INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/GLB/LST/48/BNG **Mine code : 38KAR10017**

(i) Name of the Inspecting Officer and ID No. : **S006) SURESH PRASAD**

(ii) Designation : Regional Controller Mines

(iii) Accompaning mine Official with Designation : G. Sudhakar, DGM-Mines and Nagur Meera Saheb Sheik, G

(iv) Date of Inspection : 29/12/2022

(v) Prev.inspection date : 03/08/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KALBURGI CEMENT LST MINE**

(b) Registration NO. : **IBM/13906/2012**

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : KARNATAKA
District : GULBARGA
Village : Chincholi
Taluka : Chincholi
Post office : Kharchikhed
Pin Code :
FAX No. : 040-30006955 (F),sudhakar.g
E-mail : sudhakar.g@vicat.com
Phone : 040-30006999 (O), 91 96637

(f) Police Station : Mirian

(g) First opening date : 21/06/2012

(h) Weekly day of rest : SUN

2. Address for correspondance : M/s Kalburgi Cement Private Limited, (Formerly Formerly Vicat SagarReliance Majestic,Road No. 1 Banjara Hills, Hyderabad-500034, Telengana

3. (a) Lease Number : KAR1616
(b) Lease area : 446.77
(c) Period of lease : 20
(d) Date of Expiry : 08/11/2029

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 : AMIT MEHTA
KALBURGI CEMENT PVT LTD,
CHATRASALA KHERCHIKHED,
CHINCHOLI TQ, KALBURGI
GULBARGA KARNATAKA
Phone: 8688826186
FAX :

Mining Engineer

Name : G Venkateswarlu,Full Time

Qualification : BE Mining

Appointment/ Termination date : 21/06/2018

Geologist

Name : K.NAGARAJ RAO,Full Time

Qualification : M.SC, (MINERAL EXPLORATION)

Appointment/ Termination date : 14/02/2011

Manager

Name : Sh.G Sudhakar

Qualification : BE Mining

Appointment/ Termination date : 21/06/2018

6. Date of approval of Mining Plan/Scheme of Mining :

Fresh under rule 22 MCR1960	20/04/2009
Mining Scheme rule 12 MCDR1988	24/04/2014
Modif.approved Mining Scheme	05/05/2016
MP modif under 17(3) MCR 2016	18/05/2017
MP modif under 17(3) MCR 2016	14/05/2018
MP review under 17(1) MCR 2016	20/11/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	No Proposal	NIL	Out of 446.77 Ha Mining lease area G1-441.77 Ha G3-5.00 Ha (area occupied by Chatrasala Village accordingly no exploration was proposed)
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	No proposal	Out of 446.77 Ha Mining lease area G1-441.77 Ha G3-5.00 Ha (area occupied by Chatrasala Village accordingly no exploration was proposed)
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	No proposal.	No proposal
1e	Balance reserve as on 01/04/20	392.01 million tons of limestone as on 01.09.2018. Grade- CaO-45.49% & MgO-2% Max for 324.29 million tons and Grade-35.36% & MgO-2%(Max) for 67.72 million tons.	381.55 million tons as on 01.04.2022	As per the Annual Returnof Form H-8 for the 2021-22

1f	General remarks of inspecting officers on geology, exploration etc	99% of the Mining Lease area has been explored under G1 level of exploration. 5 Ha is occupied by Chatrasala Village. During inspection it was suggested to explore the possibilities for exploration covering this village also.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N 3075 E 2652 N 3148 E 3550	Development carried out within the proposed extent.	Development carried out within the proposed grid intervals.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	For top soil/OB - 1 bench For Mineral: 5 benches. Proposed bench height for Mineral-8 meters	Overburden-1 Mineral -5 Bench height of 8 m maintained for mineral	Separate benches are formed as proposed.
2c	Stripping ratio or ore to OB ratio	1:0.08 (In volume)	1:0.07 (In volume)	For the Year 2021-22, it was proposed to produce 39,90,090 Tonnes of Limestone with Development quantity of 1,34,057 tonnes of waste. However only 31,99,402 Tonnes of limestone Production (-) 20% with 95,645 tonnes of waste (-) 29% Development is achieved thereby deviating from the proposed quantities. Violation issued.

