

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

MCDR inspection REPORT

Bangalore regional office

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

Mine code : 38KAR10020

- (i) Name of the Inspecting : **S21**) **H M Shivakumar**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Sri. Gundla Sudhakar, DGM-Mines, Sri. J. Pradeep Kumar,
Official with
Designation
- (iv) Date of Inspection : 28/12/2022
- (v) Prev.inspection date : 04/08/2021

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 correspondance** : **KHARCHIKHED VILLAGE**
CHINCHOLI TALUK
KALABURAGI DISTRICT, KARNATAKA
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:040-30006999
 FAX :040-30006955

Owner : ANOOP KUMAR SAXENA, Nominated Owner
 M/S KALBURGI CEMENT PRIVATE
 LIMITED CHATRASALA VILLAGE,
 KHERCHKED P.O CHINCHOLI
 TALUK, GULBARGA DISTRICT
 GULBARGA KARNATAKA
 Phone: 040-30006999
 FAX : 040-30006955

Agent : Sunil Chhaperwal
 Chatrasala (V), Kherchikhed
 (P), Chincholi (T),
 Kalaburagi Dist GULBARGA
 KARNATAKA
 Phone: +91 8472 305999
 FAX :

Mining Engineer

Name : JADALA PRADEEP KUMAR, Full Time
 Qualification : B. Tech-Mining,
 Appointment/ : 06/11/2021
 Termination date

Geologist

Name : Ch STALIN RICHARDSON, Full Time
 Qualification : M.Sc. (Geology)
 Appointment/ : 09/12/2021
 Termination date

Manager

Name : J. PRADEEP KUMAR
 Qualification : B.E.in (Mining), FCC.
 Appointment/ : 29/10/2018
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 08/02/2012
 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 backlog of previous proposals.	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	No Proposal	NIL	The entire lease area of 465.39 has been explored by drilling 132 core boreholes at grid interval of 200mx200m
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal	NIL	The entire lease area of 465.39 has been explored by drilling 132 core boreholes at grid interval of 200mx200m
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal	NIL	The entire lease area of 465.39 has been explored by drilling 132 core boreholes at grid interval of 200mx200m
1e	Balance reserve as on 01/04/20	366.61million tonnes as on 01.11.2018.	366.45 million tons as on 01.04.2022	As per the Annual Return of Form H-8 for the 2021-22.
1f	General remarks of inspecting officers on geology, exploration etc			The limestone deposit is a simple bedded sedimentary deposit with good cement grade limestone. The entire lease area of 465.39 has been explored by drilling 132 core boreholes at grid interval of 200mx200m.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	N 3075 E 2652 N 3148 E 3550	Development carried out within the proposed extent.	Local co-ordinates as per the approved document.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed in Overburden and Mineral.	Separate benches maintained in OB and Mineral	BC Soil -01 & Mineral - 01
2c	Stripping ratio or ore to OB ratio	1:0.16 (in volume)	1:0.51 (in volume)	OB-9184 tons~7563.33 Cum Ore-36901 tons~14761.40 Cum. As per annual return 2021-22. It is reported that due to plant shut down for maintenance limestone production was less than the proposed quantity and machinery utilized in development works achieving more than the proposed quantity. Violation issued.
2d	Quantity of topsoil generation in m3	1013 Cu.m 1216 MT	1351 Cu.m 1621 MT	As per annual return 2021-22. It is reported that due to plant shut down for maintenance limestone production was less than the proposed quantity and machinery utilized in development works achieving more than the proposed quantity. Violation issued.
2e	Quantity of overburden generation in m3	5741 Cu.m 6889 MT	6303 Cu.m 7563 MT	As per annual return 2021-22

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	It is reported that due to plant shut down for maintenance limestone production during the year 2021-2022 was less than the proposed quantity and machinery utilized in development works achieving more than the proposed quantity of OB & top soil. Violation issued.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit Proposed	One pit working only	NIL
3b	Quantity of ROM mineral production proposed	104200 MT	36901 MT	Reportedly Less production was due to Plant shut down, Heavy Rains& Low market conditions. Violation issued.
3c	Recovery of sailable/usable mineral from ROM production	100 % proposed 104200 MT	100% Utilized 36901 MT	There is no reject / low grade/sub grade material generated. All the ROM so produced is feed to crusher and conveyed for manufacturing of Cement.
3d	Quantity of mineral reject generation	No Proposal	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	NIL	NIL
3f	Quantity of sub grade mineral generation.	No Proposal	NIL	NIL
3g	Grade of sub grade mineral generation	No Proposal	NIL	NIL

