

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
MCDR inspection report
Goa regional office

- (i) Name of the Inspecting Officer and ID No. : (NKK) NARESH KUMAR KATARIYA
- (ii) Designation : Regional Controller of Mines
- (iii) Accompanying mine Official with Designation : Shri Anil D. Kawale (Mines Head) & Shri Anil Gupta (Mining Engineer), Shri M Chakraborty (Geologist) and other officials.
- (iv) Date of Inspection : 18.11.2024
- (v) Prev. inspection date : 16.04.2024

PART-I: GENERAL INFORMATION

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1. (a) **Mine Name** : **Yadwad & Kunnal Limestone Mine, ML No. 002**
- (b) IBM Registration Number under rule 45 of MCDR, 1988 : IBM/929/2011
- (c) Mine code : 38KAR02038
- (d) Type of Working (Opencast, Underground) : Opencast
- (e) Category (Fully Mechanized, Others or Manual) : Cat. A, Fully Mechanized
- (f) Captive/Non-captive : Non-captive
- (g) Postal Address
- Village : Yadwad
- Taluk/Mandal : Gokak
- District : Belgaum
- Pin code : 591136
- State : Karnataka
- Post office : Yadwad
- Nearest police station : Kulgod
- Nearest Railway station : Ghattaprabha
- 2 Address for correspondance : RS No. 394, YADWAD VILLAGE, GOKAK TALUKA, BELGAUM DISTRICT, KARNATAKA - 591 136
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3	(a)	Total Lease Area (Ha) with breakup of Non-forest and forest land	:	1048.24 Ha., Non-Forest
	(b)	Date of Grant of Mining Lease	:	26.12.2016
	(c)	Date of Execution	:	11.01.2017
	(d)	Date of opening of Mine	:	26.02.2017
	(e)	Date of expiry	:	10.01.2067; as per MMDR Amendment Act, 2015
4		Mineral(s) granted in lease and proved for mining	:	Limestone
5	(a)	Name of the lessee, Address, phone, email and fax number	:	M/s Dalmia Cement (Bharat) Limited 11th /12th Floors, Hansalaya Building, 15, Bharakhamba road, New Delhi - 110001. Phone : 011-23465100,09611186404 Fax: 011-23313303 Email : kawale.anildadaji@dalmiacement.com
	(b)	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	:	T. Venkatesan, Dalmia Cement (Bharat) Limited, 26,Fagun Mansion 4th Floor, Ethiraj Salai, Egmore, Chennai - 600008 email:t.venkatesan@dalmiacement.com Date of Appointment:09.08.2012
	(c)	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	:	Prabhat Kumar Singh Dalmia Cement (Bharat) Limited, Yadwad village, Gokak Taluk, Belagavi District, Karnataka - 591136. email:singh.prabhat@dalmiacement.com Phone : 7039014855 Date of Appointment:01.09.2022
	(d)	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	:	Anil Gupta B.E (Mining)with FCC ; 16 Yrs Dalmia Cement (Bharat) Limited, Yadwad village, Gokak Taluk,
	(e)	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	:	Belagavi District, Karnataka - 591136. email: gupta.anil@dalmiacement.com Phone No: 7338619555 Date of Appointment:29.09.2022
	(f)	Name of the Geologist, Qualification and total experience with Address, phone,	:	Mrinmoy Chakraborty M.Sc (Applied Geology); 15 yrs experience is appointed as Geologist

	email, fax number and date of appointment in mine	Date of Appointment: 1.02.2019
6	Date of Approval of Mining Plan/Review of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	: RMP from 2021-22 to 2025-26 is approved on 10.11.2020. Modification of Mining Plan: 05.07.2024

PART - II: OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	5 nos. in F.Y2022-23 No proposal in FY 23-24	21 nos. in F.Y 2022-23; meterage of 1624m. 11 Hole in FY 23-24; metreage of 1676.00m	
1b	Exploration over lease area for Geological axis 1 or 2.	G1 proposed	G1: 155.35 Ha. G2: 28.5 Ha. G3: 87.34 Ha.	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No proposal	M/s DSS Infra Geotechno services Expenditure in FY23-24 = 37.25 Lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1 proposed over the mineralized areas	G1 achieved in 155.35 Ha.	Shortfall in exploration due to land acquisition issues, as submitted by the lessee representatives
1e	Balance reserves as on <u>01.04.2024</u>		109.3 million tonnes of Limestone.	

As on
01.04.2024.

