

**INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
MCDR INSPECTION REPORT
GOA REGIONAL OFFICE**

S. N.	Particulars	Details
1	Name of the Mine	Muddapur Limestone & Dolomite Mine, ML No. 2645
2.	Date of Inspection	08.05.2024
3.	Name of the Inspecting Officer	Krishnendu Chatterjee, Sr. Mining Geologist
4.	Name of accompanying mine officials	S/Shri Md. Shoyeb Dhage- Mining Engineer and Basappa Bandorli- Mines Manager
5.	Last date of Inspection and Officer	26.03.2023; Shri R.S. SAUDAGAR, ACOM
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	4.65 Ha., Non-Forest
7	Mine code	38KAR26080
8	IBM Registration Number under rule 45 of MCDR, 1988	IBM/11129/2012
9	Name of the lessee, Address, phone, email and fax number	Shri. Venkatesh S. Gouda Patil, M/s. Sundara Mineral Industries Anand Nagar, Taluka-Mudhol, District-Bagalkot, Karnataka-587122 Mail ID: sundara_minerals@yahoo.com
10	Village	Muddapur
11	Taluk/Mandal	Mudhol
12	District	Bagalkot
13	Pin code	587122
14	State	Karnataka
15	Post office	Muddapur
16	Nearest police station	Mudhol
17	Nearest Railway station	Bagalkot
18	Date of Grant of Mining Lease	31.07.2010
19	Date of Execution	31.07.2010
20	Date of opening of Mine	
21	Date of expiry	30.07.2060; as per MMDR Amendment Act, 2015
22	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Not Applicable.
23	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri. Venkatesh S. Gouda Patil, Lessee.
24	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Sri Basappa Bandorli (Permit Manager) Anand Nagar, Taluka-Mudhol, District-Bagalkot, Karnataka-587122.
25	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Md. Shoyeb Dhage (Part-Time). B.E-Mining Anand Nagar, Taluka-Mudhol, District-Bagalkot, Karnataka-587122. Date of appointment: 01.09.2022
26	Name of the Geologist, Qualification and total experience with Address, phone,	Sri Suraj Mense (Part-Time), M.Sc. Geology. Anand Nagar, Taluka-Mudhol, District-

	email, fax number and date of appointment in mine	Bagalkot, Karnataka-587122. Date of appointment:10.11.2021
27	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 for the period from 2020-21 to 2024-25 is approved on 05.08.2020.
28	Mineral(s) granted in lease and proved for mining	Limestone & Dolomite
29	Method of Mining (Opencast, Underground)	Opencast
30	Category (Fully Mechanized, Others or Manual)	Cat. B, Manual
31	Captive/ Non captive	Non-captive
32	Present EC Capacity	25,000 tonnes per annum

(1) Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil during F.Y 2023-24.	
1b	Exploration over lease area for Geological axis 1 or 2.	G1	G1: 4.65 Ha.	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No proposal	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1 proposed.	G1 achieved.	
1e	Balance reserves as on 01.04.2024		0.265 million tonnes of Limestone & 0.550 million tonnes of Dolomite. As on 01.04.2024.	Limestone quality: CaO +34 % to 50.95% Dolomite quality: MgO +15 to 20.35%.
1f	General remarks of inspecting officer on geology, exploration etc.	Entire ML area is explored by the lessee under G1 level by drilling with 08 nos. of DTH and 04 nos. of core boreholes.		

(2) Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	1793600 N to 1794070 N and 534850 E to 535050 E	1793600 N to 1794070 N and 534850 E to 535050 E	No change in development area.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches in ore proposed.	Benches in Ore: 3 Benches in Overburden: 0	
2c	Stripping ratio or ore to OB ratio	1: 0.18	1:0.22	
2d	Quantity of topsoil generation in m3	No proposal	Nil	

2e	Quantity of overburden generation in m3	2,222m3	950m3	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Only 950m3 interstitial waste generated from the mine during F.Y 2023-24 which were disposed to construct safety bund along the ML boundary.		

