

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

MCDR inspection REPORT

Goa regional office

Mine file No : KNT/BGM/LST-30/GOA

Mine code : 38KAR02038

- (i) Name of the Inspecting : **K04**) **DR. Y.G.KALE**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : S/SHRI. MUKESH KUMAR SINHA, G.M. & SUNIL KUMAR SHARMA
Official with
Designation
- (iv) Date of Inspection : 12/10/2018
- (v) Prev.inspection date : 16/03/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **YADWAD & KUNNAL (M.L.NO.0**
- (b) **Registration NO.** : **IBM/929/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : KARNATAKA
- District : BELGAUM
- Village : YADWAD & KUNNAL
- Taluka : GOKAK & RAMDURG
- Post office : YADWAD
- Pin Code :
- FAX No. :
- E-mail : sinha.mk@dalmiacement.com
- Phone : 91 8334292271
- (f) Police Station : KULGOD
- (g) First opening date : 26/02/2017
- (h) Weekly day of rest : SUN
2. Address for : RS No. 394,
correspondance : YADWAD VILLAGE, GOKAK TALUKA,
BELGAUM DISTRICT, KARNATAKA - 591 136
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : DALMIA CEMENT (BHARAT) LIMITED
 15, BARA KHAMBA ROAD POST,
 HANSALAYA BUILDING, NEW
 DELHI - 110 001. DELHI
 DELHI
 Phone:011-22330121
 FAX :011-23313303

Owner : SHRI. T. VENKATESAN, NOMINATED OWNER,
 M/S. DALMIA CEMENT (BHARAT)
 LIMITED 26, FAGCON MANSION,
 4TH FLOOR, ETHIRAJ SALAI,
 EGMORE, CHENNAI CHENNAI
 CITY TAMIL NADU
 Phone:
 FAX :

Agent : ANIL BAJAJ
 YADWAD VILLAGE, GOKAK
 TALUKA, BELAGAVI DISTRICT,
 KARNATAKA-591 136 BELGAUM
 KARNATAKA
 Phone: 0833-4292271
 FAX :

Mining Engineer
 Name : SUNIL KUMAR SHARMA, Full Time
 Qualification : B.E. (MINING), 12 YEARS EXPERIENCE
 Appointment/ : 12/01/2017
 Termination date

Geologist
 Name : RAMAN ARUNACHALAM, Full Time
 Qualification : M.Sc (APPLIED GEOLOGY), 15 YEARS EXPERIE
 Appointment/ : 12/01/2017
 Termination date

Manager
 Name : MUKESHKUMAR SINHA
 Qualification : B.E. (Mining Engg), F.C.C.
 Appointment/ : 12/01/2017
 Termination date

6. Date of approval of Mining : MP modif under 17(3) MCR 2016 15/12/2017
 Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	Lessee has drilled 27 boreholes to a total depth of 1227 meters in the year 2017-18.
1b	Exploration over lease area for geological axis 1 or 2		Lessee has drilled 27 boreholes covering about 59 to 60Ha in Block -1.	It has been informed that work order are being issued to take up work of 2018-19.
1c	Exploration Agencies and Expenditure in lakh rupees during the year		Exploration was carried out by lessee only. However machines were hired from M/s. Khanna & Associate.	Total expenditure on exploration is Rs-30.00 lakh.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Proposals were given to explore the entire mineralized area under G-1 level.	About 40.35 Ha has been explored under G-1 level and about 167 boreholes to a total depth of 6647mtr is proposed in the balance plan period.	
1e	Balance reserve as on 01/04/20		Reserves as on 01.04.2018 Reserves - 43.84 MT Remaining Resources- 15.509 MT.	
1f	General remarks of inspecting officers on geology, exploration etc			At present exploration is carried out in Block-I only and proposals were given in the remaining area to cover entire mineralized area under G-1 level in the present plan period.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N-17918890 to N-179300 & E-520800 to E-521080 (Block-I)	Working has been carried out as per the proposal.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil of 0.5-2.0m shall be handled and stored separately.	Topsoil in working area is being handled and stored separately. waste is present in the form of intercalated waste.	
2c	Stripping ratio or ore to OB ratio	1:0.09	1:0.28	
2d	Quantity of topsoil generation in m3	72065	147671	More topsoil generated. The same has been stacked separately for future use.
2e	Quantity of overburden generation in m3	28665 (DEC 2017 TO March 2018)	230787	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Due to lack of exploration OB was not proposed during April-2017 to Nov-2017, but OB was removed in this period so actual OB removed is more than the proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Development of second pit is under progress as per 2018-19.
3b	Quantity of ROM mineral production proposed	1804000	1587870	
3c	Recovery of sailable/usable mineral from ROM production		100%	Entire ROM is recoverable.
3d	Quantity of mineral reject generation	Nil	Nil	Sub-grade mineral is being utilized by blending.
3e	Grade of mineral rejects generation and threshold value declared.	Not Applicable.	Not Applicable.	Sub-grade mineral is being utilized by blending.