1f General remarks of Total 1676 m drilling done during FY 2023-24. inspecting officer on The mineral exploration in the ML area is not geology, exploration etc. undertaken in the Kunnal area due to land accessibility issues. The earlier lease of 798.01 ha was increased to 1048.24 ha, due to which a new proposal of exploration was incorporated in FY25 & FY26.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	X : 520387-521286 Y : 1792825 - 1790986	X : 520514 - 521138 Y : 1792666 - 1791191	The location of work was found to deviate from the approved proposal. A violation under rule 11(1) was issued based on the inspection dated 16.04.2024.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Benches only in ore proposed.	Topsoil is removed and stacked separately before the formation of benches. The thickness of topsoil varies from 0.3m to 1m	
2c	Stripping ratio or ore to OB ratio	1: 0.14	1:0.11	
2d	Quantity of topsoil generation in m3	262665	22800	The thickness of topsoil is proposed up to a depth of 1.5 to 2.0 m but encountered

up to a depth
of 0.5m only
during the
course, of
mining

2e	Quantity of overburden generation in m3	191110	129708	B.D 1.8 tonnes/m3
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The location of the development work observed on deviated from the proposal during inspection; a violation of rule 11(1) of MCDR, 2017 issued.		

Exploitation :

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Single pit proposed.	Single pit worked	Found in order.
3b	Quantity of ROM mineral production proposed	4.3 million tonnes	2.369 million tonnes	
3c	Recovery of salable/usable mineral from ROM production	90% proposed	92% recovery achieved during 2023-24.	OB waste consists of mainly interstitial clay within the ROM domain.
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	No proposal	Not applicable	
3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No proposal	Not Applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanized method	
3i	Any analysis or beneficiation study proposed & carried out	No proposal	Nil	

	for sub-grade mineral and reject				
3j	Provision of drilling & blasting in mineral benches	Drilling and deep hole blasting proposed with slurry explosive		No change. Dia: 152 mm.	
3k	Provision of mining machineries in mineral benches	Proposed with hydraulic excavators, rock breaker and dumpers.		Hydraulic excavators, rock breaker and dumpers adopted	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	11m bench height proposed.		Bench height of 9 to 10m is found maintained.	
3m	Total area covered under excavation/pits	74.50 Ha. proposed in the approved RMP at the end of F.Y. 2025-26.		48.08 Ha. at the end of F.Y 2023-24.	Actual area utilizations are furnished as per the submitted AR of F.Y 2023-24.
3n	Ore to OB ratio for the pit/mine during the year	1 : 0.14		1 : 0.11	
3o	Total area put in use under different heads at the end of year	Area under mining: 74.50 Ha. Top soil stacking:11.55 Ha. Waste Dump: 13.65 Ha. Road and Infrastructure : 2.35 Ha..		Area under mining: 48.08 Ha. Dump & Top Soil Storage: 12.07 Ha. Infrastructures & Road: 7.02 Ha.	Actual area utilizations are furnished as per the submitted AR of F.Y 2023-24. Proposals are given as per the approved RMP, at the end of F.Y. 2025-26
3p	Production of mineral during last five-year period, as applicable	ROM	2019-20: 2.40 2020-21: 4.30 2021-22: 4.30 2022-23: 4.30 2023-24: 4.30	2019-20: 2.035 2020-21: 1.855 2021-22: 2.319 2022-23: 2.335 2023-24: 2.369	

		(in million tonnes Limestone)	(in million tonnes Limestone)
3q	General remarks of inspecting officer on method of mining etc.	Actual Limestone production was less than the proposal. As per Lessee, the demand for a cement plant was less. The production achieved till Oct 2024 is 16.2 lacs and around 3.6 lacs of OB.	

Solid Waste Management-Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate disposal of topsoil and OB proposed.	Topsoil and OB waste are separately stacked	
4b	Location of topsoil, OB & mineral reject dumps	Topsoil dump: Eastern side of the ML area in Block-1. Waste dump: North Eastern side of the Mine pit in Block-1.	Topsoil dump and Waste dump were found constructed at designated areas.	
4c	Number of dumps within lease area and outside lease area	1 no. topsoil dump and 1 no. waste dump proposed.	No Change	Found in order.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL proposed	Located outside UPL.	Found in order
4e	Number of active & alive dumps	2 nos. of active dump proposed	2 nos. of active dumps	One each for topsoil and OB waste.
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Proposed	Retaining wall and garland drains constructed along the	

			periphery of the dumps.	
4i	Length of Retaining wall or garland drain all along dump	Retaining wall: 430m proposed. Garland drain: 390m proposed	Retaining wall: 380m constructed Garland drain: 690m constructed.	
4j	Number of settling ponds	1 nos	Not constructed as per proposal	violation of rule 11(1) of MCDR,2017 issued based on the inspection dated 16.04.2024 for not maintaining the proposed number of settling tanks.
4k	Specific comments of inspecting officer on waste dump management.	Topsoil is being utilized for plantation purposes along the safety zone areas and non-mineralised areas. The silt settling tank was not found maintained at the time of inspection, a violation of rule 11(1) of MCDR,2017 issued.		

