreement during office hours on any working day within 28 days of issue of this work order.

Yours' Faithfully'

Sd/-PROJECT OFFICER MOONIDIH COLLIERY

Copy to:

9. AFM: This has to his FC No. : WJA/MND/FC/AFM/Misc. Contractual works/Rev/ 2016-17/27/15/281 Dt::09/18.06.2016 for Rs.10, 74, 200.00 (This includes Service Tax Rs.51, 037. 00on A/C of BCCL+Rs.51, 037.00 on A/C of Sri Santosh Kr. Mishra, Contractor)

10. Colliery Manager, Moonidih Colliery

-do-11. Ventilation Officer,

-do-

12. Manager(Personnel), -do-

13. Sr. PA to PO,

14. AM(Finance), -do-15. Asstt. Manager(Finance), -do-

18. Tender File/Survey Section.

PROJECT MOONIDIH COLLIERY



Bharat Coking Coal Limited भारत कोकिंग कोल एक मिनी (A Subsidiary of Coal India Limited: A Maharutna Comp (महारत्न Regd. off. : Koyla Bhawan, Koyla Nagar Dhanbad - 826005 CIN : U10101]H1972G01000918 ल इंदिया का एक उपकम) कृत कार्यालय : कोयला भवन, कोयला नगर, सीआइएन : U10101JH1972GO1000918 परियोजना पदाधिकारी का कार्यालय OFFICE OF THE PROJECT OFFICER MOONIDIH COLLIERY मुनीडीह कोलियरी पो. मुनीडीठ, जिलाः धनबाद (झारखण्ड)-828129 PO: MOONIDIH, DISTT: DHANBAD (JHARKHAND) - 828129 षोन में.0326 2273354: फेक्स: 0326 2273445, ई-मेल: cgmwj@bccl.gov.in PHONE NO:0326 2273354, FAX NO: 0328 2273445, e-mail : comwj@bccl.gov.in W.O. No.- BCCL/WJA/SUR/MND/25-02/2017-18/ 1014 Dated: 07.09.2017 To, Sri Santosh Kr. Mishra Contractor. Moonidih Colliery. Subject: Construction of two nos. EPI Stopping at 2nd & 3rd connection between BG D-13 & TG D-14(B), XVI (T) Seam-500MH at Moonidih Colliery, W. J. Area. Dear Sir, As per E-Tender Id: 2017\_BCCL\_74252\_1 for above mentioned subject work against NIT No. BCCL/WJA/MND/SUR/2017-18/25-02 Dated: 26.07.2017 has been accepted by the competent authority and you are hereby awarded the entire work for the value of Rs. 15,04,452.00 (Rupees fifteen lakhs four thousand four hundred fifty two only) at the quoted rate submitted by you. The date of commencement will be reckoned from seven days from issue of this work order or as per actual which ever is earlier. The date of completion will be 180.00(one hundred eighty) days after the date of commencement and penalty up to 10% of the value of the contract may be imposed if you fail to complete the job as per schedule. The company has received a sum of Rs.9, 706.00 vide eProcurement Ref. Number: 76627214700 of Axis Agreegator Bank Netbanking which has been adjusted against your security deposit (first part of security deposit) for the above mentioned subject work and balanced performance security deposit of Rs, 65, 517.00 (Rupees sixty five thousand five hundred seventeen only) shall be submitted within 28 days of issue of this work order in any of the form given below: . A Bank Guarantee in prescribed form. .Govt. Securities, FDR . Demand draft in favour of M/S Bharat Coking Coal Limited of any Nationalised Bank payable at Dhanabad. All running on account bills shall be paid at 95 %( ninety five percent) of work value. This 5 %( five percent) deduction towards Retention Money will be the second part of security deposit. 5% performance security should be refunded within 14 days of the issue of defect liability certicate (laking over-sertificate with a list of defects). Retention Money/2nd part of security deposite will be refunded after issue of No Defect Certificate & satisfactory completion of work by project authority after six months of completion of work. The work is awarded to you on the basis of labour rate (Bricks, Cement & Sand shall be supplied by the contractor); other materials required for the job including the tools and tackles will be issued from the dept. on surface but loss of any materials or misuse of materials will be your responsibility and cost of lost or misused materials will be recovered from your bills. Contractor have to abide by the CMPF rules as applicable in respect of the contractor workers to be engaged for the job and will be responsibility of the contractor to ensure submission of prescribed form for allotment of account no. to CMPF office immediately the workers becomes eligible for this, a copy of this should be given to Dy. Manager (Personnel), Moonidih Colliery.

You will have to make payment to your workers on payment counters of the area in presence of deptt. Representative and a copy of the payment sheet will be submitted along with each bill of the contract. In case of accident you will be responsible for any other similar law inforce accident you will be responsibly for compensation under Labour Compensation Rules or any other similar law inforce.

You will have to spare new workers for training on job at our training centre.

The contractor may be fined up to Rs.10, 000.00 accordingly to seriousness of the default if:

- I) They send lobours in ug without proper attendance.
- li) They employed untrained labours in ug.

