MCDR-MiFLOLST/5/2022-GOA-IBM_RO_GOA INDIAN BUREAU OF MINES

1/29823/2024

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 : K07) KRISHNENDU CHATTERJEE

Officer and ID No.

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine : S/SHRI. ANIL GUPTA, MINES MANAGER CUM MINING ENGINEER

Official with Designation

(iv) Date of Inspection : 25-AUG-23
(v) Prev.inspection date : 10-MAR-22

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-FEB-17

(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

1/29823/2024

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-JAN-17

Termination date

Geologist

Name : RAMAN ARUNACHALAM, Full Time

Qualification : M.Sc (APPLIED GEOLOGY), 15 YEARS EXPERIE

Appointment/: 12-JAN-17 31-JAN-19

Termination date

Geologist

Name : MRINMOY CHAKRABORTY, Full Time

Qualification : M.Sc (APPLIED GEOLOGY) 10YERS EXPERIENC

Appointment/ : 01-FEB-19

Termination date

Manager

Name : MUKESHKUMAR SINHA

Qualification : B.E.(Mining Engg), F.C.C.

Appointment/ : 12-JAN-17

Termination date

6. Date of approval of Mining : MP modif under 17(3) MCR 2016 15-DEC-17 Plan/Scheme of Mining MP review under 17(1) MCR 2016 10-NOV-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	5 nos. in F.Y 2022-23	21 nos. in F.Y 2022-23; meterage of 1624m	
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.	Non mineralized area 526.82 Ha.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	By lessee	M/s Synergy Geotech, Nagpur. Expenditure: Rs. 37.25 Lakhs during F.Y. 2022-23	Total expenditure against exploration till 2022-23 is 182.78 lakhs
1d	Balance area to be explored to bring Geological axis in 1 or 2	Gl 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 reserve as on 01/04/20		111.74 million tonnes. Limestone average quality: 44.05% CaO.	As on 01.04.2023
1f	General remarks of inspecting officers on geology, exploration etc			Total,105 nos. of boreholes have been proposed to be drilled during F.Y 2021-22 and 2022-23, against which only 32 boreholes were reported to be drilled during the same period (11 nos. in 2021-22 and 21 nos. in 2022-23). Violation of Rule 11(1) issued on 01.09.2023.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	520387 to 521269E 1792820 to 1790980 N	520514 to 521171 E 17922640 to 1791290 N	Development lagging was observed during the course of inspection; violation of rule 11(1) issued.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches only in ore proposed.	Top soil is being removed and stacked separately before formation of benches. Thickness of top soil varies from 0.5m to 1m	
2c	Stripping ratio or ore to OB ratio	1:0.08	1:0.08	
2d	Quantity of topsoil generation in m3	285,500 m3	20,333 m3	Thickness of top soil is proposed upto a depth of 1.5 to 2.0 m but actually encountered upto a depth of 0.5m only during the course of mining.
2e	Quantity of overburden generation in m3	191,102 m3	95,725 m3	B.D 1.8 tonnes/m3
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Extent of mine development was found lagging in F.Y. 2022-23 with respect to the approved Mining Plan document; violation of rule 11(1) of MCDR, 2017 issued.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit proposed	Single pit.	
3b	Quantity of ROM mineral production proposed	4.3 million tonnes	2.335 million tonnes	
3с	Recovery of sailable/usable mineral from ROM production	90% proposed.	92% recovery achieved during 2022-23.	OB waste consists of mainly interstitial clay within ROM domain.
3d	Quantity of mineral reject generation	No proposal	Nil	

3e	Grade of mineral rejects 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	Mechanised method	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	Proposed to drill by deep hole driller and blasting using 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 combination adopted.	Excavator 2 nos. of 6 m3 capacity and Dumper 7 nos. of 60 tonnes capacity.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	11m bench height proposed.	Bench height of 8 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.	43.790 Ha. at the end of F.Y 2022-23.	Actual pit extent is mentioned as per the AR 2022-23.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.18	1:0.16	

30	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: 43.79 Ha. Plantation & Top soil stacking area: 24.37 Ha. Waste Dump: 8.55 Ha. Road and Infrastructure: 5.50 Ha.	Actual land utilization is mentioned as per the submitted AR 2022-23. Proposals are given as per the approved RMP, at the end of F.Y. 2025-26
3p	Production of ROM mineral during the last five year period as applicable	2018-19: 2.40 2019-20: 2.40 2020-21: 4.30 2021-22: 4.30 2022-23:4.30 (in million tonnes Limestone)	2018-19: 2.183 2019-20: 2.035 2020-21: 1.855 2021-22: 2.319 2022-23:2.335 (in million tonnes Limestone)	
3q	General remarks of inspecting officers on method of mining etc.			4.3 million tonnes of Limestone ROM production was proposed during F.Y. 2022-23, against which 2.335 million tonnes of ROM production was reported during the same period. Such production deviation also attributed to the deviation in proposed mining locations. Violation of rule 11(1) of MCDR,2017 issued on 01.09.2023.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	-	Top soil and OB waste o are separately stacked	

proposal.

