

**INDIAN BUREAU OF MINES  
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

**Review and updation of Mining Plan REPORT**

**Kolkata regional office**

**Mine file No :** KOL/JHK/SB(W)/LST-20

**Mine code :** 38JHK18003

- (i) Name of the Inspecting : **K004** ) **B.P KERKETTA**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sri Sanjeev Tripathi, DGM(Mines)  
Official with  
Designation
- (iv) Date of Inspection : 09/11/2019
- (v) Prev.inspection date : 08/11/2019

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **RAJANKA (F-2 BLOCK)**
- (b) **Registration NO.** : **IBM/256/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : JHARKHAND
- District : SINGHBHUM (WEST)
- Village : Rajanka
- Taluka : Chaibasa
- Post office : JHINKPANI
- Pin Code : 833215
- FAX No. : +91 6589235250
- E-mail : harish.badami@acclimited.co
- Phone : +91 6589235391/300
- (f) Police Station : Tonto
- (g) First opening date : 01/07/1946
- (h) Weekly day of rest : SUN
2. Address for : M/S ACC LIMITED, P.O.- JHINKPANI- 833215  
correspondance DIST: -WEST SINGHBHUM.  
JHARKHAND
3. (a) Lease Number : BHR0032
- (b) Lease area : 9.3
- (c) Period of lease : 20
- (d) Date of Expiry : 12/09/1985
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : ACC LIMITED  
 CHAIBASA CEMENTS WORKS P.O  
 - JHINKPANI DIST. -  
 SINGHBHUM (W) SINGHBHUM  
 (WEST) JHARKHAND  
 Phone:06589-235224  
 FAX :06589-235250

Owner : Sridhar Balakrishnan  
 Cement House 121 Maharshi  
 karve Road Mumbai 40020,  
 India SINGHBHUM (WEST)  
 JHARKHAND  
 Phone: 912233024321  
 FAX : 912266317407

Agent : DR. ARUN KUMAR SAXENA  
 ACC LIMITED, CHAIBASA  
 CEMENT WORKS DISTT :  
 SINGHBHUM WEST JHARKHAND  
 SINGHBHUM (WEST) JHARKHAND  
 Phone: +91+916589235224  
 FAX : +916589235250

## Mining Engineer

Name : Mr. Mithlesh jha,Full Time  
 Qualification : B.E (Mining)  
 Appointment/ : 10/09/2019  
 Termination date

## Geologist

Name : Mrs.Bitasta Banarjee,Full Time  
 Qualification : M.Sc. in Applied Geology  
 Appointment/ : 01/11/2019  
 Termination date

## Manager

Name : SANDEEP KUMAR JAIN  
 Qualification : B. Tech.(Min. Engg.)  
 Appointment/ : 01/04/2013  
 Termination date

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	29/10/2005
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	29/07/2010
		Mining Scheme rule 12 MCDR1988	20/08/2015

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Fully explored no backlog	Fully explored no backlog	
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal for 2018-19	Exploration work completed prior to 2017-18	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	The area is fully explored.	
1e	Balance reserve as on 01/04/20		(111)-3.231 Lac Tonnes (211)-43.087 Lac Tonnes	
1f	General remarks of inspecting officers on geology, exploration etc		The area has been fully explored.	

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Common boundary area between F2 & F3 Block (SL OO'-SL PP')	No development	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	At the time of inspection separate benches were present.	
2c	Stripping ratio or ore to OB ratio	1:0.78	NIL	
2d	Quantity of topsoil generation in m3	241 cum	NIL	
2e	Quantity of overburden generation in m3	103968 cum	NIL	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No development work carried out during 2018-19 for want of Common boundary permission from DGMS.
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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01	01	
3b	Quantity of ROM mineral production proposed	146418 MT	2202 MT	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	NIL	NIL	
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NIL	
3f	Quantity of sub grade mineral generation.	120600 MT	NIL	
3g	Grade of sub grade mineral generation	35-38% (CaO)	35-38% (CaO)	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Mechanized method	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal during 2018-19	No work done.	
3j	Provision of drilling and blasting in mineral benches	Yes	Yes, Drilling and blasting doen in Mineral Benches.	

3k	Provision of mining machineries in mineral benches	Yes	Yes, Mining Machineries in mineral Benches.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of benches in overburden and mineral proposed in MP/SOM	height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM
3m	Total area covered under excavation/pits	40.867 Ha	40.867 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1:0.78	NIL
3o	Total area put in use under different heads at the end of year	54.227 Ha	50.03 Ha
3p	Production of ROM mineral during the last five year period as applicable	2014-15 400000 Tonnes 2015-16 956064 Tonnes 2016-17 90000 Tonnes 2017-18 146500 Tonnes 2018-19 210000 Tonnes	2014-15 288249 Tonnes 2015-16 440643 Tonnes 2016-17 53327 Tonnes 2017-18 32451 Tonnes 2018-19 2202 Tonnes
3q	General remarks of inspecting officers on method of mining etc.		Mining Method as peoposed in the approved documnet is being followed.

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top soil directly spread on backfilled area for plantation	Top soil directly spread on backfilled area for plantation	
4b	Location of topsoil, OB and mineral reject dumps	Top soil directly spread on backfilled area	Top soil directly spread on backfilled area	

4c	Number of dumps within lease area and outside of lease area	No Dumps	No dumps only backfilling done in the mined out area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal for dumps within the lease.	No dumps present within the lease
4e	Number of active and alive dumps.	No proposal	No active or alive dumps present within the lease.
4f	Number of dead dumps.	No proposal	No dead dumps.
4g	Number of dumps established.	No proposal for dumps to be established	No dumps established.
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	No dumps, no retaining wall, no garland drain.
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Retaining wall and garland drain is present all along the backfilled area, length of retaining wall is nearly 01 km.
4j	Number of settling ponds	01 nos of settling ponds in proposal at the end of retaining wall	01 nos of settling ponds present at the end of retaining wall covering the backfilled area.
4k	Specific comments of inspecting officer on waste dump management		No dumps present within the lease area, only backfilling is done in the mined out area which is covered by top soil in the later stage and plantation is being done.

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Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Proposal for Extraction till basement rock at the depth	Extracted till basement rock at the depth	
5b	Area under backfilling of mined out area	29.14 Ha	29.14 Ha	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	For Plantation on Backfilled area	For Plantation on Backfilled area	
5d	Total area fully reclaimed and rehabilitated	19.41 Ha during 2018-19	22 Ha in 2018-19	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Backfilling is being done in the mined out area as per proposal, and plantation is being doen in the backfilled area.	Backfilling is being done in the mined out area as per proposal, and plantation is being doen in the backfilled area.

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Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Not in proposal	Yes annual report of PMCP submitted on time.	
6b	Area available for rehabilitation (ha) .	0.81 ha	No area has been fully rehablitated.	
6c	afforestation done (ha).	proposal for 0.81 ha to be afforested.	1.0 Ha. has been afforested.	
6d	No. of saplings planted during the year	Proposal for plantation of 2000 saplings.	Nearly 2000 Saplings planted during the year.	
6e	Cumulative no .of plants	No proposal	Total of 85000 Plants have been planted during the year.	
6f	Any other method of rehabilitation	No proposal	No work done.	
6g	Cost incurred on watch and care during the year	No proposal	As reported nearly Rs 100000/-	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No proposal	No work done
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	No work done
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	0.80 Ha	1.0 Ha
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	No work done
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	No work done.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.80 ha	1.00 Ha
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	No work done.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation followed by backfilling in the mined out areas.	Plantation followed by backfilling in the mined out areas is being done.



6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposal for monitoring in core and buffer zone.	Submitted half yearly report regularly
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Plantation is being done in the mined out backfilled areas.

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposal for ROM Mineral Despatch after blending	ROM Mineral Despatch after blending	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical sorting Bench wise	Mechanical sorting Bench wise	
7c	Different grade of mineral sorted out at mines.	High & medium (>38%) & Sub grade(35-38%)	High & medium (>38%) & Sub grade(35-38%)	
7d	Any beneficiation process at mines	No Proposal	No Benefication done in Mines area.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		ROM Mineral Despatch after blending, Mechanical sorting Bench wise done in High & medium (>38%) & Sub grade(35-38%)	

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#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposal was there in approved Scheme of mining.	Top soil is seperately removed and plced in the backfilled area for plantation.	

8b	Concurrent use or storage of topsoil	Concurrent Use	Concurrent Use of top soil is being practiced.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Back filling is proposed.	Bakfilling is being done in the mined out area.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling by waste rocks and rejects is proposed.	Backfilling by waste rocks and rejects is being carried out.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposeal for phase restoration.	Phased restoration is being practiced.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Existing plants were about 20000nos. Additional plantation 2000nos to be done.	Existing plants were about 20000nos. Additional plantation 2000nos done.
8g	Survival rate	90%	above 85 %
8h	Water sprinkling on roads to control airborne dust	By fix and mobile water sprinkler available in mine	By fix and mobile water sprinkler available in mine
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Aesthetic beauty in and around mines area is good, Mines is situated in a slight hilly terrain.

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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly and Annual Return for 38JHK18017 Submitted on time.	Monthly and Annual Return for 2018-19 for 38JHK18017 Submitted on time.	38JHK18017 and 38JHK18003 are of same mine.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer in charge - Mr.Biswaranjan Mohanty Geologist in charge - Ashwin Rao	Mining Engineer in charge - Mr.Mithilesh Jha Geologist in charge - Ms Bitasta Banerjee	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited & abandoned by opencast (O/C) mining - 1.80 HA. Covered under current (O/C) Workings - 39.20 HA. Reclaimed/Rehabilitated - 18.100 HA. Used for waste disposal - 1.150 HA. Occupied by plant, buildings, residential, welfare buildings & roads - 8.7ha	Already exploited & abandoned by opencast (O/C) mining - 1.80 HA. Covered under current (O/C) Workings - 39.20 HA. Reclaimed/Rehabilitated - 18.100 HA. Used for waste disposal - 1.150 HA. Occupied by plant, buildings, residential, welfare buildings & roads - 8.70 HA.	
9d	Scrutiny of Annual return on afforestation	Number of trees planted during the year - 2000 nos.	Number of trees planted during the year - 2000 nos.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Rejects generated - nil	Mineral Rejects generated - nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock Production - 2202 Tonnes Grade - Cement Grade	ROM Stock Production - 2202 Tonnes Grade - Cement Grade	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mines Price of Cement Grade Limestone - Rs. 335/-	Ex Mines Price of Cement Grade Limestone - Rs. 335/-	

9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets (in Rs.) 353804980/-	Value of Fixed Assets (in Rs.) 353804980/-
9k	Scrutiny of Annual return on mining machineries	SHOVEL (HYDRAULIC) - 4 CUM - 01 Nos. DUMPER - 45 Tonnes - 02 Nos. PUMPS (ELEC.) - 04 Nos.	SHOVEL (HYDRAULIC) - 4 CUM - 01 Nos. DUMPER - 45 Tonnes - 02 Nos. PUMPS (ELEC.) - 04 Nos.

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**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed		Show couse position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

**Date :**

**(B.P KERKETTA)**

Indian Bureau of Mines