On termination of work order/ composition of the work you shall have to dispose off labous after making full al payment of their local discrepancy including and final payment of their legal due and the management shall not take any responsibility of any discrepancy including deployment of worknown and the management shall not take any responsibility of any discrepancy including deployment of workmen employed by you.

You are requested to deposit Non Judicial stamp paper of Rs.1, 000.00 (Ruppers one thousand only) to the fundersigned for the second part of this work office of undersigned for the agreement during office hours on any working day within 28 days of issue of this work order. order.

Yours' Faithfully'

Sd/-PROJECT OFFICER MOONIDIH COLLIERY

Copy to:

1. AFM: This has to his FC No. : WJA/MND/FC/AFM/Misc. Contractual works/Rev/ 2017-18/31/41/496 Dt.:05.09.2017 for Rs.17, 75,253.00 (This includes GST Rs.2, 70,801.00 on A/C of Sri Santosh Kr. Mishra, Contractor)

2. Colliery Manager, Moonidih Colliery

3. Dy. Manager (Personnel),	-do
4. AM (Finance),	-do
1 5-DV. Manager (Survey),	-do
6 Tender File/Survey Section.	-de

7. Office Copy, PO (MND)

PROJECTOFFICER MOONIDIN COLLIERY 87

Bharat Coking Coal Limited कोकिंग कोल लिमिटेड रत एक भिनी रत्न कम्पनी (महारत्न कम्पनी कोन इंडिया का एक उपकन) पंजान्त वासंसर कम्पनी याथन, त्यायसा नगर, पंचान्त 220005 सोआइएन : U10101111 1972GO1000918 A mini Katila Company (A Subsidiary of Ceal India Limitedi A Muburatnu Company) Regd. Off.: Koyla Bhawan, Koyla Nagar Dhanbati - 826005 CiN: U101011/11972C01000918 परियोजना पदाधिकारी का कार्यालय OFFICE OF THE PROJECT OFFICER गुनीडीह कोलियरी MOONIDIH COLLIERY पो. गुनीधीव, जिलाः धनमाद (सारखण्ड)-828129 PO: MOONIDIH, DISTT: DHANBAD (JHARKHAND) - 828129 मेन न 0326 2273354: जेग्स: 0326 2273445, 1-मेस: cgmwj@bccl.gov.in PHONE NO:0326 2273354, FAX NO: 0326 2273445, e-mail : cgmwj@bocl.gov.in W.O. No. - BCCL/WJA/MNP/SUR/2016-17/ 340 Trated: 04.07.2016 8--M/S Mohan Rai, Contractor. Moonidih Colliery. Subject: Construction of two EPI Stopping at S-X-Cut near 4th connection at400MH at Moonidih Colliery. Dear Sir, As per E-Tender Id: 2015\_BCCL\_27048\_1 for above mentioned subject work against NIT No. BCCL/WJA/MND/SUR/2015-16/28 Dated:24.11.2015 has been accepted by the competent authority and you are hereby awarded the entire work for the value of Rs.6, 58,730.00 (Rupees six lakhs fifty eight thousand seven hundred thirty only) at the quotated rate submitted by you. The rate and bill of quantity will be as follows: The date of commencement will be reckoned from seven days from issue of this work order or as per actual which ever is earlier. The date of completion will be 180.00(one hundred eighty) days after the date of commencement and a subity up to 10% of the value of the contract may be imposed if you fail to complete the icb as per schedule. The company has received a sum of Rs.4, 705.00 vide DD No.276427 dt.10.12.2015 of SBI Bank, Digwadih (Dhanbad) which has been adjusted against your security deposit (first part of security deposit) for the above mentioned subject work and balanced performance security deposit of Rs, 28, 232.00 (Rupees twenty eight thousand two hundred thirty two only) shall be submitted within 28 days of issue of this work order in any of the form given below: . A Bank Guarantee in prescribed form. .Govt. Securities, FDR . Demand draft in favour of M/S Bharat Coking Coal Limited of any Nationalised Bank payable at Dhanabad. All running on account bills shall be paid at 95 %( ninety five percent) of work value. This 5 %( five percent) deduction towards Retention Money will be the second part of security deposit. 5% performance security should be refunded within 14 days of the issue of defect liability certicate (taking over certificate with a list of defects). Retention Money/2nd part of security deposite will be refunded after issue of No Defect Certificate & satisfactory completion of work by project authority after six months of completion of work. The work is awarded to you on the basis of labour rate including Bricks, Cement & Sand; other materials required for the job including the tools and tackles will be issued from the dept. on surface but loss of any materials or misuse of materials will be your responsibility and cost of lost or misused materials will be recovered from your bills.