4b	Location of topsoil, OB and mineral reject dumps	Eastern side	Top soil dump and Waste dump were found constructed at designated areas.	
4c	Number of dumps within lease area and outside of lease area	1 no. top soil dump and 1 no. waste dump proposed.	No change.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL proposed.	Located outside UPL	
4e	Number of active and alive dumps.		02 nos. of active dumps	One each for top soil and for OB waste.
4f	Number of dead dumps.	No proposal	Nil	
4 g	Number of dumps established.	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 dumps	Retaining wall: 430m proposed. Garland drain: 390m proposed.	Retaining wall: 380m constructed Garland drain: 690m constructed.	
4j	Number of settling ponds	No proposal	2 nos. constructed.	
4k	Specific comments of inspecting officer on waste dump management			Top soil is being utilized for plantation purpose along the safety zone areas. Actual construction of retaining wall against proposals was marginally less in F.Y 2022-23 since actual waste handling and subsequent builtup of waste dump was lower than

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	Nil as the mine pit was 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 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.			Mine pit was not matured for backfilling since mineral persists at the bottom of mine workings.

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).	Proposed.	Annual report on PMCP submitted dated 15.07.2023	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6с	afforestation done (ha).	1.0 Ha. proposed.	1.15 Ha. along the waste dump and safety zone areas.	
6d	No. of saplings planted during the year	2875 nos.	2900 nos. within the ML area.	
6e	Cumulative no .of plants	Not specified.	Apprx. 25000 nos. within ML area.	
6f	Any other method of rehabilitation	No proposal	Nil	

Cost incurred on Not specified Rs. 3.0 lakhs as stated

6g

og.	watch and care during the year	Not specified	by the management representatives.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Not applicable
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Not applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No proposal	Not applicable
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Not applicable
61	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 rehabilitation (ha)	No proposal	Not applicable

60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Not applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodic monitoring Proposed.	Environmental monitoring is carried out periodically and parameters are found within stipulated limit	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance & progressive closure operations are found to be carried out as per the approved proposals

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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 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 on Mineral conservation and 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.

1/29823/2024

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed.	Top soil is being separately removed and utilized for plantation.	
8b	Concurrent use or storage of topsoil	Concurrent use of top soil proposed.	Top soil is being utilized for plantation.	Top soil is being used for plantation along the dumps and safety barrier zone.
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 affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed.	Plantation is carried out at waste dump & along the ML boundary.	
8g	Survival rate	85% proposed.	75 to 80%.	
8h	Water sprinkling on roads to control airborne dust	using water	water tankers arrangement for water sprinkling on mine roads have been made.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty around the mining area is good.

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 Aug 2023 & A.R. Submitted up to 2022-2023	M.R. Submitted up to Aug 2023 & A.R. Submitted up to 2022-2023 Annual Return submitted within time limit.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager & Mining Engineer: Shri Anil Gupta Geologist: Shri Mrinmoy Chakraborty	Manager & Mining Engineer: Shri Anil Gupta Geologist: Shri Mrinmoy Chakraborty	Notice of appointments in respect of Mining Engineer and Geologist are submitted.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Ha. Plantation & Top soil	No change.	
9d	Scrutiny of Annual return on afforestation	2900 nos.	2900 nos. within the ML area.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Furnished as Nil	No mineral reject generation during 2021-22.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ore closing	Actual was also same at that time.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	<u> </u>	Limestone ROM is being utilized for captive cement consumption.	

1/29823/2024

9h	Scrutiny of Annual return on fixed assets	balance of the	Mentioned in the AR.
9k	Scrutiny of Annual return on mining machineries		No change.

PAGE: 14

1/29823/2024

Details of violations observed during current inspection and compliance position of violation pointed out				
Violati	on observed	Show co	ouse position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on	
MCDR17 Rule 11(1) 01-SEP-23			

Date:

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines