

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

FMCP Inspection REPORT

Bangalore regional office

Mine file No : KNT/TMK/LST/1/BNG

Mine code : 38KAR19006

- (i) Name of the Inspecting : **S21**) **H M Shivakumar**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : P. Satya Sai Baba- Mine Manager, Narayan Khannur - Mi
Official with
Designation
- (iv) Date of Inspection : 11/08/2022
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **YEREKATE (M.L.1654)**
- (b) **Registration NO.** : **IBM/398/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **TUMKUR**
- Village : **CHIKKARAMPURA**
- Taluka : **GUBBI/C.N.HALLI**
- Post office : **AMMASANDRA**
- Pin Code : **572211**
- FAX No. : **08139-278375**
- E-mail : **sk.tiwari@heidelbergcement**
- Phone : **08139-278656**
- (f) **Police Station** : **CHIKKANAYAKANAHALLI**
- (g) **First opening date** : **01/06/1966**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **Yerekatte Limestone Mine of**
correspondance : **M/s HeidelbergCement India Limited**
: **Po-Ammasandra, Tq-Turuvekere, Dist-Tumkur-572211**
3. (a) **Lease Number** : **KAR0116**
- (b) **Lease area** : **305.54**
- (c) **Period of lease** : **50**
- (d) **Date of Expiry** : **23/02/2020**
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : HEIDELBERG CEMENT INDIA LIMITED
 9 th Floor, Infinity Tower-
 C DLF Cyber city, Phase-II
 Gurugram GURGAON HARYANA
 Phone:0124-4503700
 FAX :0124-4147698

Owner : Sushil Kumar Tiwari- Director
 M/s HCIL, 9th Floor,
 Infinity Tower-C, DLF
 Cyber City, Phase-II
 Gurugram GURGAON HARYANA
 Phone: 0124-4147698
 FAX : 0124-4503700

Agent : P. Sreenivasa Murthy
 TUMKUR KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : MR.NARAYAN KHANNUR,Full Time
 Qualification : B.E IN MINING
 Appointment/ : 13/08/2012
 Termination date

Geologist

Name : Balbir Singh Rawat,Full Time
 Qualification : M.Tech. Appld Geology
 Appointment/ : 26/09/2019
 Termination date

Manager

Name : P.SATYA SIABABA
 Qualification : FCC DIP.IN MIN.ENG.
 Appointment/ : 01/01/2015
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Existing rule 11 MCDR1988	13/09/1991
		Existing rule 11 MCDR1988	13/09/1991
		Mining Scheme rule 12 MCDR1988	23/09/1996
		Mining Scheme rule 12 MCDR1988	24/09/1996
		Renewal under rule 22 MCR1960	17/01/2001
		Renewal under rule 24 MCR1960	09/06/2006
		Modif.of approved Mining Plan	15/01/2007
		Modif.of approved Mining Plan	01/02/2008
		Mining Scheme rule 12 MCDR1988	10/02/2011
		Mining Scheme rule 12 MCDR1988	27/03/2015
		MP review under 17(1) MCR 2016	02/12/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	NIL	39.8 Ha Lateral extents. (Previously done)	Mine is not in operation as the Lease is under Temporary discontinuance from 06/11/2017 and not in operation.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	-		Mine is not in operation as the Lease is under Temporary discontinuance from 06/11/2017 and not in operation.
1d	Balance area to be explored to bring Geological axis in 1 or 2	39.80 Ha vertically from 805mRL to 750mRL 1111 meters	NIL	Mine is not in operation as the Lease is under Temporary discontinuance from 06/11/2017 and not in operation.
1e	Balance reserve as on 01/04/20	Proved Mineral Reserve 111-22809219 Tons, Prefeasibility mineral resource-221 & 222 -87500 tons. Inferred mineral resource-333 - 36965754Tons	Reserves and Resources as per the AR-2021-2022 Reserve (111)-19390000 Tonnes, Resources-(222)- 70000 Tonnes, (333)-31280000 tonnes.	

