

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

Mining Plan Modification 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 :
Official with
Designation
- (iv) Date of Inspection : 13/04/2018
- (v) Prev.inspection date : 20/04/2017

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),dhananjaya**
- E-mail : **sudhakar.k@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 : N. Prasanth, Full Time
 Qualification : B.Tech - 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 : K.SUDHAKAR
 Qualification : Dip.in (Mining), FCC.
 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

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 CBH in LSt and 11 CBH to establish the Pink Shale below the LSt	33 CBH drilled to upgrade the LSt Resources to reserves. 11 CBH drilled to establish the pink shale as reserves (G1)	Limestone-200 X 200 m, Pink Shale- 400 X 400 m
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Rs.40 Lakhs	GEMS, Hosapete, Rs.30.81 Lakhs	Includes drilling, logging and analysis.
1d	Balance area to be explored to bring Geological axis in 1 or 2	-	440.75 Ha has been explored out of 446.77 Ha .	Exploration to be done in 6.02 Ha in future
1e	Balance reserve as on 01/04/20		220.82 million tons	-
1f	General remarks of inspecting officers on geology, exploration etc			The lessee had drilled 33 nos of core bore holes to upgrade the LSt Resources to reserves & 11 holes were 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 benches towards north	Working as per proposal	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches are proposed in OB and Mineral	One bench in OB & 5 benches in Mineral	-
2c	Stripping ratio or ore to OB ratio	1 : 0.073	1 : 0.17 (2016-17)	-
2d	Quantity of topsoil generation in m3	87,442 m3	20,5406 m3(2016-17)	BD of 1.2 taken for soil

2e	Quantity of overburden generation in m3	No proposal	Nil	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development of the benches were as per approved document

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Working 1st,2nd & 3rd bench towards west & 4th ,5th benches towards north
3b	Quantity of ROM mineral production proposed	3.0 Million Tons	2.9 Million Tons(2016-17)	-
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	-
3e	Grade of mineral rejects generation and threshold value declared.	Limestone threshold value:CaO-35% (Min)	Entire ROM is being utilized in their captive plant with proper blending	-
3f	Quantity of sub grade mineral generation.	NA	There is no generation of sub grade	-
3g	Grade of sub grade mineral generation	NA	Nil	-
3h	Manual / Mechanised method adopted for segregating from ROM	No such proposals	The limestone is transported to crusher by 55 Tons dumpers. The crushed limestone is transported through conveyor belt to cement plant.	-

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals	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	-
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.073	1 : 0.17(2016-17)	-
3o	Total area put in use under different heads at the end of year	Pit-46.12 Ha , Top soil storage-2.85 Ha,OB/old dump-0.73 Ha,Mineral storage-6.0 Ha Infrastructure & roads- 05.17 Ha,others- 22.84 Ha	Pit -34.28 ha,Dumps-0.73 Ha,Roads & infrastructure-5.17 Ha,Green belt-10.78 Ha(2016-17)	Mining operation started on 21.06.2012
3p	Production of ROM mineral during the last five year period as applicable	2012-13:1.98 2013-14: 2.5 2014-15: 1.84 2015-16: 2.13 2016-17: 3	2012-13: 0.36 2013-14:1.38 2014-15: 1.84 2015-16: 2.13 2016-17: 2.9	Unit: Million Tons
3q	General remarks of inspecting officers on method of mining etc.			The mine was working as per the proposal with deep hole drilling & blasting

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate stacking for top soil along the ML boundary.	Actual work done as per the proposal	-
4b	Location of topsoil, OB and mineral reject dumps	Top soil utilized for construction of bund along the ML boundary, afforestation work	Top soil 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	Within ML-02 Outside ML-Nil	within ML-02 Outside ML-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	-
4e	Number of active and alive dumps.	01	01	Top soil bund
4f	Number of dead dumps.	1	1	Old existing dump
4g	Number of dumps established.	No Proposal	1 partly stabilized by plantation	Old existing dump
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Garland drain all along the bunds	-
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	Garland drain all along the bunds	-
4j	Number of settling ponds	02	NIL	Location of working changed & accordingly modified MP approved on 18.05.2017
4k	Specific comments of inspecting officer on waste dump management			The total area covered by soil dump was about 0.73 Ha (old). The management of top soil dumps carried out as per modified proposals.

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	Top soil generated is used for construction of bund along the ML boundary as proposed	-
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
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 29.06.2017 for 2016-17	Due for the year 2017-18 on 1st july
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 (L x 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	750	850	Outside ML 10350 no of plants are plants covering 2.03 Ha(2016-17)
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.75 By Afforestation 850	0.38 By Afforestation	-

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)	Season wise environmental monitoring of ambient air quality, water quality, dust fall rate, soil sample analysis& noise level	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 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)	The top soil generated will be utilized for making bund along the ML boundary& afforestation	246487 m3 of top soil generated in 2016-17 & utilized for making bund along the ML boundary & afforestation purpose.	-
8b	Concurrent use or storage of topsoil	Top soil generated will be stacked and utilized for making bund along the ML boundary& afforestation	Utilized for plantation	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There is no wase rock, reject & fines except top soil	Separate dumping of top soil is being carried out	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Nil	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	Nil	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	WML- 750 nos covering 0.75 Ha OML-5000 nos covering 2 Ha	WML- 850 nos covering 0.38 Ha OML-10350 nos covering 2.03 Ha	-
8g	Survival rate	90%	90%(2016-17)	-
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.	-

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
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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 March - 2018. A.R. submitted up to year 2016-2017	AR due on 1st July for 2017-18	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- G sudhkar Geologist- K Nagaraja Rao Manager Mining-K Sudhakar	Mining Engineer- N Prasanth Geologist- K Nagaraja Rao Manager Mining-K Sudhakar	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit area-34.28 Ha Infrastructure including road area-5.17 Ha Waste disposal-0.73 Ha Green belt/plantation-10.78 Ha	Appears to be correct	
9d	Scrutiny of Annual return on afforestation	WML-850nos OML-10350 nos	Appears to be correct	
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	Nil	Nil	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price=cost of production=Rs. 135/ton	Appears to be correct	
9h	Scrutiny of Annual return on fixed assets	Rs.1410560/-	Appears to be correct	
9k	Scrutiny of Annual return on mining machineries	Hyd.Excavator-1no,Rocker shovel loader-1 no,Front end loader-1 no,55 T dumpers-04 no,dozer-1 no, crusher unit-1(1400 TPH) no, water tanker-1 no	Same as mentioned in the AR	-

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed		Show cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

Date :

(ARUN KUMAR)

Indian Bureau of Mines