

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

S. N.	Particulars	Details
1	Name of the Mine	Yadwad Limestone Mine, ML No. 2617
2.	Date of Inspection	09.05.2024
3.	Name of the Inspecting Officer	Krishnendu Chatterjee, Sr. Mining Geologist
4.	Name of accompanying mine officials	S/Shri Mallappa Shivappa Chekkennavar- Lessee, Siddharamesh- Mining Engineer.
5.	Last date of Inspection and Officer	
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	4.85 Ha., Non-Forest
7	Mine code	38KAR02032
8	IBM Registration Number under rule 45 of MCDR, 1988	IBM/6920/2011
9	Name of the lessee, Address, phone, email and fax number	Shri Mallappa Shivappa Chekkennavar 292-Yadwad, Ward-I, Gokak Belgaum District Karnataka: 591 136 Mail ID: chekkennavarminerals@gmail.com
10	Village	Yadwad
11	Taluk/Mandal	Gokak
12	District	Belgaum
13	Pin code	591136
14	State	Karnataka
15	Post office	Yadwad
16	Nearest police station	Gokak
17	Nearest Railway station	Bagalkot
18	Date of Grant of Mining Lease	13.08.2009
19	Date of Execution	15.01.2010
20	Date of opening of Mine	23.04.2010
21	Date of expiry	14.01.2060; 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 Mallappa Shivappa Chekkennavar, Lessee.
24	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Siddharamesh. Diploma in Mining Experience: More than 10 years Post: Lokapur, Mudhol Taluk, Bagalkot District, Karnataka 587122
25	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Date of appointment: 01.07.2023 Phone: 9986221121. Mail ID: chekkennavarminerals@gmail.com
26	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sri Chandrasekar (Part-Time), M.Sc. Geology. Experience: More than 15 years Post: Lokapur, Mudhol Taluk, Bagalkot District, Karnataka 587122. Date of appointment:01.02.2017

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 28.01.2020.
28	Mineral(s) granted in lease and proved for mining	Limestone
29	Method of Mining (Opencast, Underground)	Opencast
30	Category (Fully Mechanized, Others or Manual)	Cat. B, Manual
31	Captive/ Non captive	Non-captive

(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: 4.85 Ha.	Entire ML is explored under G1 stage.
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 <u>01.04.2024</u>		0.608 million tonnes of Limestone. As on 01.04.2024.	Limestone quality: CaO +34 % to 50.81%
1f	General remarks of inspecting officer on geology, exploration etc.	Entire ML area is explored by the lessee under G1 level by drilling with 02 nos. of DTH and 10 nos. of core boreholes.		

(2) Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	1795100 N to 1795280 N and 521270 E to 521550 E	1795100 N to 1795280 N and 521270 E to 521550 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: 0.11	1:0.24	
2d	Quantity of topsoil generation in m ³	4142 m ³	Nil	Proposed mining areas were devoid of any top soil.
2e	Quantity of overburden generation in m ³	1310 m ³	636 m ³	B.D 2.8 tonnes/m ³
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Only 636 m ³ interstitial waste generated from the mine during F.Y 2023-24 which were disposed to Dump-1. Initially, irregular thickness of 0.5m to 6m top soil was envisaged and accordingly handling proposals were given in the approved RMP document but actually no top soil was generated at the proposed mining areas during 2023-24.		

		Lessee was advised to correct the top soil generation proposals in the next RMP document as per field data which is pending for submission before 01.10.2024.
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(3) Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Single pit proposed.	Single pit worked, Eastern Pit.	Dimension of pits within ML area: 240m x 60m x 10m (Eastern Pit); & 30m x 20m x 3m (western Pit).
3b	Quantity of ROM mineral production proposed	33,000 tonnes Limestone ROM proposed.	5,300 tonnes of Limestone production reported.	
3c	Recovery of salable/usable mineral from ROM production	90% recovery of ROM proposed.	80% recovery of ROM achieved.	Actual ROM recovery was less than proposal due to higher contamination of interstitial clay.
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 overburden and mineral suitable for method of mining proposed in MP/SOM	3m bench height proposed.	Average height more than 3m.	Violation of Rule 11(1) issued on 31.05.2024.
3m	Total area covered under excavation/pits	2.23 Ha. at the end of F.Y. 2024-25.	1.60 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: 0.11	1:0.24	
3o	Total area put in use under different heads at the end of year	Area under mining: 2.23 Ha. Dump & Top Soil Storage: 0.82 Ha. Infrastructures & Road: 0.40 Ha.	Area under mining: 1.60 Ha. Dump & Top Soil Storage: 0.35 Ha. Infrastructures & Road: 0.36 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	2019-20: 33,000 2020-21: 33,000 2021-22: 33,000 2022-23: 33,000 2023-24: 33,000 (in tonnes)	2019-20: Nil 2020-21: Nil 2021-22: 4,450 2022-23: 9,650 2023-24: 5,300 (in tonnes)	
3q	General remarks of inspecting officer on method of mining etc.	Category- B, Manual mining operation. It was reported by the lessee that, production of ROM was less than proposal due to quality issue and less demand from consumer market. Working bench height and width are proposed to be maintained by 3m and by 5m respectively. But during inspection it was observed that pit benches were formed unsystematic manner with height of the benches more that 3m 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 by dumping.	Disposal of waste by surface dumping.	No mineral rejects and top soil generated during 2023-24.
4b	Location of topsoil, OB & mineral reject dumps	2 nos. of waste dumps proposed at south western side.	Both waste dumps located at south western side of the ML area (Dump-1 & Dump-2).	
4c	Number of dumps within lease area and outside lease area	02 no. of dumps proposed.	02 no. of waste dumps constructed.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed within UPL	Located within UPL.	Entire ML is mineralized.
4e	Number of active & alive dumps	1 active dump proposed (Dump-1)	01 active dump (Dump-1).	
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	Construction of Retaining wall below the dumps proposed.	Retaining Wall found constructed below the waste dumps.	

I/35873/2024

4i	Length of Retaining wall or garland drain all along dump	15m of Retaining wall proposed below Dump-1.	Constructed as per proposal	Height of the Retaining wall 1m.
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management.	No deviation in respect of waste dump management was observed during the inspection.		

(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)	0.11 Ha. during 2023-24	0.10 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. 2000 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	No proposal	Not applicable	

I/35873/2024

	B x D)			
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.	Cement 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 manual sizing and sorting of ore. 4496.21 tonnes of cement grade Limestone were reported to be dispatched form the mine during 2023-24.
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(8) Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and utilization of top soil proposed.	No Top Soil generation in F.Y. 2023-24.	Initially, thickness of 0.5m to 6m top soil was envisaged in the ML area and accordingly handling proposals were given in the approved RMP document but actually no top soil was generated in the proposed mining areas during 2023-24.
8b	Concurrent use or storage of topsoil	Proposed.	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)	Separate disposal of waste was proposed by dumping.	Disposal of waste by surface dumping.	
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. 2000 nos. saplings were planted within ML area.	
8g	Survival rate	Not specified.	70 to 80%	
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 24.06.2024.	
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: Sri Siddharamesh Geologist: Sri Chandrashekar	Manager and Mining Engineer: Sri Siddharamesh Geologist: Sri Chandrashekar	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: 1.60 Ha. Dump & Top Soil Storage: 0.35 Ha. Infrastructures & Road: 0.36 Ha.	No change.	
9d	Scrutiny of Annual return on afforestation	100 nos. within ML area.	100 nos. along the ML boundary.	
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 Graded ore closing Stock of Cement grade Limestone: 10352.44 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 Cement grade Limestone: Rs. 506/tonne and Production Cost: Rs. 375.60 /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. 25,00,000/-	Net closing balance and estimated market values are mentioned in AR.	
9k	Scrutiny of Annual return on mining machineries	Air Compressor-1	No change.	B-category, Manual Mine.

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

- a) The mine was previously inspected on 27.03.2023 by Shri R.S. Saudagar, ACOM. No MCDR violation was pointed out during that time.
- b) This office issued violation letter on 21.08.2023 under rule 34(A)(2) for non-submission of satellite images data (DAI) of the ML area on or before 1st July, 2023. In compliance, lessee had submitted satellite image data on 04.12.2023 in the DDMS Portal of IBM. This violation was considered as complied on 24.04.2024.
- 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**