1f	General remarks of inspecting officers on geology, exploration etc	(1) The Limestone deposit of the lease is having grade of CaO3- 38-46%, SiO2 6-12% & Mgo 1-3. %. The mine is explored fully (laterally) & 39.8 Ha is proved Mineralized and remaining 265.74 Ha as non Mineralized. The Mine is explored in the past by drilling 70 exploratory boreholes of 4105.9 meterage.	(2) Mine is not in operation for the reasons mentioned above. However, the mine was inspected in connection with the draft FMCP submitted by lessee in reference to the State DMG letter No.DMG/ML-2620/2020-21 dated 07/01/2022 seeking for approved FMCP based on the Notice submitted by lessee for surrender the Mining Lease before its expiry.	(3) The document was scrutinized based on this inspection and comments issued. However, the lessee has subsequently withdrawn the document reportedly due to change in management decision not to surrender the Mining Lease.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	PitNo-2, RL - 915, Local co-ordinates: W 1381 to W 1235 and N 1045 to N 1201	NIL	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top benches	NIL	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
2c	Stripping ratio or ore to OB ratio	1: 0.17	NIL	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
2d	Quantity of topsoil generation in m3	NIL	-	

2e	Quantity of overburden generation in m3	32582	NIL	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The mine is developed creating two pits 1 & 2 owing to a big stream that cuts through the mine. Total excavation is over 49.200 Ha. There are 4 benches in the over burden and 6 benches in the Mineral. The average height of the benches in both Over burden and Mineral is 10m and width is 15m.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1, (Pit No-2)	NIL	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
3b	Quantity of ROM mineral production proposed	526000 Tons	NIL	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
3c	Recovery of sailable/usable mineral from ROM production	Recovery Factor of 85%		The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
3d	Quantity of mineral reject generation	42080 Tons	NIL	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.

3e	Grade of mineral rejects generation and threshold value declared.	There is occurrence of high MgO Lime stone having MgO of 8 to 10% which is in general waste as per the threshold value, CaO%-35% (Min), MgO-4% (Max)	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
3f	Quantity of sub grade mineral generation.	Nil, (There is NIL no sub grade ore in the mine)	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
3g	Grade of sub grade mineral generation	-	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized Method by crushing and screened in two stages and blended in the Radial Stacker-Reclaimer before dispatch by rope way to Captive Cement Plant.	The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and not in operation.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	Yes. By DTH drill .	-

3k	Provision of mining machineries in mineral benches	HEMM equipment: 2 excavators- 1.6Cum each, 1 Dozer, 20-16 tonner Tippers , 1- Front end loader, 1- Drilling Machine.	-	Only the reported machinery i.e Hydraulic Shovel 4.000 CUM was present in the mine site as the mine is under Temporary discontinuance since 06/11/2017
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, Suitable. Bench height will be 10m and width will be more than 15 m.		
3m	Total area covered under excavation/pits	49.20 ha	49.20 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.17	NIL	
3o	Total area put in use under different heads at the end of year	71.25 ha	71.25 ha	
3p	Production of ROM mineral during the last five year period as applicable	2017-18: 462787 2018-19:469312 2019-20:463750 2020-21:526000 2021-22:526000 (in tonnes)	2017-18: Nil 2018-19: Nil 2019-20: Nil 2020-21: Nil 2021-22: Nil (in tonnes)	The Mine is under Temporary discontinuance with effect from 06/11/2017 and not in operation. Notice of TD received in office on 12/10/2017.
3q	General remarks of inspecting officers on method of mining etc.			Open pit mechanized means of mining is being carried out suitable to the type of deposit.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes, dump No.1	NIL	NIL
4b	Location of topsoil, OB and mineral reject dumps	Location: W - - 1762 to W-1542, and N-1041 to N-1207. D-1:4.0 Ha, D-2: 3.16Ha, D-3: 7.01Ha, D-4: 0.30 Ha, D-5: 0.23Ha, D-6: 0.33 Ha.		The Mine is under Temporary Discontinuance w.e.f 06/11/2017 and also Mine is not in operation.
4c	Number of dumps within lease area and outside of lease area	6	-	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	All the dumps are located beyond the UPL and in non-mineralized area.	-	
4e	Number of active and alive dumps.	2	-	
4f	Number of dead dumps.	4	-	
4g	Number of dumps established.	4	-	
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	-	
4i	Length of Retaining wall or garland drain all along dumps		Existing length of RW & GD-314m.	
4j	Number of settling ponds	-	-	The surface runoff of water is diverted into the existing pits after stage wise precipitation of water and utilized as settling ponds/sumps.

4k	Specific comments of inspecting officer on waste dump management			Out of 6 existing dumps, 4 dumps are fully stabilized by way of terracing, plantation and construction of engineering structures like Retaining Wall and Garland drains.
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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.	NIL		No parts of Pits are fully exhausted from Mineral.
5b	Area under backfilling of mined out area	NA	-	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Will be used for Planation, if any	NIL	NIL
5d	Total area fully reclaimed and rehabilitated	NA	-	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No part of the two existing Pits over 49.2 Ha is fully exhausted and Mineral exists beneath. Therefore backfilling and reclamation does not arise.

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).	Annual report on PMCP will be submitted on time and correctly	PMCP report within the stipulated time.	Submitted
6b	Area available for rehabilitation (ha) .	NIL	NIL	NIL
6c	afforestation done (ha).	0.5	0.5	Appears to be correct.
6d	No. of saplings planted during the year	500	500	Appears to be correct.
6e	Cumulative no .of plants	2000	2000	Cumulative no of plants are existing in excess of the reported numbers.
6f	Any other method of rehabilitation	-	-	
6g	Cost incurred on watch and care during the year	1 lakh	1 lakh	Appears to be correct.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NA	-	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	-	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NA	-	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	-	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	-	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	-	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	-	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	-	
6p	Compliance of environmental monitoring (core zone and buffer zone)	-	-	Regular monitoring of Environmental parameters is being carried out and all the readings are within the permissible limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Except for proposed afforestation activities, No other works is being carried out during the reporting year as the mine is under Temporary Discontinuance since 06/11/2017.

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	445344	NIL	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	<p>There is occurrence of high MgO Lime stone having MgO of 8 to 10% which is in general waste as per the threshold value. However, the lessee is using this low grade lime stone, which is approximately about 8 to 10% of the total production of the lime stone from the mine and can be called as mineralized reject. This 8 to 10% high MgO limestone is stacked separately near the crusher site & is used by blending with high Cao & low MgO lime stone as and when recovered from the mine.</p>	NIL	
7d	Any beneficiation process at mines	NIL	NIL	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The low grade mineral generated is suitably blended with good grade Limestone and consumed in captive cement plant. However, during the RY No Development or Production is carried out.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	As and when available will be used for plantation	Nil	No Mining activity carried out.
8b	Concurrent use or storage of topsoil	Top soil used for plantation	Nil	The entire top soil generated in the past is utilized in plantation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Easting, from -1762 to -1542, and Northing from 1041 to 1207	NIL	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	-	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Plantation on Dumps	Planted on Dumps	Planted on Dump No.1

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500	500	Proposed plantation of 500 saplings is carried out and 2000 cumulative no of plants existing as reported. However, existing plantation are in excess of the reported numbers.
8g	Survival rate	70%	70%	
8h	Water sprinkling on roads to control airborne dust	Proposed.	Nil.	No Mining work carried out
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the Mine is satisfactory.

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 2022 *****		Submitted Annual Return for 2021-22 on 24-06-2022. Submitted up to date.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Mr.Narayan Khannur & Mining Geologist: Mr.Balbir Sing Rawat.	The officials reported were present on the day of inspection.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Pit: 49.20 Ha, Dumps: 15.030 Ha, Plant, Buildings, Residence & Roads: 6.30 Ha, PMCP activity: 0.50 Ha.	Appear to be correct.	
9d	Scrutiny of Annual return on afforestation	500 saplings.	Verified.	Appear to be correct.

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	-	-	No development and Production reported during the RY.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock of Cement grade Limestone at Mine Head : 8047.907 Tonnes.	Verified.	Appear to be correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Nil		No Production during the RY.
9h	Scrutiny of Annual return on fixed assets	Rs. 27953965/-	In order.	
9k	Scrutiny of Annual return on mining machineries	Hydraulic Shovel 4.000 CUM .		Only the reported machinery was present in the mine site as the mine is under Temporary discontinuance since 06/11/2017.

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)	19/08/2022			

Date :**(H M Shivakumar)**

Indian Bureau of Mines