3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Not applicable.	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Not applicable.	Not applicable.	ROM is directly being fed to plant without segregation.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not applicable.	Not applicable.	
3j	Provision of drilling and blasting in mineral benches	Yes, Drilling and blasting proposed.	Being carried out.	
3k	Provision of mining machineries in mineral benches	Yes	HEMM deployed.	The lessee is using machineries as per the mining plan proposal.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	11m bench height proposed in mineral (limestone)	Bench height maintained less than 11m.	
3m	Total area covered under excavation/pits	8.97Ha.	Nearly 8.32 Ha.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.09	1:0.28	
3o	Total area put in use under different heads at the end of year	27.90Ha	Area inder mining-8.32 Ha, Area for storage of topsoil-1.5Ha, Waste dump-2.02 Ha, Roads-2.00Ha and area under green belt-11.70Ha.	
3p	Production of ROM mineral during the last five year period as applicable		2016-17 111206 tonnes 2017-18 1587870 tonnes.	Lease was executed on 11.01.2017 and working has been commenced in feb-2017 only.

3q General remarks of inspecting officers on method of mining etc.

This is newly opened mine and over all mining operations are carried out as per the proposals of mining plan.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumps proposed	Separate dumping is being carried out.	
4b	Location of topsoil, OB and mineral reject dumps	Topsoil dump: In the Eastern side of the lease in Block-I. OB/Reject dump: North of Rain water harvesting pit in Block-I.	Topsoil dump: In the Eastern side of the lease in Block-I. OB/Reject dump: North of Rain water harvesting pit in Block-I.	
4c	Number of dumps within lease area and outside of lease area	Two within the lease area (Topsoil and OB).	Two within the lease area (Topsoil & OB).	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps are proposed in non mineralized area and outside the UPL.	Dumping is made as per the proposal.	Dumping area is proved as non-mineralized.
4e	Number of active and alive dumps.	02	02	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	0	0	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	Garland drain and Retaining wall are made. Last inspection violation has been rectified.

4i	Length of Retaining wall or garland drain all along dumps	Retaining wall-1, 565m x 1-2m x 1m. Retaining wall -2, 360m x 1-2m x 1m.	1085m x 1.5m x 1m.	For both walls.
4j	Number of settling ponds	Nil	Two.	
4k	Specific comments of inspecting officer on waste dump management			Topsoil and waste dumping is done on the non-mineralized area away from UPL. The violation of last inspection for non-construction of retaining wall has been observed to be rectified during current inspection.

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	Mine is recently started and mineral is not extracted up to the proved depth.	
5b	Area under backfilling of mined out area	Not Applicable.	Not Applicable.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Applicable.	Not Applicable.	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			This is recently opened mine and working has been not reached up to the proved depth and no backfilling was proposed in the present plan period.