Solid Waste Management-Backfilling :

S1.No.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Nil as the mine pit is not matured for backfilling.	
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposal	Nil	
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	

5e General remarks of Mine pit is not matured for backfilling since inspecting officer on mineral persists at the bottom of mine backfilling, reclamation workings. etc

Progressive Mine Closure Plan :

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	Proposed.	Submitted for F.Y. 2023-24 along with AR.	
6b	Area available for rehabilitation (ha)	No proposal	Nil	
6c	Afforestation done (ha)	0.65 Ha. during 2023-24	0.7 Ha along the safety barrier areas.	
6d	No. of saplings planted during the year	1625 nos.	1700 nos. within the ML area in FY 2023-24.	
6e	Cumulative no. of plants	Not specified.	Apprx. 20000 nos. saplings planted within ML.	
6f	Any other specific method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch & care during the year	Not specified	Rs. 3.0 lakhs as stated by the management representatives.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)	No proposal	Not applicable	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings	No proposal	Not applicable	
6j	Compliance on reclamation and rehabilitation by	No proposal	Not applicable	

	backfilling (iii) Afforestation on the backfilled area		
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Not applicable
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	No proposal	Not applicable
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	No proposal	Not applicable
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha)	No proposal	Not applicable
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposal	Not applicable
6p	Compliance of Environmental monitoring (core zone & buffer zone)	Proposed.	Environmental monitoring is carried out periodically and parameters are found within stipulated limits.
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Afforestation activities were executed as per the proposal	

Mineral Conservation :

Sl.No.	Item	Proposals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch proposed directly to the captive plant.	ROM is directly sent to the captive cement plant for crushing and blending as per requirement.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No proposal	Not applicable at the mine level.
7c	Different grade of mineral sorted out at mines	Proposed for all +34% CaO.	No change
7d	Any beneficiation process at mines	No proposal	Nil
7e	General remarks of inspecting officer Mineral conservation & beneficiation issues	The ROM is directly sent to the captive cement plant, located at a distance of 1 km from the ML area, where it is crushed. The ROM at plant is blended at the crusher to meet the requirement of the captive plant.	

Environment :

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and utilization of top soil proposed.	Top soil is being separately removed and utilized for plantation	
8b	Concurrent use or storage of topsoil	Storage of topsoil proposed.	Top soil is being stored separately	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of top soil and OB proposed.	Separate dumping of top soil and OB has been carried out..	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed during Conceptual stage.	Not applicable as of now.	
8e	Phased restoration, reclamation and rehabilitation of lands	No proposal	Nil	

affected by mining operations (Pits, dumps etc)

8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Proposed.	Plantation is carried out at waste dump & along the ML boundary.
8g	Survival rate	80% proposed	81% As mentioned in Fy2023-24 AR
8h	Water sprinkling on roads to control airborne dust	Proposed.	Water tanker arrangement for water sprinkling on mine roads has been made.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mines area is good	

Compliance of Rule 45 :

Sl.No.	Item	COMMENTS	Remarks	
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to March 2024 & A.R. Submitted up to 2023-2024	Date of submission of AR was 30.06.2024.	
S.N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager and Mining Engineer: Shri Anil Gupta Geologist: Shri Mrinmoy Chakraborty	Manager and Mining Engineer: Shri Anil Gupta Geologist: Shri Mrinmoy Chakraborty	Notices of appointments of Mining Engineer and Geologist found submitted.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	The area under mining: 48.08 Ha. Dump & Top Soil Storage: 12.07 Ha.	No change.	

		Infrastructures & Road: 7.02 Ha.	
9d	Scrutiny of Annual return on afforestation	1700 nos. within ML area.	1700 nos. within the ML boundary.
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Furnished as Nil	No mineral reject generation in 2023-24.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM and Graded ore closing Stocks: Nil	The actual was also the same at that time.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex- Mine price reported as Rs. 246.97/tonne. Production cost: Rs. 246.97/tonne.	Limestone ROM is being utilized for captive cement consumption.
9i	Scrutiny of Annual return on fixed assets	The closing balance of the fixed assets is reposted as Rs. 30150.2 lakhs	Mentioned in the AR.
9k	Scrutiny of Annual return on mining machineries	Dozer: 1 no. Back Hoe: 2 nos. Dumper: 7 nos. Water Tanker: 1 no. Air Compressor: 2 nos. Rock Drill: 1 no.	No change.

Details of violations observed during current inspection and compliance position of violation pointed out					
<u>Violation observed</u>			<u>Show cause position</u>		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

(Naresh Kumar Katariya)

Indian Bureau of Mines