3h	Manual / Mechanised method adopted for segregating from ROM	No segregation from ROM Proposed. Only Crushing proposed for sizing of the Limestone and also stacker, Reclaimer for blending of relatively high grade and low-grade Limestone.	Only Crushing carried Out for size reduction.	All the limestone generated of all grade is used after size reduction for cement Manufacturing in the captive cement plant. Crusher of 1400 TPH. Feed size < 1.2 m ³ Product Size-(-55 mm)
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	Deep hole drilling and blasting proposed.	Deep hole drilling and blasting carried out.	Drilling by 115mm dia and blasting by 83mm slurry in conjunction with detonators.
3k	Provision of mining machineries in mineral benches	Excavator- 1(2.2 cu.m) Tipper - 4 (12.5 cu.m) Drill - 1 (115mm dia)	Excavator-1 (0.9 cu.m) Tipper-5 (18 cu.m) Drill-1 (115mm dia)	The machineries engaged are varying to small extent from proposed capacity.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of OBbench-2m Height of Mineral Bench: 6-8m	Height of bench in OB- 1.5 m Height of bench in Mineral- 8m maintained	In Mineral the bench height is 8 meters and in OB is 1.2 to 1.5 meters.
3m	Total area covered under excavation/pits	3.89 Ha till end of plan period i.e., till 31.03.2024.	2.09 Ha. As on 01.04.2022	As per the annual return 2021-22
3n	Ore to OB ratio for the pit/mine during the year.	1:0.08 (In Volume)	1:0.51 (In Volume)	OB-9184 tons~7563.33 Cum Ore-36901 tons~14761.40 Cum. As per annual return 2021-22. Violation issued.

3o	Total area put in use under different heads at the end of year	At the end of RMP(31.03.2024) Area under Mining 3.89 Storage of Top soil 0.55 Over burden 1.32 Roads 2.00 Others-PMCP 0.55 Green Belt 1.25 Total 9.56	Actual (as on 01.04.2022) Area under Mining 2.09 Storage of Top soil 0.31 Over burden 1.15 Roads 1.50 Others-PMCP 0.36 Green Belt 0.61 Total 6.02	Details are furnished as per the annual return submitted for the year 2021-22.
3p	Production of ROM mineral during the last five year period as applicable	2017-18 - 1,00,298 2018-19 - 1,00,515 2019-20 - 1,05,040 2020-21 - 1,04,760 2021-22 - 1,04,720	2017-18 -6,764 2018-19 -45,450 2019-20 -54,651 2020-21 -33,945 2021-22 -36,901	Less production for the year 2021-22 due to Plantshutdown, Heavy Rains and low market conditions. Violations issued.
3q	General remarks of inspecting officers on method of mining etc.			Method of Mining is by open pit mechanized mining and is the right method of mining for this type of flat bedded deposit.

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 dumped along RSZ as safety bund towards East and temporary dumping of Topsoil.	NIL

4b	Location of topsoil, OB and mineral reject dumps	OB Dump N 809 E2043 N 867 E 2092 Top Soil Dump N 848 E 1998 N 939 E 2029	OB Dump N 819 E 2041 N 861 E 2081 Top Soil Dump N 848 E 1995 N 939 E 2029	No mineral reject generation. OB & Top soil dumping is within the proposed co-ordinates as per the approved Mining plan.
4c	Number of dumps within lease area and outside of lease area	01 dump within ML	01 dump within ML	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed within UPL	All dumps are within UPL	The entire Mining Lease is Mineralized and therefore all proposals of temporary dumping OB & TS are made to be utilized later for backfilling of the mined-out pits.
4e	Number of active and alive dumps.	01 No	01 No	NIL
4f	Number of dead dumps.	No proposal	NIL	NIL
4g	Number of dumps established.	No proposal	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed retaining wall of 212 mtrs along the river safety zone and construction of garland drain around pit and dump	42m Retaining wall constructed and a garland drain made around pit and dump	It was proposed to construct 212m Length of retaining wall. However only 42m length of retaining wall is constructed. Violation issued.
4i	Length of Retaining wall or garland drain all along dumps	212m long	42 mtrs retaining wall constructed. A garland drain made around pit and dump covering an area of 0.08 Hect.	NIL
4j	Number of settling ponds	No Proposal	NIL	NIL

4k	Specific comments of inspecting officer on waste dump management			It was proposed to construct 212m Length of retaining wall. However only 42m length of retaining wall is constructed and Violation issued.
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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 Mine 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 mine is in a very initial stage of development with a small pit of one mineral bench and mineral exists underneath. No part of the pit is matured for backfilling and reclamation.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted before 1st of July every year.	Annual PMCP Report submitted for the year 2021-22 On 25th June, 2022	NIL
6b	Area available for rehabilitation (ha) .	0.25 ha on OB soil Dumps proposed	0.25 ha on OB soil Dumps as proposed	Top soil is temporarily stacked for future use in proposed plantation.
6c	afforestation done (ha).	0.25 ha on OB soil Dumps proposed	0.25 ha on OB soil Dumps as proposed	
6d	No. of saplings planted during the year	250 nos. of saplings proposed on OB soil dump within ML and 4000 nos. outside ML are	250 nos. of saplings planted within ML on OB soil dump and 4000 nos. outside ML area	Details as furnished in the Annual Return for the year 2021-22 and appears to be correct.
6e	Cumulative no .of plants	750 Nos upto 31.03.2022 of the plan period	1,000 nos. within ML Area since inception of the mine	NIL
6f	Any other method of rehabilitation	No Proposal	NIL	NIL
6g	Cost incurred on watch and care during the year	Rs 20,000/- proposed for dump management	Cost incurred on watch & care during the year as per proposal.	Appears to be correct.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x 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 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	0.25 ha on OB soil Dumps proposed with 820 nos. of saplings	0.25 ha on OB Soil Dumps have been afforested with 250 no of saplings.	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)	Environmental monitoring Proposed.	Environmental monitoring Carried out by Global Environment & Mining Services, Hosapete. Air quality, Surface Water, Ground water, Noise level, Dust & soil monitoring carried out. All parameters are within permissible Limits	

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Proposed Plantation carried out. Environmental monitoring is carried out by Global Environment & Mining Services, Hosapete. Air quality, Surface Water, Ground water, Noise level, Dust & soil monitoring carried out. All parameters are within Limits. For the year 2021-22, it was proposed to construct 212m Length of retaining wall. However only 42m length of retaining wall only is constructed. Violation issued.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral no sorting only crushing and size reduction	ROM Mineral no sorting only crushing and size reduction by Double rotor impact hammer crusher capacity of 1400 TPH	All the limestone generated of all grade is used after size reduction for cement manufacturing in the captive cement plant. Crusher of 1400 TPH. Feed size? 1.2 m3 Product Size-(-55mm)
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No grade wise Mineral sorting proposed. Only Mechanized crushing Proposed.	Mechanized crushing carried out as per the proposal.	NIL

7c	Different grade of mineral sorted out at mines.	No Sorting in ROM mineral	No Sorting in ROM mineral	NIL
7d	Any beneficiation process at mines	No Proposal	NIL	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The high grade and low grade is suitably blended to achieve cement grade limestone thereby taking care of mineral conservation aspect. No beneficiation required for the mineral produced.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	The generation of 1013 cu.m top soil proposed for the year 2020-21.	1,351 cu.m top soil has been generated for the year 2020-21 and stacked separately at the earmarked location to be used for Plantation.	Minimum quantity Top soil used for plantation and rest is stacked separately at the earmarked location to be used for Plantation.
8b	Concurrent use or storage of topsoil	Storage of topsoil proposed	Topsoil stored at the earmarked location and used for plantation as and when required.	Minimum quantity Top soil used for plantation and rest is stacked separately at the earmarked location to be used for Plantation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump proposed for OB soil.	Separate dump proposed for OB soil.	NIL

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	NIL	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)	250 Nos of saplings within the ML Area.	1,000 nos. within ML area since inception of the mine.	Outside Mining Lease area cumulative plantation is 193468 No. & 64.42 Ha
8g	Survival rate	WML 90 % OML 92 %	WML 95% OML 93%	As per information furnished in the annual return for the year 2021-22 and appears to be correct..
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads proposed.	Water sprinkling carried out as per the proposal	One 8KL capacity water tanker with jet spray system is deployed for the dust suppression in the pit and A permanent water sprinkling system provided all along haul road from Pit to Crusher.

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	The aesthetic beauty is reasonably good with plantation done on small scale within the lease. Outside the lease good plantation is done all along the road leading to cement plant which adds to aesthetic beauty around the mines area.
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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 RCOM, Banglaore for the month of August, 2022 on 06th September, 2022 ***** A.R. Submitted up to RCOM, Banglaore for the Year 2021-22 on 25th June, 2022		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Mr J. Pradeep Kumar Geologist: Mr. Ch. Stalin Richardson Manager: Mr J. Pradeep Kumar	The officials reported were present at the mine site during inspection.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Mining 2.09 Storage of Top soil 0.31 Over burden 1.15 Roads 1.50 Others-PMCP 0.36 Green Belt 0.61 Total 6.02	In order.
9d	Scrutiny of Annual return on afforestation	WML: 250Nos @ 95% survival OML: 4,000 Nos @ 93% survival	Appears to be correctly reported.
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 O/s-Nil ROMProduction- 36,901 tons ROM C/s-Nil Graded ore Cement Grade O/s- 0 tons Production- 36,901 tons Dispatched- 36,901 tons C/s- 0 tons.	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Total Production Cost:Rs.220.08 /-	Limestone produced is consumed in their captive cement plant.
9h	Scrutiny of Annual return on fixed assets	Rs.603,868,000 /- Including Plant, Machinery, Land and Residential	No comments.

9k Scrutiny of Excavator-0.9 The reported machineries
Annual return on Cu.m 1 No. were found deployed in
mining Tippers- 25 the mine on the day of
machineries Ton 5 No. inspection.
Air Compressor
1 No.
Rock Drill-
115 mm 1 No.
Water Tanker -
8KL 1 No.

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)	01/02/2023				
MCDR17 Rule 45(7)(a)	01/02/2023	06/03/2023			

Date :

(H M Shivakumar)

Indian Bureau of Mines