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 Ist july of every year.	The annual report for 2017-18 was received on 20.10.2018.	
6b	Area available for rehabilitation (ha) .	Nil	Not Applicable.	
6c	afforestation done (ha).	1.03Ha	12.74Ha	
6d	No. of saplings planted during the year	3000	3451	
6e	Cumulative no .of plants		3451	
6f	Any other method of rehabilitation	Not Applicable.	Not Applicable.	
6g	Cost incurred on watch and care during the year		Rs-25.63 lakh has been spent on various environmental management measures.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not Applicable.	Not Applicable.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Applicable.	Not Applicable.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not Applicable.	Not Applicable.	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Applicable.	Not Applicable.	

6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not Applicable.	Not Applicable.	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not Applicable.	Not Applicable.	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not Applicable.	Not Applicable.	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not Applicable.	Not Applicable.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Four locations at Core zone & Four at Buffer zone.	Monitoring carried out in Core and Buffer zones. Monthly report are being submitted to PCB.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Mine is recently opened and lessee is regularly monitoring air, water and sound in core and buffer zone and results are within permissible limit. Lessee has planted around 3451 saplings in the year 2017-18 within the lease area.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1,80,4000 tonnes	1,58,7870 tonnes	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Not Applicable.	Not Applicable.
7c	Different grade of mineral sorted out at mines.	Not Applicable.	Not Applicable.
7d	Any beneficiation process at mines .	Not Applicable.	Not Applicable.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		No sorting of ROM is being done and entire ROM is being fed to plant without any processing. During discussion it was noticed that lessee wish to go for total analysis of ROM. Accordingly lessee has been advised to carry out analysis at RMPL, Bengaluru.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	72065 M3 of topsoil removal. Utilization not proposed in Block period.	147671 M3 of topsoil handled and stored separately.	
8b	Concurrent use or storage of topsoil	Nil	Stored separately for future use.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	01	01	OB dump maintained separately.

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Applicable.	Not Applicable.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Applicable.	Not Applicable.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		About 3451 no. plantation done up and additional 3187 no. of plantation done outside the lease.
8g	Survival rate	80%	94% of survival rate reported.
8h	Water sprinkling on roads to control airborne dust	Proposed	One dedicated water tanker with 10KL capacity is deployed for water sprinkling on road to control airborne dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		This is newly opened mine and lessee is in the process of initiating various measures for improving aesthetic beauty. the lessee has undertaken developing garden and entertainment site for various cultural activities.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Annual returns for the year 2017-18 was submitted and Monthly return for the year 2017-18 was submitted up to september-2018.	Verified.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Sunil Kumar Sharma, Geologist:- Raman Arunachalam and Mines Manager;- Mukesh Kumar Sinha.	Details given in the Annual returns 2017-18 are found correct.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	27.35Ha	Current opencast working-8.320Ha, Waste disposal- 2.020Ha, Building and Infrastructure-2.80Ha and Topsoil+ Afforestation-14.210Ha.
9d	Scrutiny of Annual return on afforestation	Plantation- within lease- 3451 and Survival rate- 88%. Outside the lease-1053 with survival rate 85%	within lease 3451no. and outside lease-3157 no.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Applicable.	Not Applicable.
9f	Scrutiny of Annual return on ROM stock and/or graded ore		During scrutiny of Annual Returns and while examination of record during inspection it was observed that DMG, Karnataka is insisting to indicate opening stock to obtain e-permit for transportation of ore. The opening stock is shown roughly based on the quantum of blast material and bulk density. This is approximate value. The production reported also includes the opening stock which is actually not correct. the lessee has represented and matter is being taken up with DMG, Karnataka for solution.

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine Price:rs- 223.68/tonne.	This is a captive limestone mine where is ROM is directly fed to the lessee's cement plant.
9h	Scrutiny of Annual return on fixed assets	Rs, 1807198669.	
9k	Scrutiny of Annual return on mining machineries	Excavators-03 nos, dumper-07, Dozer-01, Wheel loader-01 was shown in annual returns submitted for the year 2017-18.	HEMM deployment was found as per Annual Return.

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 :**(DR. Y.G.KALE)**

Indian Bureau of Mines