INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

Inspection under SDF for star rating of mines REPORT

Bangalore regional office

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

(i) Name of the Inspecting Officer and ID No. : **M003) G C MEENA**

(ii) Designation : Regional Controller Mines

(iii) Accompaning mine Official with Designation : G.Sudhakar, Mines Manager & K. Nagaraja Rao, Geologis

(iv) Date of Inspection : 18/11/2019

(v) Prev.inspection date :

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: FAX :
Owner	:	Anoop Kumar Saxena M/s. Vicat Sagar Cement Pvt Limited Reliance Majestic Bldg,Road No:11 Door No:8-2-626, Banjara Hills, HYDERABAD TELANGANA Phone: FAX :
Agent	:	Anubhav Verma M/s. Kalburgi Cement Private Limite Chatrasala (Vil), Kherchikhed (P), Kalaburagi Dist. Karnataka GULBARGA KARNATAKA Phone: 7760686752 FAX :

Mining Engineer

Name	:	G Venkateswarlu,Full Time
Qualification	:	BE Mining
Appointment/ Termination date	:	01/08/2017

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	:	20/09/2013

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

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	NIL	NIL	
1b	Exploration over lease area for geological axis 1 or 2	No proposal of Exploration	No exploration has been done.	No Exploration as the entire ML area already covered except the existing Chatrasala Village area.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	NIL	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Existing Village in ML could not considered for exploration-6.02hac in future also	In 446.77 hac. except the village area of 6.02 Ha. the balance area of 441.77 hac was explored.	
1e	Balance reserve as on 01/04/20	217.66 million tons	217.66 million tons	218 million tons as per AR as on 01.04.2019
1f	General remarks of inspecting officers on geology, exploration etc			

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	E 2777 N 2428 E 2886 N 2718 E 2558 N 2718 E 2551 N 2442	E 2779 N 2428 E 2889 N 2718 E 2562 N 2718 E 2553 N 2439	Working as planned.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches are proposed in OB and Mineral	BC Soil -01 & Mineral - 05	

2c	Stripping ratio or ore to OB ratio	1 : 0.069	1:0.042	
2d	Quantity of topsoil generation in m3	17,694 m3/21,233 MT	8,392 m3/ 10,070 MT	
2e	Quantity of overburden generation in m3	1,00,264 m3/1,20,317 MT	73,918m3/88,702 MT	Working as proposed
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Working in pit towards NW&NE
3b	Quantity of ROM mineral production proposed	45,00,010 MTonnes	31,58,169 M Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	42,75,000(95%) M Tonnes	31,58,169 (74%) M Tonnes	
3d	Quantity of mineral reject generation	NIL	NIL	No generation of mineral reject
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	Cao - +34% to - 44% and MgO - 5% (Max)	No waste, the entire mineral will be utilised.
3f	Quantity of sub grade mineral generation.	No Proposal	NA	
3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Opencast mechanized mining by using deep hole drilling and blasting with HEMM	Opencast mechanized mining is adopted for segregating the ROM.	The loading and transportation is supported by Shovel/Loader and dumpers.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	NA	No study done.
3j	Provision of drilling and blasting in mineral benches	By using deep hole drilling and blasting.	The deep hole drilling and Blasting as per 106(2) b permission. Sandvik DP1500i top hammer drill is used for drilling the mineral benches. The spacing and burden is varies from 3-3.5 X 5-5.5 mtrs and blasting is done by using nonel	The vibration levels of each blast are recorded as per DGMS Circular No.7 of 1997 with MINI MATE. Rock breaker is used for breaking boulders.
3k	Provision of mining machineries in mineral benches	HEMM are used in mineral benches	The loading and transportation is supported by Shovel and loader with 04 dumpers.	01-Loader 01-Excavator(6.5M3) 04-Dumpers 01-Rock Breaker with back hoe (2.2M3) 01-Drill, 01-Dozer, 01-Explosive Van, 01-MSU van 01-Compactor along with auxiliary machinery.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	PC 1250-8R Excavator and WA600-6R Loader are using for loading the OB and mineral benches	The digging height of the PC 1250 and WA 600 are having more than the bench ht	In Mineral the bench height is 8 mtrs and in OB is 1.2 to 1.5 mtrs.
3m	Total area covered under excavation/pits	44.21 Ha	45.03 Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.069	1 : 0.042	

3o	Total area put in use under different heads at the end of year	44.21 Ha - Pit, 5.17 Ha - Infrastructure, 19.25 - Mineral Storage and Top Soil, OB dump& water Harvesting, 3.52- PMCP Ha- Green Belt- 6.74 Ha=78.89	45.03 Ha - Pit, 11.047 Ha - Infrastructure, 15.625Hac-Plantation, Mineral& OB dump& Top soil Storage and 1.780 Ha - PMCP =73.482 Hc	Data furnished as per AR
3p	Production of ROM mineral during the last five year period as applicable	2013 - 14: 25,03,416 MT 2014 - 15: 18,43,500 MT 2015 - 16: 21,31,500 MT 2016 - 17: 30,00,000 MT 2017 - 18: 30,00,000 MT 2018 - 19:45,00,010 MT	6,98,208 MT 18,43,500 MT 21,31,500 MT 29,01,385 MT 30,98,615 MT 31,58,169 MT	Mine opened on 21.06.2012
3q	General remarks of inspecting officers on method of mining etc.			

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 of OB proposed.	Separate dumping of OB, Mineral stock and topsoil is made.	OB (BC Soil) is dumping along RSZ as safety bund towards South & temporary stacking of Topsoil is made.
4b	Location of topsoil, OB and mineral reject dumps	OB -E 2747 N 2200 E 2762 N 2247 E 2610 N 2255 E 2628 N 2301	OB - E 2747 N 2200 E 2762 N 2247 E 2585 N 2255 E 2620 N 2301 Top Soil: E3200 N 2278 E2278 N 2289 E2853 N 2392 E2978 N 2392	Mineral Stock: E3340 N 2357 E3678 N 2395 E3340 N 2268 E3331 N 2341 Dumping proposed grids

4c	Number of dumps within lease area and outside of lease area	05 dumps within ML	05 dumps within ML	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed Within UPL	The safety bunds are made within UPL	Along RSZ towards South and 7.5 mtrs barrier zone towards East.
4e	Number of active and alive dumps.	5	5	Along RSZ towards South and 7.5 mtrs barrier zone towards East.
4f	Number of dead dumps.	Not proposed	No dead dumps	
4g	Number of dumps established.	No Proposal	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	Garland drain along the working pit	
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	Garland drain along the working pit and OBdumpto avoid the inrush of water covering an area of 0..88 Ha.	
4j	Number of settling ponds	No Proposal	NA	
4k	Specific comments of inspecting officer on waste dump management			

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 for full extraction of Mineral	NA	As we have not fully extracted the mineral, we have not proposed Back filling.
5b	Area under backfilling of mined out area	No proposal	NA	As we have not fully extracted the mineral, we have not proposed Back filling.

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NIL
5d	Total area fully reclaimed and rehabilitated	No proposal	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.		

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).	Submitted for the year 2018-19	A garland drain is made around the working pit covering an area of 0.88 Ha. to avoid the inrush of rain water into the working pit and along OB dump.	Submitted vide letter No: KCPL / MINES - CLM / IBM / RR /2019-85. Date: 28th June 2019.
6b	Area available for rehabilitation (ha) .	0.75	0.85	
6c	afforestation done (ha).	No proposal	NIL	
6d	No. of saplings planted during the year	No proposal	NIL	
6e	Cumulative no .of plants	No proposal	NIL	
6f	Any other method of rehabilitation	No proposal	NIL	
6g	Cost incurred on watch and care during the year	No proposal	NIL	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	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 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	750	900	Outside ML 1000 no of plants are plants covering 1.10Hc
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	.75	.85	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	By Afforestation	By Afforestation	

6p	Compliance of environmental monitoring (core zone and buffer zone)	AAQ - 6, Noise- 4 Water -4, Soil-4 & Ground Vibration-1	CZ BZ AAQ- 04 06 Noise-07 04 Water - 01 09 Soil - 03 & Ground Vibration-1	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.			

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 from different benches to crusher	As per the plant requirement ROM from diff. benches will be crushed and transported by conveyer.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	By blending from different benches	BY Mechanical
7c	Different grade of mineral sorted out at mines.	Sorted out at mines	Sorted and blended	Blended at mines
7d	Any beneficiation process at mines .	NA	NA	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks

8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Removed and stacked separately. Used for plantation	
8b	Concurrent use or storage of topsoil	No proposal	Utilized for plantation	3500 M3 of top soil utilised.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	BC Soil is dumped along the Buffer Zone and Road Safety Zone	Safety bund along the Eastern Boundary BZ and South of RSZ	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	The mineral is not fully excavated. Hence no use of OB for restoration	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	The mineral is not fully excavated.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	0.75 Ha 750 nos	0.85 Ha Green belt along RSZ about 900Nos of trees planted.	1.10Ha Outside ML 1000Nos of trees planted.
8g	Survival rate	86 %	95 %	
8h	Water sprinkling on roads to control airborne dust	Sprinklers and 8KL tanker are provided to suppress the airborne dust on haul roads.	Sprinklers are provided along haul road and 8KL tanker is used to suppress the airborne dust on haul roads in mines.	Mist spray is provided at the Crusher dump hopper to arrest the airborne dust during unloading of dumpers in crusher
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			

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		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer - MrG Venkateswrlu Geologist-Mr K Nagaraja Rao Manager - MrGundla Sudhakar		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	45.03 Ha - Pit, 11.047 Ha - Infrastructure, 15.625Hac- Plantation, Mineral Stock, Water Pit & Top soil Storage and 1.780 Ha - PMCP		
9d	Scrutiny of Annual return on afforestation	WML - 900 @ 95% survival OML- 1000 @ 95% survival		
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL		
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock (Cement Grade) OB - Nil, Production:31, 58,169 MT CB - Nil		Mineral Stock available Is 12,21,729 MT
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Total Production Cost:Rs.166.33		

9h	Scrutiny of Annual return on fixed assets	Rs.135,40,14,000/- including Plant, Machinery, Land and Residential
9k	Scrutiny of Annual return on mining machineries	Excavator (6.5 M3)-01, Loader (6.5 M3)-01, Backhoe(2.2 M3)-01, Dumpers - 04, Dozer - 01, Drill - 01, Explosive Van -1, Water Tanker -(8KL)-01, Crusher - 1400TPH, MSU - 01 and Pumps (Elec)-01

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

Date :

(**G C MEENA**)

Indian Bureau of Mines