

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/MYS/MG/13/BNG

Mine code : 39KAR14013

- (i) Name of the Inspecting : **S21**) **H M Shivakumar**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Sri.Y. Narayan Rao Agent, Rajagopalaiah, MineManager,
Official with
Designation
- (iv) Date of Inspection : 04/10/2021
- (v) Prev.inspection date : 07/03/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **TALOORU**
- (b) **Registration NO.** : **IBM/4375/2011**
- (c) **Category** : **A Other than Fully Mech.**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **MYSORE**
- Village : **THALOORU**
- Taluka : **MYSORE**
- Post office : **TALOORU**
- Pin Code : **571311**
- FAX No. : **0821-2463789 (F),9341625511**
- E-mail : **rajashekar_mys@yahoo.com**
- Phone : **0821-2463789 (O), 934211038**
- (f) **Police Station** : **MYSORE SOUTH**
- (g) **First opening date** : **23/04/2005**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **SRI.N.RAJASHEKAR,**
TALOORU VILLAGE, P.O TALOORU,
VIA KADAKOLA, MYSORE -571311.
3. (a) **Lease Number** : **KAR1537**
- (b) **Lease area** : **11.88**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **22/04/2025**
4. **Mineral worked** : **MAGNESITE** **Main**

5. Name and Address of the

Lessee : N. RAJSHEKHAR
 MYSORE KARNATAKA
 Phone:9342110383
 FAX :08212463789

Owner : N. RAJSHEKHAR
 MYSORE KARNATAKA
 Phone: 9342110383
 FAX : 08212463789

Agent : Y.NARAYAN RAO
 MYSORE KARNATAKA
 Phone: 9341625511
 FAX :

Mining Engineer

Name : SURESH GANESH, Full Time
 Qualification : BE MINING
 Appointment/ : 10/09/2021
 Termination date

Geologist

Name : Dr.C.P.PRASANNA KUMAR, Part Time
 Qualification : M.SC.(GEO)
 Appointment/ : 01/06/2018
 Termination date

Manager

Name : K.RAJAGOPALAI AH
 Qualification : DIP.IN MINING ENGINEER , IInd CLASS HOLD
 Appointment/ : 15/10/2005
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	05/12/2003
Plan/Scheme of Mining		Modif.of approved Mining Plan	28/05/2007
		Modif.of approved Mining Plan	09/01/2008
		Mining Scheme rule 12 MCDR1988	29/09/2015
		MP review under 17(1) MCR 2016	05/02/2020
		Modif.approved Mining Scheme	18/02/2021

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	7.10 H & 4.78H	7.10 H & 4.78H	Mineralized area is 7.10 H and exploration is completed in the past.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	Trail pits done as per mining plan in the past.
1e	Balance reserve as on 01/04/20	815345		As per the AR 2020-21.
1f	General remarks of inspecting officers on geology, exploration etc			The entire lease area has been explored in the past and 7.10 ha is proved for mineralization.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	On western direction Pit No 1	On western direction Pit No 1	The development activity is carried out within the proposed locations. However the advancement is lagging due to less development activity than proposed violation issued.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Pit No 1 Separate benches proposed in OB & Mineral	Separate benches proposed in OB & Mineral	OB - 2 Benches, 4mtrs height and mineral - 4 benches of 4 mtr height.

2c	Stripping ratio or ore to OB ratio	1:2.87	1: 2.51	3655 tonns production 9185 tonnes overburden 1 : 2.51
2d	Quantity of topsoil generation in m3	No proposal	NIL	NIL
2e	Quantity of overburden generation in m3	5068Cum	3062cum	As per AR 2020-21 9185 tonnes of OB is removed . VL is issued for less development.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development is carried out within the proposed limits. However proposed quantity is not achieved. Violation is issued.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1	1	NIL
3b	Quantity of ROM mineral production proposed	8187tonnes	3655 tonnes	Only 3655 tonnes of production is achieved out of proposed 8187 tonnes . Violation issued.
3c	Recovery of sailable/usable mineral from ROM production	8187M.T.	3655M.T.	Production is less due to 2 Months mine closed and labour attendance is less due to COVID 19 as reported by the lessee.
3d	Quantity of mineral reject generation	NIL	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NIL	NIL
3f	Quantity of sub grade mineral generation.	7278M.T.	3055 M.T.	NIL

3g	Grade of sub grade mineral generation	30% to -35%Mgo	30% to -35%Mgo	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Manual method	Manual method	Manual sorting and sizing of the Magnesite ore is carried out.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	No proposal for drilling & blasting.	NIL	Rock breaker is being used for Mining
3k	Provision of mining machineries in mineral benches	1) Excavator-2 nos(1.5cum) 2) Rockbreaker - 1 no 3) Tipper - 2 nos (10 tons) 4) Water tanker - 1 nos (5000 ltrs) 5) Wheel loader - 1 no	1) Shovel - 1 nos (0.65cum) 2) Tipper - 2 nos (4.5cum) 3) Water tanker - 1 no (12000ltrs) 4) Front loader- 1no	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 mtr Bench	4 mtr Bench	OB - 2 benches - 4 mtrs Mineral 4 benches - 4mtrs, Height of the benches are maintained within the proposed limit. 4m height maintained for both OB bench & Mineral bench.
3m	Total area covered under excavation/pits	4.460ha	4.460ha	As per AR 2020-21.
3n	Ore to OB ratio for the pit/mine during the year.	1:2.86	1:2.84	
3o	Total area put in use under different heads at the end of year	7.998 Ha	8 Ha	As per AR 2020-21.

