

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

Inspection under SDF for star rating of mines REPORT

Bangalore regional office

Mine file No : KNT/GLB/LST-53/BNG

Mine code : 38KAR10020

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri J Pradeep Kumar - Mines Manager ,Shri. N.Prasant
Official with
Designation
- (iv) Date of Inspection : 17/12/2019
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KHARCHIKHED LIMESTONE MIN**
- (b) **Registration NO.** : **IBM/13906/2012**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **GULBARGA**
- Village : **KHARCHIKHED**
- Taluka : **CHINCHOLI**
- Post office : **MIRIYAN**
- Pin Code :
- FAX No. : **040-30006955**
- E-mail : **kalburgicementmines@gmail.com**
- Phone : **040-30006999**
- (f) **Police Station** : **MIRIYAN**
- (g) **First opening date** : **21/06/2016**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **KHARCHIKHED VILLAGE**
correspondance : **CHINCHOLI TALUK**
: **KALABURAGI DISTRICT**
3. (a) **Lease Number** :
- (b) **Lease area** :
- (c) **Period of lease** :
- (d) **Date of Expiry** :
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : M/S KALBURGI CEMENT PRIVATE LIMITED
CHATRASALA VILLAGE
CHINCHOLI TALUK GULBARGA,
KARNATAKA GULBARGA
KARNATAKA
Phone:
FAX :

Owner : M/s Kalburgi Cement Private Limited
Chatrasala Village,
Kharchikhed PO, Chincholi
Taluk, Kalburgi District
Karnataka GULBARGA
KARNATAKA
Phone:
FAX :

Manager

Name : K.SUDHAKAR
Qualification : Dip.in (Mining), FCC.
Appointment/ :
Termination date

6. Date of approval of Mining Plan/Scheme of Mining : MP review under 17(1) MCR 2016 28/11/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil	No backlogs
1b	Exploration over lease area for geological axis 1 or 2	G1 & G2	Exploration Completed covering the entire ML area 465.39 Ha	Total 132 core holes drilled during the years 2015-16 & 2016-17 covering entire ML area at 200 X 200 m grids to upgrade the LSt
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal	Nil	M/s GEMS, Hosapete, carried out the exploration in the year 2015-16 & 2016-17 Cost: Rs.1.07 Crores
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	465.39 Ha of the ML area explore.
1e	Balance reserve as on 01/04/20	Nil	3 Million tonnes	As per AR Submitted for FY 2018-19
1f	General remarks of inspecting officers on geology, exploration etc			As against the proposal of 133 core bore holes 132 core boreholes drilled amounting to 6056 meters covering 465.39 Ha of ML area

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Location of development proposed : E 1067 - 1105, N 852 - 937	Actual development done: E 1070 - 1100, N 858 - 915	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches are proposed in OB and Mineral	Separate benches maintained in OB and Mineral	BC Soil -01 & Mineral - 01

2c	Stripping ratio or ore to OB ratio	1 : 0.15	1:0.38	Nil
2d	Quantity of topsoil generation in m3	1162 Tons	922 Tons as on Nov.2019	BC Soil-1.2 t/M3
2e	Quantity of overburden generation in m3	6586 Tons	4320 Tons as on Nov 2019	Bulk density limestone-2.5 t/M3, BC Soil-1.2 t/M3
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The pit was developed as per the proposal in the central part of the ML area.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit proposed	Actual work was carried out in one pit only	OB-1 bench, Limestone-1 bench
3b	Quantity of ROM mineral production proposed	1,05,040 MT	28,649 MT ,as on Nov 2019	Violation issued for lower production
3c	Recovery of sailable/usable mineral from ROM production	100 %	100 %	Nil
3d	Quantity of mineral reject generation	No proposal	Nil	No generation of mineral reject
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	Nil	Nil
3f	Quantity of sub grade mineral generation.	No Proposal	Nil	No sub grade mineral generated
3g	Grade of sub grade mineral generation	No proposal	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal	All the blasted material is fed to the crusher situated at Chatrasala, feeding to the plant after sizing	Nil

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No beneficiation study carried out	Nil
3j	Provision of drilling and blasting in mineral benches	Deep hole drilling and blasting was proposed.	Using deep hole drilling and blasting carried out as per proposal	Drilling by 115 mm and blasting by 83 mm slurry in conjunction with NONEL detonators
3k	Provision of mining machineries in mineral benches	Excavator tipper combination is proposed using deep hole drilling & Blasting	Mining Machineries deployed as proposed in the mine. The loading and transportation is supported by Shovel with 05 tippers. 01-PC 210 LC,05-Tata tippers,01-Wagon Drill,	The drilling, loading & transporting of limestone is outsourced
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height of:OB-1.5 to 2m and in limestone- 6 to 8m. Bench Width-15 mts	Bench height & appropriate width maintained as per the proposal	Mineral - 6 to 8 mtrs & OB - 2 mtrs
3m	Total area covered under excavation/pits	3.89 Ha at the end of the plan period	1.56 Ha as per the AR submitted for FY 2018-19	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.15	1:0.38	As on Nov 2019
3o	Total area put in use under different heads at the end of year	3.89 Ha - Pit, 0.55 Ha - Storage of Soil, OB-1.32 Ha Roads - 2.00 Ha, Green belt - 1.25 and PMCP -0.55Ha =9.56 Ha	1.56 Ha - Pit, 0.63 ha Infrastructure, OB safety bund - 1.30 Ha (River safety bund)	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014 - 15: 100,500 MT 2015 - 16: 100,193 MT 2016 - 17: 100,485 MT 2017 - 18: 100,298 MT 2018 - 19: 100,515 MT 2019 - 20: 105,040 MT	2014 - 15: 100,500 MT 2015 - 16: Nil 2016 - 17: Nil 2017 - 18: 6,764 T 2018 - 19: 45,450 T 2019 - 20: 28,649 T, till Nov.2019	Violation issued for deviation in production

3q General remarks of inspecting officers on method of mining etc. The actual exploitation of mineral was on the lower side. V/L issued for necessary clarification.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping for top soil and OB along River Safety zone (RSZ) towards East.	OB (BC Soil) is dumping along RSZ as safety bund towards East and temporary dumping of Topsoil.	Nil
4b	Location of topsoil, OB and mineral reject dumps	Top soil: E 1974 to 1994, N 841 to 939 OB: E 2040 to 2080, N 812 to 838	Temporary top soil: : E 1974 to 1995, N 862 to 933, OB: E 2043 to 2073, N 817 to 834	Nil
4c	Number of dumps within lease area and outside of lease area	01 dump within ML	01 dump within ML	Entire area is mineralized
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed Within UPL	The safety bunds are made within UPL	No area is devoid of mineral
4e	Number of active and alive dumps.	01	01 dump is active & alive	Nil
4f	Number of dead dumps.	No dead dumps proposed	Nil	The mine is opened a few years back only
4g	Number of dumps established.	No Proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Whether Retaining wall or garland drain all along dumps proposed	Retaining wall of black cotton soil made	Along the river safety zone
4i	Length of Retaining wall or garland drain all along dumps	212m long	Earthen bund of 212Mts made along the dump	Nil
4j	Number of settling ponds	No proposal	Nil	Nil

4k	Specific comments of inspecting officer on waste dump management	Waste dump management was satisfactory. Waste dumping carried as per proposal
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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 Proposal	Nil	The Mines is in initial stage. Hence no proposal of Back filling.
5b	Area under backfilling of mined out area	No Proposal	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	No Proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The Mines is in initial stage & it has been opened in 2016-17.No backfilling & reclamation proposed except plantation

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).	To be submitted before 1st july every year	PMCP report submitted	Submitted vide letter No: KCPL / MINES - KLM / IBM / RR /2019- 86 ,Date: 28th June 2019.
6b	Area available for rehabilitation (ha) .	0.25 Ha	0.30 Ha	Nil

6c	afforestation done (ha).	0.25 Ha	0.30 Ha	Nil
6d	No. of saplings planted during the year	250 no of saplings	500 saplings planted in FY 2019-20	Nil
6e	Cumulative no .of plants	250 nos	so far 750 saplings planted	Nil
6f	Any other method of rehabilitation	No proposal	Nil	Plantation done
6g	Cost incurred on watch and care during the year	Rs.20,000/-	Rs.50000/-	Includes purchasing of saplings & watering
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil	Nil

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Season wise environmental monitoring proposed in core & buffer Zone for air,water,noise & soil	Season wise environmental monitoring carried out in core & buffer Zone for air,water,noise & soil	The monitoring is carried out by M/s GEMS, Hosapete. All the parameters are within the limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities were carried out as proposed in the approved document

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral will be loaded and transported to crusher	ROM is loaded and transported to crusher existing in the adjacent ML in tippers for further sizing	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	All the blasted material is fed to the crusher for size reduction	No sorting of mineral
7c	Different grade of mineral sorted out at mines.	No proposal	Nil	Nil

7d	Any beneficiation process at mines .	No beneficiation proposed	No beneficiation work done.	All the blasted material is fed to crusher for captive consumption
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The mine is in initial stage.All the blasted material is sent to crusher for size reduction & is used for captive purpose.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and utilization of topsoil proposed	Top soil is removed and stacked separately and used for plantation	Nil
8b	Concurrent use or storage of topsoil	Proposed	Utilized for plantation	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB is proposed to be dumped along the River safety zone all along the ML boundary.	Safety bund along the River safety zone is made towards East	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Still the mine is in initial stage ,hence no proposal has been done.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	Nil	Nil

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Available	OML-1000 @ 95 % Survival	Plantation to be done with in ML area on safety bunds.Preparation in progress
8g	Survival rate	85 %	95 % outside the ML area	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads proposed to control airborne dust	Water tanker is used to suppress the airborne dust on haul roads in mines.	8KL water tanker is in use
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in & around the mine is maintained as there is not much of the land degradation.The mine is in the initial stage

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 - 2019. A.R. submitted up to year 2018-2019	AR submitted on 28th June 2019.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager- J Pradeep Kumar Mining Engineer- N Prasanth Geologist: K Nagaraja Rao	Same mine officials were present during the inspection.Violation issued for ME ,not having desired experience	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	1.56 Ha - Pit, 0.63 ha Infrastructure , OB safety bund - 1.30 Ha (River safety bund)	Appears to be correct	
9d	Scrutiny of Annual return on afforestation	WML- Nil OML-1000 @ 95 % Survival	Appears to be correct	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock (Limestone) OB: Nil, Production: 45,450 MT CB: Nil	Appears to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production & Ex Mine price- Rs.184.86/ton	No sale value, as it is a captive mine
9h	Scrutiny of Annual return on fixed assets	Rs.135,40,14,000/- including plant and machinery, land and residential building	Appears to be correct
9k	Scrutiny of Annual return on mining machineries	01-PC 200 LC 05-Tata tippers 01-Wagon Drill, 01-Jeep	Appears to be correct

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	08/01/2020			
MCDR17	Rule 55(1)(1)	08/01/2020			
MCDR17	Rule 35(2)	08/01/2020			
MCDR17	Rule 11(1)	09/01/2020			
MCDR17	Rule 55(1)(3)	09/01/2020			
MCDR17	Rule 35(2)	09/01/2020			

Date :

(ARUN KUMAR)

Indian Bureau of Mines