2d	Quantity of topsoil generation in m3	19714 Cu.m 23657 MT	14065 Cu.m 16878 MT	As per annual return 2021-22
2e	Quantity of overburden generation in m3	111714 Cu.m 134057 MT	79704 Cu.m 95645 MT	As per annual return 2021-22
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development carried out within the proposed grid intervals and formation of separate benches in topsoil, overburden & mineral as proposed suitable to the bedded type of deposit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit Proposed	One pit working only .	As per proposal.
3b	Quantity of ROM mineral production proposed	3990090 MT	3199402 MT .	For the Year 2021-22, it was proposed to produce 39,90,090 Tonnes of Limestone with Development quantity of 1,34,057 tonnes of waste. However only 31,99,402 Tonnes of limestone Production (-) 20% with 95,645 tonnes of waste (-) 29% Development is achieved thereby deviating from the proposed quantities reportedly due to Plant shutdown & Low market demand.

3c	Recovery of sailable/usable mineral from ROM production	100 % proposed 3990020 MT	100% Utilized 3199402 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 (ROM) generated of different grade is used after size reduction for cement manufacturing in the captive cement Plant. No segregation of ROM is practiced.
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 is carried out with Sandvik DP 1500 I top hammer dia -152 mm and Blasting id carried out using Slurry Explosives + ANFO with Nonel Detonators.

3k	Provision of mining machineries in mineral benches	i)Drill -152 mm-1 nos. ii)Excavator-6.5 Cum-1no. iii)Dumper-55 tons-4nos. iv)Wheel loader-6.5 Cum-1 no. v)Rock Breaker-1no. vi)Dozer-1nos vii)Water tanker-8KL-1No	i)Drill -152 mm-1 nos. ii)Excavator-6.5 Cum-1no ,1.6 Cum-1 no & Back Hoe- 6.7 Cum-1 no. iii)Dumper-55 tons-4nos& 100 tons- 1no. iv)Wheel loader-6.5 Cum-1 no. vi)Dozer-1no. vii)Water tanker-8KL-1 No	As per the proposal.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of benches in Mineral-8 m	Height of bench in OB-1.5 m Height of bench in Mineral- 8m maintained	As per the proposal bench height and width is 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	81.76 Ha till end of plan period i.e., till 31.03.2024.	62.14 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)	1:0.07 (In Volume)	A small variation from the proposal due to less production and Development. OB-112523 tons~93769.17 Cum., Ore-3199402 tons~1279760.8 Cum., As per annual return 2021-22

3o	Total area put in use under different heads at the end of year	Area under Mining 81.76 Storage of Top soil 3.60 Over burden 8.35 Infra structure 0.67 Roads 4.50 Others-PMCP 3.96 Others-Wat Har Pit 3.60 Green Belt 11.14 Limestone Stock 0 Total 122.58 At the end of RMP(31.03.2024).	Area under Mining 62.14 Storage of Top soil 3.10 Over burden 7.35 Infra structure 0.67 Roads 4.50 Others-PMCP 2.34 Others-Wat Har Pit 2.62 Green Belt 10.12 Limestone Stock 4.40 Total 97.24	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 30,00,000 2018-19 45,00,010 2019-20 39,90,005 2020-21 39,90,020 2021-22 39,90,090 ROM (MT)	2017-18 30,98,615 2018-19 31,58,169 2019-20 30,07,297 2020-21 29,69,357 2021-22 31,99,402 ROM (MT)	Less production for the year 2021-22reportedly due to Plant shutdown and low market conditions.
3q	General remarks of inspecting officers on method of mining etc.			Mining method is by open pit mechanized means with deep hole drilling, blasting and shovel & dumper combination as proposed.

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-1 No. OB- 2 nos.- Dump-C& Dump-3	Top soil-1 No. OB-2 nos.- Dump-C& Dump-3	As per the proposals.

4b	Location of topsoil, OB and mineral reject dumps	Top soil N 2306 E2982 N 2362 E 3214 OB Dump-C N 2747 E 3996 N 2943 E 4091 OB Dump-3 N 2264 E 2491 N 2352 E 2625	Top soil dumping & OB Soil Dumping carried out at the earmarked location within the proposed extent as per the proposal	No mineral reject generation. Local co-ordinates as per the approved mining plan.
4c	Number of dumps within lease area and outside of lease area	1 top soil dump proposed and 4 OB Soil dump within ML. (No dump outside lease area)	1Top soil dump and 4 OB Soil dumpwithin ML. (No dump outside lease area).	Top soil dump and OB Soil dump-A, B,1&2 as proposed.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed within UPL	All dumps are within UPL	Since the entire lease area is mineralized, temporary dumping is proposed for rehandling for backfilling of mined out pits in future.
4e	Number of active and alive dumps.	OB Dumps-2 Nos. Dump C Dump-3 Topsoil Dump-1no.	OB Dumps- Dump C Dump-3 Topsoil Dump-01 No.	As per the proposal.
4f	Number of dead dumps.	No proposal	NIL	NIL
4g	Number of dumps established.	No proposal	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall proposed all along dumps	Retaining wall with Garland drains all along the proposed dumps are provided as per approved document.	All the engineering structures in place along the existing dumps as proposed.
4i	Length of Retaining wall or garland drain all along dumps	Retaining Wall Length-407 mtr DumpC-195Mtr Dump3-148Mtr	Retaining Wall Length-407 mtr DumpC-200Mtr Dump3-148Mtr	As per the proposal.
4j	Number of settling ponds	No Proposal	NIL	NIL

4k	Specific comments of inspecting officer on waste dump management	All the engineering structures in place and along the existing dumps along with plantation carried out as proposed for stabilization of the dumps.

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	No part of the mine pit is matured for backfilling. Mineral exists at depth.
5b	Area under backfilling of mined out area	No Proposal	NIL	No part of the mine pit is matured for backfilling. Mineral exists at depth.
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.			No part of the mine pit is matured for backfilling. Mineral exists at depth.

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 1stof July every year.	Annual PMCP Report submitted for the year 2021-22 On 25thJune, 2022	Verified and found that Annual PMCP Report submitted within the prescribed time limit.
6b	Area available for rehabilitation (ha) .	0.82 ha on OB soil Dumps proposed	0.82 ha on OB soil Dumps as proposed	NIL
6c	afforestation done (ha).	0.82 ha on OB soil Dumps proposed.	0.82 ha on OB soil Dumps as proposed.	Afforestation carried out in excess of the proposed quantity.
6d	No. of saplings planted during the year	820 nos. of saplings proposed on OB soil dump within ML and 4000 nos. outside ML area.	1870 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 verified in the field.
6e	Cumulative no .of plants	2620 Nos upto 31.03.2022 of the plan period.	25,936 nos. within ML Area since inception of the mine.	Plantation carried out is till date is very good.
6f	Any other method of rehabilitation	No Proposals	Nil	
6g	Cost incurred on watch and care during the year	Rs 50,000/- proposed for dump management.	Cost incurred on watch & care during the year is Rs. 3,69,567/-	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No Proposal	NIL	No part of the mine pit is matured for backfilling. Mineral exists at depth.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	NIL	No part of the mine pit is matured for backfilling. Mineral exists at depth.

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	0.82 ha on OB soil Dumps proposed with 820 nos. of saplings	0.82 ha on OB soil Dumps have been afforested with 1870 no of saplings.	NIL
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)	Environmental monitoring proposed.	Environmental monitoring carried out with Global Environment & Mining Serves, Hosepet. Air quality, Surface Water, Ground water, Noise level, Dust & soil monitoring carried out. All parameters are within Limits	

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance & progressive closure operations are carried out as per the proposals.