3p	Production of ROM mineral during the last five year period as applicable	2016-17 2017-18 2018-19 2019-20 2020-21 (In Toones)	8187 8187 8187 8187 8187	2016-17 2017-18 2018-19 2019-20 2020-21 (In Toones)	4465 5980 6490 5000 3655	Magnesite saleable production.
3q	General remarks of inspecting officers on method of mining etc.					It was proposed to produce 8187 tonnes of Mg and achieve 15204cum of development against which only 3655 tonnes of Mg and 9185cum of development is achieved. Violation issued for (-)70% & (-)40% deviation respectively.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Seperate dumping proposed for waste & mineral reject.	Waste mineral reject is dumped seperately in waste dump in northern dump.	Waste /Mineral reject dump is maintained seperately.
4b	Location of topsoil, OB and mineral reject dumps	N1362910 to 1363050 E678700 to 67880 for Western dump	N1362910 to 1363050 E678700 to 67880 for existing Northern dump	As reported due to farmers agitation they could not dump on western side how ever they have dumped waste on Northern dumping ground.
4c	Number of dumps within lease area and outside of lease area	(Within lease) 2 Waste dumps within ML 1 active & 1 stablized.	(Within lease) 2 Waste dumps within ML 1 active & 1 stablized.	One active dump in northern part of lease and one small inactive dump in southern part of the lease area is present.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Western direction of lease N1362710 to 1362880 E6786 to 678750	Northern direction of waste dump N1362970 to 136310 E678750 to E678830	Due to farmers agitation they could not dump on western side how ever they have dumped waste on Northern dumping ground.

4e	Number of active and alive dumps.	1	1	One active dump in northern part of the lease area.
4f	Number of dead dumps.	One small dead dump in south part of lease.	One	NIL
4g	Number of dumps established.	--	Part of waste dump stabilized	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	--	Retaining wall drain being constructed at bottom of dump	NIL
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall 179mtrs safety bund 360mtrs	Retaining wall 179mtrs safety bund 360mtrs	Is carried out.
4j	Number of settling ponds	NIL	2	NIL
4k	Specific comments of inspecting officer on waste dump management			The backlog construction of 2 silt settling tanks of 2015-16 & 2016-17 are completed during March 2021. The proposed retaining wall and safety bund construction is done and waste dump management is satisfactory.

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	
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.			There is no backfilling proposal during 2020-21. However during 2021-22 it is proposed and is in progress in small scale.

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).	Submitted	Submitted	Submitted
6b	Area available for rehabilitation (ha) .	--	--	NIL
6c	afforestation done (ha).	0.10 Ha	0.10 Ha	
6d	No. of saplings planted during the year	1000 (ML) 200(outside ML)	1000 (ML) 200(outside ML)	As reported in AR.
6e	Cumulative no .of plants	11800(within ML)	12000(within ML)	NIL
6f	Any other method of rehabilitation	NIL	NIL	NIL
6g	Cost incurred on watch and care during the year	--	--	Not reported
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	NIL	NIL

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	NIL	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	800	1000	Plantation is done with in mining lease area
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.10 ha	0.10 ha	NIL
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	200 plants 0.10 ha	200 plants 0.10 ha	Plantation is done on the slope of the western dump
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air, water, soil, noise	Air, water, soil, noise	Quarterly Air monitoring being done by M/S. Ganesh consultancy & results are with in the limit

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	909 H Grade 7278 low Grade	650 H Grade 4350 Sub Grade	Less ROM due to Covid - 19 due to which less man power during 2020-21 hence ROM less
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	Manual sorting & sizing carried out for magnesite ore.
7c	Different grade of mineral sorted out at mines.	1st Grade Low Grade	1st Grade Low Grade	High grade- Mgo- 42% + Subgrade- Mgo- 35% to 41% size 6mm to 35mm (C-ore) 10mm to 40mm (C-ore) -10m fines.
7d	Any beneficiation process at mines	No proposal	NIL	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation aspect is taken care by the lessee in the Mining Lease.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	NIL	NIL
8b	Concurrent use or storage of topsoil	No proposal	NIL	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	N1362910to 136050 E678700 to67880	N1362910 to 136050 E678700 to67880 Existing northern dump	Separate dumping of waste is done in the proposed waste dump as per the proposal.

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	NIL	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	NIL	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	11000 800 ----- 11800	11000 1000 ----- 12000	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Water Tanker for dust suppression	Water Tanker for dust suppression	Effective dust suppression is being done in & around mine by using one water tanker of 12000 ltr capacity.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The asthetic beauty in and around the mine is maintained well.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	--	Submitted	AR for 2020-21 submitted on 22/5/2021.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri Suresh Ganesh, Mining Engineer Dr.C P Prasannakumar, Geologist Sri K Rajagopalaiah, Mines Manager		All were present during inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	NIL	NIL	NIL
9d	Scrutiny of Annual return on afforestation	NIL	NIL	The figures reported in AR 2020-21 apperars to be correct.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	The figures reported in AR 2020-21 apperars to be correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	NIL	NIL	The figures reported in AR 2020-21 apperars to be correct.
9h	Scrutiny of Annual return on fixed assets	NIL	NIL	The figures reported in AR 2020-21 apperars to be correct.
9k	Scrutiny of Annual return on mining machineries	NIL	NIL	The figures reported in AR 2020-21 apperars to be correct.

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	12/10/2021			
MCDR17	Rule 33	12/10/2021			

Date :

(H M Shivakumar)

Indian Bureau of Mines