भारत कोकिंग कोल Bharat Coking Coal Limited कम्प्रती नी कोल इंडिया का एक उपकम) (A Subsidiary of Coal ladia Limited; A Maharatna Company) कोयला भवन, कोयला मगए, Regd. Off. : Koyla Bhawan, Koyla Nagar Dhanbad - 826005 CIN: U10101JH1972G01000918 सीआइएन : U10101JH1972GOT000918 परियोजना पदाधिकारी का कार्यालय OFFICE OF THE PROJECT OFFICER मुनीडीह कोलियरी MOONIDIH COLLIERY पो. मुनीडीठ, जिला: यनवाय (कारखण्ड)-828129 PO: MOONIDIH, DISTT: DHANBAD (JHARKHAND) - 828129 मेन न.0326 2273354: फेस्स: 0326 2273445, ई-मेत: comwj@bccl.gov.in PHONE NO.0325 2273354, FAX NO: 0325 2273445, e-mail : ogmwj@bool.gov.in V.O. No.-BCCL/WJA/SUR/MND/2016-17/24-02/219 Dated: 23.02.2017 17 ò. ri Shailesh Kr. Singh, contractor. Aoonidih Colliery. Subject: Construction of two nos, EPI Stopping near Shaft No.-I & II at 280MH at Moonidih Colliery. lear Sir, As per E-Tender Id: 2016\_BCCL\_34939\_1 for above mentioned subject work against NIT No. "/WJA/MND/SUR/2015-16/24-02 Dated: 20.03.2016has been accepted by the competent authority and you re hereby awarded the entire work for the value of Rs.9, 40,293.00 (Rupees nine lakhsseventy forty housand two hundred ninety three only) at the quotated rate submitted by you. FC has been given for Rs.6, 10,000.00 (Rupees six lakhs only) for the year 2016-17 balance FC will be provided in the year 2017-18. The rate ind bill of quantity will be as follows: The date of commencement will be reckoned from seven days from issue of this work order or as per ctual which ever is earlier. The date of completion will be 240.00(two hundred forty) days after the date of ommencement and penalty up to 10% of the value of the contract may be imposed if you fail to complete the job s per schedule. The company has received a sum of Rs.6, 440.00 vide DD No.096416 Dt.13.05.2016 of UCO Bank, Aconidih (Dhanbad) which has been adjusted against your security deposit (first part of security deposit) for the bove mentioned subject work and balanced performance security deposit of Rs, 40, 575.00 (Rupees forty housand five hundred seventy five only) shall be submitted within 28 days of issue of this work order in any of the orm given below: A Bank Guarantee in prescribed form. Fovt. Securities, FDR many draft in favour of M/S Bharat Coking Coal Limited of any Nationalised Bank payable at Dhanabad. All running on account bills shall be paid at 95 % (ninety five percent) of work value. This 5 % (five percent) eduction towards Retention Money will be the second part of security deposit. 5% performance security should be refunded within 14 days of Issue of defect liability certificate (taking wer certificate with a list of defects). Retention Money/2<sup>nd</sup> part of security deposite will be refunded after issue of to Defect Certificate & satisfactory completion of work by the Project authority after sxi months of completion of pork. The work is awarded to you on the basis of labour rate including Bricks, Cement & Sand; other materials equired for the job including the tools and tackles will be issued from the dept. on surface but loss of any aterials or misuse of materials will be your responsibility and cost of lost or misused materials will be recovered om your bills. 1.111

Contractor have to ablde by the CMPF rules as applicable in respect of the contractor workers to be engaged for the job and will be responsibility of the contractor to ensure submission of prescribed form for allotment of account no. to CMPF office immediately the workers becomes eligible for this, a copy of this should be given to Manager (Personnel), Moonidih Colliery.

You will have to make payment to your workers through Bank and a copy of the payment sheet will have to be submitted along with each bill of the contract to Dy. Manager (P), Moonidih Colliery. In case of accident you will be responsible for compensation of any other similar laws in-force.

You will have to spare new workers for training on job at our training centre.

The contractor may be fined up to Rs.10, 000.00 accordingly to seriousness of the default if:

- V) They send lobours in ug without proper attendance.
- ii) They employed untrained labours in ug.

On termination of work order/ composition of the work you shall have to dispose off labous after making full and final payment of their legal due and the management shall not take any responsibility of any discrepancy including deployment of workmen employed by you.

You are requested to deposit Non Judicial stamp paper of Rs.1, 000.00 only to the office of undersigner the agreement during office hours on any working day within 28 days of Issue of this work order.

Yours' Faithfully

Sd/-PROJECT OFFICER MOONIDIH COLLIERY

Cupy to:

1. AFM: This has to his FC No. ; WJA/MND/FC/AFM/Misc. Contractual works/Rev/ 2016-17/37/79/1346 Dt.:15.02.2017 for Rs.6, 00,000.00 (This includes Service Tax Rs.31, 500.00 on A/C of BCCL & Rs.31, 500.00 A/C of Sri Shallesh Kr. Singh, Contractor)

- 2. Area Survey Officer, W. J. Area
- Colliery Manager, Moonidih Colliery
- 4. Ventilation Officer,
- 5. Dy. Manager(Personnel), -do-
- 6. Sr. PA to PO, -do-
- 7. AM(Finance),
- 8. Asstt. Manager(Finance), -do-
- 9 Tender File/Survey Section.

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PROJECT MOONIDIH COLLIERY