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.
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.	No grade wise Mineralsorting Proposed as the entire ROM is blended and used in cement production.
7c	Different grade of mineral sorted out at mines.	No Sorting in ROM mineral	No Sorting in ROM mineral	No grade wise Mineralsorting Proposed as the entire ROM is blended and used in cement production.
7d	Any beneficiation process at mines .	No Proposal	NIL	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The entire ROM is blended and used in cement production thereby taking care of Mineral Conservation aspect. No beneficiation is required in the mineral produced.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks

8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal of Top soil and storage proposed.	Top soil removed separately and dumped in proposed top soil dump location.	Top soil used for plantation and part is stacked for utilization in future.
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.	Topsoil stored at the earmarked location and used for plantation as and when required.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump proposed for OB soil.	Separate dumpcarried out for OB soil.	Dump 3&C for OB soil dumping There is no reject generation.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Nil	No part of the mine pit is matured for backfilling or restoration of land to its original use. Mineral exists at depth.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	Nil	No part of the mine pit is matured for backfilling or restoration of land to its original use. Mineral exists at depth.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2620 Nos of saplings with in the ML Area.	25,936 nos. within ML Area since inception of the mine.	Cumulative 25,936 Nos of saplingscovering over 64.42 Ha.
8g	Survival rate	90% (WML) & 92% (OML)	95%(WML) & 93%(OML)	As per information furnished in the annual return for the year 2021-22.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads proposed.	Water sprinkling carried out as per the proposal	8KL capacity water tanker with jet spray system for arrest 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	Aesthetics in and around the mine is very good and Laudable.

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,Bangalore for the month of August, 2022 on 06th September, 2022 ***** A.R. Submitted up to RCOM,Bangalore 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 G Venkateswrlu Geologist: Mr. Nagur Meera Saheb Manager: Mr Gundla Sudhakar	The designated officials were present during the inspection.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Mining 62.14 Storage of Topsoil 3.10 Over burden 7.35 Infra structure 0.67 Roads 4.50 Others-PMCP 2.34 Others-Wat Har Pit 2.62 Green Belt 10.12 Limestone Stock 4.40 Total 97.24	As per the approved proposals.	

9d	Scrutiny of Annual return on afforestation	WML: 1,870 Nos @ 95% survival OML: 4,000 Nos @ 93% survival	Claimed plantation carried out during the RY appears to be correct.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	No mineral rejects proposed or produced in the mine.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM O/s- 11,71,171 tons ROM Production- 31,99,402 tons ROM C/s- 9,75,351 tons Graded ore Cement Grade O/s- 0 tons Production- 33,95,222 tons Dispatched- 33,95,222 tons C/s- 0 tons.	Appears to be correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Total Production Cost: Rs.187.33/-	Appears to be correct.
9h	Scrutiny of Annual return on fixed assets	Rs.123,38,73,000/- Including Plant, Machinery, Land and Residential	Appears to be correct.

9k	Scrutiny of Annual return on mining machineries	Excavator-6.5 Cu.m 1 No. Back Hoe- 6.7 Cu.m 1 No. Wheel loader- 6.5 Cu.m 1 No. Exc/Rock Breaker 2.1 1 No. Dumper- 55 Ton 4 No. Dumper -100 ton 1 No. Dozer-320 HP 1 No. Compactor 10 Ton 1 No. Rock Drill- 152 mm 1 No. Explosive Van- 10 T 1 No. Water Tanker - 8KL 1 No. Crusher 1400 TPH 1 No. Pumps-Ele 3 No. Jeep 1 No. Mobile Service Van 1 No.	Appears to be correct.

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)	10/02/2023	21/03/2023			
MCDR17 Rule 45(7)(a)	10/02/2023	21/03/2023			

Date :

(**SURESH PRASAD**)

Indian Bureau of Mines