

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

Review and updation of Mining Plan REPORT

Bangalore regional office

Mine file No : KNT/GLB/LST/48/BNG

Mine code : 38KAR10017

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : G Sudhakar ,Mines Manager & K Nagaraj roa ,Geologist
Official with
Designation
- (iv) Date of Inspection : 24/10/2018
- (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 966378**
- (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/ : 01/08/2017
 Termination date

Geologist

Name : K.NAGARAJ RAO,Full Time
 Qualification : M.SC, (MINERAL EXPLORATION)
 Appointment/ : 14/02/2011
 Termination date

Manager

Name : Sh.G Sudhakar
 Qualification : BE Mining
 Appointment/ : 20/09/2013
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	24/04/2014
Plan/Scheme of Mining	:	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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	No proposal	-
1b	Exploration over lease area for geological axis 1 or 2	33 in LSt and 11 core holes to establish the Pink Shale below the LSt	33 CBH drilled in LSt to upgrade the LSt resources into reserve.11 CBH drilled to establish the pink shale as reserves.	LSt- 200X200mts, Pink Shale - 400X400m.Meterage drilled is 1805.65. Area covered G1:441.77 Ha
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Rs.40 Lakhs	M/s Global Environment Research Labs, Hosapete Rs.30.81 Lakhs	Includes drilling, logging and analysis.
1d	Balance area to be explored to bring Geological axis in 1 or 2	-	In 446.77 ha except the village area of 5.0 Ha. the balance area of 441.77 hac was explored.	Exploration is to be done in 5.0 Ha in future.
1e	Balance reserve as on 01/04/20	-	220.82 million tons AS ON 01.04.2018	221 million tons as per AR as on 01.04.2018
1f	General remarks of inspecting officers on geology, exploration etc			The lessee had drilled 33 nos. of CBH to upgrade the Lst resources to reserves & 11 CBH drilled to establish the pink shale as reserves.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	1st,2nd & 3rd bench towards west & 4th,5th bench towards north	Working as per proposal	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches are proposed in OB and Mineral	OB -01 & Mineral - 05	-
2c	Stripping ratio or ore to OB ratio	1 : 0.073	1 : 0.071	No significant change
2d	Quantity of topsoil generation in m3	No proposal	Nil	-

2e	Quantity of overburden generation in m3	87,442 m3	88500 m3	B.D of 1.2 taken for soil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development of benches were as per the approved document

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	1st,2nd & 3rd bench towards west & 4th,5th bench towards north
3b	Quantity of ROM mineral production proposed	30,00,000 Tonnes	30,98,615 Tonnes	Actual production is more than the planned. Violation pointed out
3c	Recovery of sailable/usable mineral from ROM production	95%	95%	5% considered as mining loss.
3d	Quantity of mineral reject generation	No proposal	NIL	No generation of mineral reject
3e	Grade of mineral rejects generation and threshold value declared.	Limestone threshold value : CaO-34% (Min)	Entire ROM is being utilized in their captive plant with proper blending	-
3f	Quantity of sub grade mineral generation.	No Proposal	NA	-
3g	Grade of sub grade mineral generation	No proposal	NA	-
3h	Manual / Mechanised method adopted for segregating from ROM	No such proposal	The limestone is transported to crusher by 55 Tons dumper.The crushed limestone is transported through conveyor belt to cement plant	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 such proposal	No such study carried out	-
3j	Provision of drilling and blasting in mineral benches	Deep hole drilling and blasting proposed	Deep hole drilling & blasting in ore zone (Sandvik DP1500i top hammer drill) is used for drilling the mineral benches and blasting with nonel.	Rock breaker is used for breaking boulders.
3k	Provision of mining machineries in mineral benches	Shovel dumper combination	The loading and transportation is supported by Shovel and loader with 04 dumpers.	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	1.5 to 2 mtr- Top soil, 5 No of ore benches with Max.height of 8 Mts	1.5 Mt-Top soil, 5 No of ore benches with height of 8 Mts & width of 15 to 30 mts	-
3m	Total area covered under excavation/pits	41.20 Ha	38.31 Ha	Excavation is within the proposed excavation limits.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.073	1 : 0.071	No significant change
3o	Total area put in use under different heads at the end of year	41.20 Ha - Pit, 5.17 Ha - Infrastructure, 07.62 Ha - Mineral Storage & water Harvesting, 01.02 Ha - PMCP & 11.53 Ha-Green Belt	38.31 Ha - Pit, 5.17 Ha - Infrastructure, 6.80 Hac-Plantation, Mineral * Top soil Storage and 2.02 Ha - PMCP	-
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	2013 - 14: 6,98,208 MT, 2014 - 15: 18,43,500 MT 2015 - 16: 21,31,500 MT 2016 -17:29,01,385 MT 2017 - 18: 30,98,615 MT	Actual production in the year 2017-18 has exceeded the proposed production. Violation pointed out

3q	General remarks of inspecting officers on method of mining etc.	The mine was working as per the proposed grids with deep hole drilling & blasting.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate stacking for OB & top soil proposed	Actual work done as per the proposal	OB (BC Soil) is dumped along RSZ as safety bund towards South & temporary stacking of Topsoil is made.
4b	Location of topsoil, OB and mineral reject dumps	OB utilized for construction of bund along the ML boundary,afforestation work	OB utilized for construction of bund along the ML boundary (south) ,afforestation work done	-
4c	Number of dumps within lease area and outside of lease area	WML-05 dumps OML-Nil	WML-05 dumps OML-Nil	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Near to ML boundary as the entire ML area is mineralized	Near the ML boundary as per proposals	Along RSZ towards South and 7.5 mtrs barrier zone towards East.
4e	Number of active and alive dumps.	05	05	-
4f	Number of dead dumps.	Not proposed	No dead dumps	-
4g	Number of dumps established.	No Proposal	NIL	No dumps mautured for stabilization
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 to avoid the inrush of water covering an area of 2.0 Ha.	-
4j	Number of settling ponds	02	No work done	Settling pond not constructed.Violation pointed out

4k	Specific comments of inspecting officer on waste dump management			OB (BC Soil) is dumped along RSZ as safety bund towards South & temporary stacking of Topsoil is made. The management of top soil dumps carried out as per modified proposals.
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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	Mine is initially started & very little waste material available.	-
5b	Area under backfilling of mined out area	No Proposal	NA	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Separate stacking of top soil done	-
5d	Total area fully reclaimed and rehabilitated	No Proposal	Nil	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			There is no proposal of backfilling as the mine is at initial stage & no waste generation except small quantity of top soil.

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 july of every year	AR on PMCP received on 29.06.2018 for 2017-18	-
6b	Area available for rehabilitation (ha) .	No proposal	Nil	-
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 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	750No	1200 Nos	Outside ML 40300 no of saplings planted
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.75 Ha	1.50 Ha	Outside ML 40300 no of plants are plants covering 13.79 Ha
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)	Season wise environmental monitoring of ambient air quality, water quality, dust fall rate, soil sample analysis& noise level proposed	Season wise environmental monitoring of ambient air quality, water quality, dust fall rate, soil sample analysis& noise level are being carried out regularly.	All parameters are within limits
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP is carried out as per the proposal. Garland drains are provided to avoid the inrush of rain water into the working pit.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Direct ROM mineral dispatch to their captive cement plant.	Direct ROM mineral dispatch to their captive cement plant. Having 2 mtpa clinkering capacity	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.	No proposal	Bench wise blending done as per requirement	-
7c	Different grade of mineral sorted out at mines.	No proposal	Bench wise blending as per requirement	-
7d	Any beneficiation process at mines	No proposal	Only crushing & sizing is done	Crusher capacity-1400TPH
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Beneficiation of limestone is not required as the entire ore is crushed, blended & transported to the plant.

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	Used as and when necessary.
8b	Concurrent use or storage of topsoil	No proposal	Utilized for plantation	2500 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)	750 nos covering 0.75 Ha	1.50 Ha, Green belt along RSZ about 1200 Nos of trees planted.	13.79 Ha, Outside ML 40300 Nos of trees planted.
8g	Survival rate	90%	WML-86 %, OML-84%	-
8h	Water sprinkling on roads to control airborne dust	Proposed	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 hopper.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in & around the mine is good as lessee has carried out huge afforestation & environmental protective measures have been taken as per the approved document.

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 Sep - 2018 A.R. submitted up to year 2017-2018	Submitted AR vide letter No: KCPL/Mines-CLM/IBM/2018-80 dtd:28th June 2018.	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager-Mr Kalidindi Sudhakar ME- Mr N Prasanth Geologist-Mr K Nagaraja Rao	Mgr-Mr G Sudhakar ME-Mr G Venkateswrlu Geologist-Mr K Nagaraja Rao	Notice of termination & appointment sent

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	38.31 Ha - Pit, 5.17 Ha - Infrastructure , 6.80 Hac- Plantation, Mineral & Top soil Storage and 2.02 Ha - PMCP	Appears to be correct	
9d	Scrutiny of Annual return on afforestation	WML - 1200 @ 86% survival OML- 40300 @ 84% survival	Appears to be correct	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject generated	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock (Cement Grade) MT OB - Nil, Production:30,98,615 MT CB - Nil	Mineral Stock -12,86,030	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Total Production Cost:Rs.162.85	Appears to be correct	-
9h	Scrutiny of Annual return on fixed assets	Rs.138,31,00,00/- including Plant, Machinery, Land and Residential	Appears to be correct	-
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	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)	22/11/2018			

Date :**(ARUN KUMAR)**

Indian Bureau of Mines