(3) Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Two nos. of pits proposed. One pit in Limestone and one pit in Dolomite.	One pit in Limestone located at northern side and one pit in Dolomite located at southern side of the ML area.	Dimension of Limestone pit: 110m x 60m x 12m. Dimension of Dolomite pit: 220m x 80m x 12m
3b	Quantity of ROM mineral production proposed	5,000 tonnes of Limestone & 20,000 tonnes of Dolomite	8,590 tonnes of Dolomite production was reported during F.Y. 2023-24.	
3c	Recovery of salable/usable mineral from ROM production	85% recovery of ROM proposed.	80% recovery of ROM achieved.	
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	Manual	Manual mining	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	
3j	Provision of drilling & blasting in mineral benches	Proposed to drill by jack hammer and blasting using slurry and UNFO	Jack Hammer Drilling and Blasting with Slurry Explosive and ED with 25mm diameter hole.	
3k	Provision of mining machineries in mineral benches	No proposal	Nil	B-Category, Manual mining operation.
3l	Whether height of benches in	4m bench height	Average height	Violation of Rule

	overburden and mineral suitable for method of mining proposed in MP/SOM	proposed.	5m is maintained in Limestone Pit.	11(1) issued on 31.05.2024.
3m	Total area covered under excavation/pits	2.53 Ha. at the end of F.Y. 2024-25.	2.35 Ha.	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: 0.18	1:0.22	S. R almost maintained.
3o	Total area put in use under different heads at the end of year	Area under mining: 2.53 Ha. Mineral Storage: 0.51 Ha. Infrastructures & Road: 0.21 Ha. Safety Zone: 0.94 Ha.	Area under mining: 2.35 Ha. Mineral Storage: 0.37 Ha. Infrastructures & Road: 0.11 Ha. Safety Zone: 0.94 Ha.	Actual area utilizations are furnished as per the submitted AR of F.Y 2023-24.
3p	Production of ROM mineral during last five-year period, as applicable	Limestone & Dolomite: 2019-20: 60,000 2020-21: 25,000 2021-22: 25,000 2022-23: 25,000 2023-24: 25,000 (in tonnes)	Limestone & Dolomite: 2019-20: Nil 2020-21: 960 2021-22: 9,815 2022-23: 15,460 2023-24: 8,590 (in tonnes)	No limestone production reported during F.Y 2023-24. No permit issued by the DMG-Karnataka after demise of the lessee in Sept. 2023.
3q	General remarks of inspecting officer on method of mining etc.	Category- B, Manual mining operation. Production of ROM was less than proposal due to inferior quality and less demand from consumer market. Maximum height of working benches is proposed to be maintained by 4m and width more than the height of the benches. But during inspection it was observed that benches were formed unsystematic manner in the Limestone Pit (Pit-1). Height of the Limestone pit benches were maintained by 5 to 6m and width were also less than the bench height. Violation of Rule 11(1) issued on 31.05.2024.		

(4) Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate disposal of waste was proposed for temporary dumping and to construct safety bund along the ML boundary	Generated waste utilized to make safety bund along the ML boundary.	No mineral reject generated during 2023-24.
4b	Location of topsoil, OB & mineral reject dumps	OB proposed to make safety bund	No change. Top soil earlier	Height of the embankment was

		along the ML boundary.	utilized for spreading over the safety bund for plantation.	1m.
4c	Number of dumps within lease area and outside lease area	01 no. of temporary dump proposed.	Nil	Generated waste (950 m3 only) utilized to construct safety bund along the ML area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed within UPL	Nil	
4e	Number of active & alive dumps	01 no. proposed	Nil	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	No proposal	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps are there	Construction of safety bund along the ML boundary proposed.	Below the Dolomite stock, no Retaining Wall is found constructed along the lease boundary.	
4i	Length of Retaining wall or garland drain all along dump	No proposal in 2023-24	Nil	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management.	No waste dump is located within the ML area. Below the Dolomite stock, no Retaining Wall is found constructed along the lease boundary, in between Boundary Pillar-C to Boundary Pillar-D to prevent wash off. Violation of Rule 11(1) issued on 31.05.2024.		

(5) Solid Waste Management-Backfilling

S.N.	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 inspecting officer on backfilling, reclamation etc	Mine pit is not matured for backfilling since mineral persists at the bottom of mine workings.		

(6) Progressive Mine Closure Plan

S.N.	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)	0.16 Ha. during 2023-24	0.16 Ha along the 7.5m safety barrier areas.	
6d	No. of saplings planted during the year	100 nos.	100 nos. within the ML area in 2023-24.	
6e	Cumulative no. of plants	Not specified.	Apprx. 700 nos. saplings planted along the safety barrier.	
6f	Any other specific method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch & care during the year	Not specified	Rs.10,000/- as reported by the lessee representative	
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 backfilling (iii) Afforestation on the backfilled area	No proposal	Not applicable	
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 limit.	
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	The mine was working manually and impact on environment is negligible. However, monitoring was carried out as per schedule through approved third party.		

(7) Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch proposed after manual sizing and sorting.	ROM & grade wise dispatch after sizing and sorting.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	Proposed for all +34% CaO in respect of Limestone.	BF grade Limestone dispatch reported in F.Y. 2023-24	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Grade wise mineral being dispatched from the mine after sizing and sorting of ores. 21.41 tonnes of BF grade Limestone and 9905.30 tonnes of Dolomite were dispatched from the mine during 2023-24.		

(8) Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	No Top Soil generation in F.Y. 2023-24	
8b	Concurrent use or storage of topsoil	No proposal	Not applicable	Top soil earlier used for plantation along the safety barrier zone.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Temporary dumping as well as construction of safety bund along the ML boundary by using OB material was proposed.	Generated waste was utilized to make safety bund along the ML boundary.	

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8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Mine pit is not matured for backfilling.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed during conceptual stage.	Not applicable as of now.	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Proposed.	Apprx. 700 nos. saplings were planted within ML area.	
8g	Survival rate	Not specified.	60 to 70%	
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 and impact on environment due to mining operation is very less due to small scale manual mining operation.		

(9) Compliance of Rule 45

S.N	Item	COMMENTS	Remarks	
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to May 2024 & A.R. Submitted up to 2023-2024	Date of submission of AR was 17.06.2024. Earlier, this office issued show cause notice on 09.01.2024 under rule 45(5) (b) for delay submission of Monthly Return for the month of November, 2023.	
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: Sri Basappa Bandorli Mining Engineer: Sri Md. Shoheb Dange Geologist: Sri Suraj Mense	Manager: Sri Basappa Bandorli Mining Engineer: Sri Md. Shoheb Dange Geologist: Sri Suraj Mense	Notices of appointments of Mining Engineer and Geologist were submitted.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under mining: 2.35 Ha. Mineral Storage: 0.37 Ha. Infrastructures & Road: 0.11 Ha. Safety Zone: 0.94 Ha.	No change.	
9d	Scrutiny of Annual return on afforestation	100 nos. within ML area.	150 nos.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Furnished as Nil	No mineral reject generation in 2022-23.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stocks: Nil in respect of Limestone and Dolomite. Graded ore closing Stock of BF grade Limestone: 6022.52 tonnes. Graded ore closing Stock of Dolomite: 18074.51 tonnes.	Actual was also same at that time as per mine production and dispatch register.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-Mine Price for BF grade Limestone: Rs. 650/ tonne and Ex-Mine Price for Dolomite: Rs. 625/tonne Production Cost: Rs. 445.12 /tonne	Some of the invoices were checked during inspection and sale value given was found correct.	
9i	Scrutiny of Annual return on fixed assets	Estimated market value is furnished as Rs. 120,00,000/-	Net closing balance and estimated market values are mentioned in AR.	
9k	Scrutiny of Annual return on mining machineries	Air Compressor-1 Tipper-1 Water Tanker-1	No change.	

(10) Violation observed during current inspection and compliance position of earlier violation pointed out:

- a) The mine was previously inspected on 26.03.2023 by Shri R.S. Saudagar, ACOM. No MCDR violation was pointed out during that time.

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- b) This office issued show cause notice on 09.01.2024 under rule 45(5) (b) for delay submission of Monthly Return for the month of November, 2023. Upon reply of the show cause notice, Shri Advik Venkatesh Patil, son of the lessee submitted that Shri. Venkatesh S. Gouda Patil demised on 06.09.2023 and he had applied for legal heir before the DMG, Karnataka on 04.10.2023. Formal acceptance on legal representative of the late lessee is in process with the State Govt. of Karnataka. The matter has been kept on abeyance as lessee representative requested that the penalty amount would be paid after receipt of legal heir communication.
- c) During present inspection dated 08.05.2024; violations of Rule 11(1) was observed which was communicated by the lessee vide violation letter dated 31.05.2024.

Krishnendu Chatterjee
Senior Mining Geologist
Indian Bureau of Mines
