

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

Review and updation of Mining Plan REPORT

Bangalore regional office

Mine file No : KNT/GLB/LST/50/BNG

Mine code : 38KAR10016

- (i) Name of the Inspecting : **278**) **KRISHNENDU CHATTERJEE**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Shri V. Balasubramani-General Manager, Dr. Gulhane-QP
Official with
Designation
- (iv) Date of Inspection : 11/10/2018
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KALLUR LIMESTONE MINE ML**
- (b) **Registration NO.** : **IBM/170/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : KARNATAKA
District : GULBARGA
Village : KALLUR
Taluka : CHINCHOLI
Post office : KALLUR
Pin Code : 585305
FAX No. : 08475-295608, 9480827511
E-mail : subramani.v@chettinadcement
Phone : 044-42988652 (O) 044-42988
- (f) Police Station : Miryan
- (g) First opening date : 07/03/2012
- (h) Weekly day of rest : SUN
2. Address for : KALLUR VILLAGE, GARAGAPALLI POST,
correspondance CHANDAPUR, CHINCHOLI TALUK
GULBARGA - 585305
3. (a) Lease Number : KAR1677
- (b) Lease area : 423.11
- (c) Period of lease : 30
- (d) Date of Expiry : 24/09/2040
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : CHETTINAD CEMENT CORPORATION LIMITED
 KALLUR VILLAGE, GARAGAPALLI
 POST CHANDAPUR, CHINCHOLI
 TALUK GULBARGA - 585305
 GULBARGA KARNATAKA
 Phone:
 FAX :

Owner : L.MUTHUKRISHNAN
 Nominated owner, Rani
 Seethai Hall Building, IV &
 V 603, Anna Salai,
 Chennai, Tamilnadu CHENGAI-
 ANNA TAMIL NADU
 Phone:
 FAX :

Agent : R A Krishna Kumar
 Rani Seethai Hall Building,
 IV & V Floors, 603, Anna
 Salai, Chennai, Tamilnadu
 CHENGAI-ANNA TAMIL NADU
 Phone:
 FAX :

Mining Engineer
 Name : V.Rami Reddy, Full Time
 Qualification : B.TECH(MINING) SECOND CLASS MINES MANAGE
 Appointment/ : 10/06/2013
 Termination date

Geologist
 Name : K.V.SUBBA REDDY, Full Time
 Qualification : M.Sc.(GEOLOGY)
 Appointment/ : 10/06/2013
 Termination date

Manager
 Name : V.BALASUBRAMANI
 Qualification : D.MIN.ENGG.& 1st CLASS COMPETENCY CERTIF
 Appointment/ : 07/03/2012
 Termination date

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 15/04/2014
 Plan/Scheme of Mining : MP modif under 17(3) MCR 2016 02/08/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	15 boreholes proposed	Nil	
1b	Exploration over lease area for geological axis 1 or 2	G1 & G2	G1 covered 225.6 Ha.	So far 99 nos. of boreholes have been drilled in the ML area with cumulative meterage of 4179 m.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified.	No exploration during 2017-18.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1 & G2	G2 & G3.	
1e	Balance reserve as on 01/04/20	No proposal	Total reserve 176 million tonnes as on 01.04.2018.	
1f	General remarks of inspecting officers on geology, exploration etc		Exploration by 15 nos. of core boreholes was proposed during F.Y. 2017-18, against which no exploration was carried out during said period. Violation of Rule 11(1) was issued to the lessee dated 24.10.2018.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed in block A, N 1922800 to N 1923620 and E 760356 to E 761278	Block A; N 1922580 to N 1923800 and E 761310 to E 761810	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed for OB and mineral	Separate benches for OB and mineral maintained.	
2c	Stripping ratio or ore to OB ratio	1: 0.09	1: 0.06	

2d	Quantity of topsoil generation in m3	59965 m3	85480 m3	
2e	Quantity of overburden generation in m3	379400 m3	Nil	Entire OB generated was top soil during 2017-18.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		OB generated in mining pit development area during 2017-18 was entirely top soil.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit in block A (Pit 1)	Single pit in block A (Pit 1) measuring apprx. 800m(L) X 600m (W) X 45m (D)	Other small pit (Pit 2) located south of the block A measuring apprx. 450m (L) x 100m(W) x 15m (D).
3b	Quantity of ROM mineral production proposed	10 million tonnes of Limestone	3.08 million tonnes	
3c	Recovery of sellable/usable mineral from ROM production	100% recovery for captive use.	100% recovery of ROM for captive use.	
3d	Quantity of mineral reject generation	No proposal	No mineral reject generation during 2017-18.	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not Applicable as no mineral reject generation.	
3f	Quantity of sub grade mineral generation.	No proposal	Nil	
3g	Grade of sub grade mineral generation	No proposal	Not Applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method proposed.	Mechanised method adopted.	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No beneficiation study carried out during 2017-18.	
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting proposed.	Regular drilling and blasting carried out for production.	
3k	Provision of mining machineries in mineral benches	Proposed by hydraulic shovel and dumper combination.	No change.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height 9m, width 10m proposed.	Bench height 8 to 9m and width 10 to 15m maintained.	
3m	Total area covered under excavation/pits	85.14 Ha. area proposed at the end of F.Y. 2018-19.	52.5 Ha. area covered by mining pits.	
3n	Ore to OB ratio for the pit/mine during the year.	1: 0.09	1: 0.06	
3o	Total area put in use under different heads at the end of year	130.8 Ha. at the end of F.Y. 2018-19.	94.5 Ha. at the end of F.Y. 2017-18.	
3p	Production of ROM mineral during the last five year period as applicable	2013-14: 7000,000 2014-15: 3000,000 2015-16: 5000,000 2016-17: 7000,000 2017-18: 10000,000 (in tonnes)	2013-14: 1302,735 2014-15: 1566,320 2015-16: 1828,093 2016-17: 1947,042 2017-18: 3080,702 (in tonnes)	Production deviation was - 69.2% during 2017-18.
3q	General remarks of inspecting officers on method of mining etc.		Violation of rule 11(1) was issued to the lessee dated 24.10.2018 for production deviation of -69.2% during F.Y. 2017-18.	

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Seperate dumping of top soil proposed.	Seperate dumping of top soil was carried out.	
4b	Location of topsoil, OB and mineral reject dumps	Top soil stacking porposal was north and eastern side of the Block - A, along the safety barrier.	Top soil was stacked along the safety barrier of block A and concurrently using for plantation, no waste dump located within ML.	
4c	Number of dumps within lease area and outside of lease area	Proposed for erection of bund with waste material along the road/ nallah and afforested, no separate waste dumping was proposed.	No waste dump located within ML.	OB removed from the ML was mainly consists of top soil which was used for erection of bund along the lease boundary in block-A.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal	Not applicable as no waste dump located within ML.	
4e	Number of active and alive dumps.	No proposal	Nil	
4f	Number of dead dumps.	No proposal	Nil	
4g	Number of dumps established.	No proposal	Top soil bunds were established by concurrent afforestation.	
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall proposed along western side of the ML area.	Top soil retaining bund constructed along western side of Block A.	
4i	Length of Retaining wall or garland drain all along dumps	500 m of retaining wall	580m of top soil retaining wall constracted.	
4j	Number of settling ponds	One settling pond proposed	Not constructed.	

4k	Specific comments of inspecting officer on waste dump management	Constructions of two nos. of check dam and one silt settling tank were proposed during 2017-18 but not constructed by the lessee; violation of rule 11(1) issued dated 24.10.2018.
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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.	No such proposals as mined out pits were not matured for back-filling.	Nil	
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil utilised for plantation purpose.	Top soil utilised for plantation purpose.	
5d	Total area fully reclaimed and rehabilitated	No proposal.	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Mined out pit is not matured for back-filling and water reservoir.	

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).	The Annual Report on PMCP to be submitted within the stipulated time for FY 2017-18 within 1st July 2018	Annual Report for 2017-18 submitted.	

6b	Area available for rehabilitation (ha) .	No proposal	Nil
6c	afforestation done (ha).	4.6 Ha. area proposed	4.6 ha. area afforested along safety barrier zone and near mine office premises.
6d	No. of saplings planted during the year	4000 nos. proposed within ML.	4000 nos. within ML and 5000 nos. outside ML planted.
6e	Cumulative no .of plants	Not specified.	Approx. 30,000 nos. within ML.
6f	Any other method of rehabilitation	No proposal	Nil
6g	Cost incurred on watch and care during the year	Rs. 4 lakhs during 2017-18	Rs. 4,13 lakhs
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal for backfilling.	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	No waste land present within ML area.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monthly environment monitoring proposed.	Environmental monitoring were carried out on monthly basis and parameters were within the permissible limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Mined out pit is not matured for back-filling and for making water reservoir. About cumulative of 30,000 nos of saplings were planted within the ML area.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM proposed to be crushed at crusher of 1500TPH capacity located outside ML.	No change.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised Crushing	Mechanised Crushing	
7c	Different grade of mineral sorted out at mines.	The low grade and high grade limestone blended as per the cross belt analyser report.	Low grade siliceous limestone and high grade limestone blended as per the cross belt analyser report.	

7d	Any beneficiation process at mines	No such proposals	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		No deviation in respect of mineral conservation was observed during the inspection dated 11.10.2018

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Seperate removal and utilisation of top soil proposed.	Separate removal and utilization/stacking of topsoil for plantation purpose.	
8b	Concurrent use or storage of topsoil	Proposed	Concurrently use for plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Nil as no overburden waste except top-soil waste.	Nil	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal	Not applicable as ore not exhausted in mining pits.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposal	Nil as mined out pits are not matured for back-filling and water reservoir.	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Entire ML area is non-forest. There is proposal of planation of 4000 nos of saplings in 4.5 Ha area within ML during 2017-18	4000 nos. saplings within ML and 5000 nos. outside ML were planted during year 2017-18. About 30,000 nos of saplings were planted so far.
8g	Survival rate	80%	70 to 80% within ML.
8h	Water sprinkling on roads to control airborne dust	Proposed	The regular dust suppression by sprinkling of water is being made in the mine.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		The aesthetic beauty in and around mine is good as lessee had carried out afforestation and other environmental protective measures as per approved Modified RMP.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R. Submitted up to Oct. 2018 A.R. submitted upto FY 2017-18	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager: V Balasubramani Mining Engineer: V. Rami Reddy Geologist: K.V. SubbaReddy	Mines Manager: V Balasubramani Mining Engineer: V. Rami Reddy Geologist: K.V. SubbaReddy	No change.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Mining pits : 49.4 Ha. Plantation and Top soil stacks: 35.4 Ha Infrastructure /plant/buildin gs: 9.7 Ha	Actual also same at that time	
9d	Scrutiny of Annual return on afforestation	4000 nos. within ML.	Actual also same.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject generation during 2017-18.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	1110767 tonnes of ROM stock	4 nos. of ROM stocks located near mine office, south of the ML area (Block-A).
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine Price and cost of production: Rs 170.20 per tonne as captive mine.	Appear to be correct.
9h	Scrutiny of Annual return on fixed assets	Rs. 291,1405401/-	Appeared to be correct including plant and existing infrastructure.
9k	Scrutiny of Annual return on mining machineries	Excavator (2.1 Cum): 5 nos. Dumpers (35 tonnes): 15 nos. Tipper: 3 nos. Dozer: 1 no. Water Tanker: 1 no. Rock Drill: 2 nos (115 mm) Explosive van(10 tonnes): 1 no.	No change.

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
MCDR17	Rule 11(1)	24/10/2018			
MCDR17	Rule 35(2)	24/10/2018			

Date :

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines