

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/MYS/MG/2/BNG

Mine code : 39KAR14002

- (i) Name of the Inspecting : **257**) **Prashant S Hegde**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Shri H. J. Basavarajappa, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 14/12/2019
- (v) Prev.inspection date : 29/12/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KARYA(282H)**
- (b) **Registration NO.** : **IBM/4369/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : KARNATAKA
- District : MYSORE
- Village : KARYA
- Taluka : NANJANGUD
- Post office : HULLAHALLI
- Pin Code : 571314
- FAX No. : 080-25583172 (F),
- E-mail : karyaminesmml@gmail.com
- Phone : 080-22278813 (O), 08221-220
- (f) Police Station : Nanjangud
- (g) First opening date : 24/05/1983
- (h) Weekly day of rest : SUN
2. Address for : Karya Magnesite Mine of M/s KSMCL
correspondance Po-Hullahalli, Tq-Nanjangud
Dist-Mysore, Karnataka-571314
3. (a) Lease Number : KAR0556
- (b) Lease area : 86.25
- (c) Period of lease : 20
- (d) Date of Expiry : 23/05/2023
4. Mineral worked : DUNITE Associated
MAGNESITE Main

5. Name and Address of the

Lessee : Karnataka State Minerals Corp. Ltd
 TTMC, A Block, 5th Floor,
 BMTC Building, K.H.Road,
 Shanthinagar Bengaluru
 BANGALORE KARNATAKA
 Phone:080-22278813-14-15-16
 FAX :080-22213172

Owner : Naveen Raj Singh, IAS & MD
 Karnataka State Minerals
 Corp. Ltd TTMC, A Block,
 5th Floor, BMTC Building,
 K.H. Road, Shanthinagar,
 BANGALORE KARNATAKA
 Phone: 080-22278813-14
 FAX : 080-22213172

Agent : Shankarlingaiah
 Karnataka State Minerals
 Corp. LTD TTMC Building, A
 block,5th Floor BMTC Bus
 station, Shanthinagar
 BANGALORE KARNATAKA
 Phone: 080-22278813-14-15-16
 FAX : 080-22213172

Geologist

Name : R.CHANDRASHEKAR,Full Time
 Qualification : MSc (Geology)
 Appointment/ : 01/02/2018
 Termination date

Manager

Name : H J Basavrajappa
 Qualification : Dip. in Mining, 1ST Class MM Cert.
 Appointment/ : 07/10/2016
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	14/07/1992
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	16/12/1997
		Renewal under rule 22 MCR1960	18/06/2003
		Modif.of approved Mining Plan	19/12/2008
		Mining Scheme rule 12 MCDR1988	06/12/2013
		MP review under 17(1) MCR 2016	02/02/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2018-19: 8 nos BHs with 240 total meterage. 2019-20: 8 nos BHs with 240 total meterage.	As on date, 17 core BHs completed/drilled with 495 total meterage.	NIL
1b	Exploration over lease area for geological axis 1 or 2	9.8 Ha	9.8 Ha	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	24 lakhs	M/s PRB Infraproject Pvt. Ltd. Nagpur; 31.5 lakhs expenditure incurred.	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	Exploration completed as per approved RMP.
1e	Balance reserve as on 01/04/20	----- -	Magnesite: 210,007 tonnes (Grade: 1 to 6 % SiO ₂) Dunite: 3,239,500 tonnes (Grade: 35 to 45 % MgO)	Based on last approved RMP dated 2/2/2018
1f	General remarks of inspecting officers on geology, exploration etc	-----	-----	Exploration has been completed as per approved RMP. Entire potentially mineralised area (9.8 Ha) covered under G-1.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Southern part of ML in section FF' to JJ' (E-800 to 1000 & N-1250 to 1050)	As per the approved proposals.	NIL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches for mineral and OB	As per the approved proposals.	vein depoist and total 6 nos of benches.

2c	Stripping ratio or ore to OB ratio	1:0.25	1:0.87	(i)Dunite production also considered. (ii)Cum data (iii) More development for systematic development of benches.
2d	Quantity of topsoil generation in m3	NIL	NIL	NIL
2e	Quantity of overburden generation in m3	24,370	22,408	BD: 1.8
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-----	-----	Development is being carried out as per the approved RMP. Further, corner BPs were well maintained at time of inspection.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Only one pit in southern part of ML. (331 m X 223 m X 40 m)
3b	Quantity of ROM mineral production proposed	Magnesite: 17,059 tonnes	Magnesite: 2,618 tonnes	Besides, 69,521 tonnes of Dunite produced against the proposal of 255,885 tonnes.
3c	Recovery of sailable/usable mineral from ROM production	5 % recovery for Magnesite and 75 % recovery for Dunite.	As per the proposals.	NIL.
3d	Quantity of mineral reject generation	NIL	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NIL	Entire Magnesite produced is being utilised after blending.
3f	Quantity of sub grade mineral generation.	NIL	NIL	Entire Magnesite produced is being utilised after blending.

3g	Grade of sub grade mineral generation	NA	NA	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised Method	As per the proposals.	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals.	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	40% total handling requires drilling & blasting with 100 mm dia wagaon drill & 7 m depth	Carried out as per the proposals.	NIL
3k	Provision of mining machineries in mineral benches	Yes. Excavators and tippers	As per the proposals.	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 m height & 8 m width.	As per the proposals.	NIL
3m	Total area covered under excavation/pits	9.2 Ha	9.2 Ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1:0.25	1:0.87	i)Dunite production also considered. (ii)Cum data (iii) More development for systematic development of benches.
3o	Total area put in use under different heads at the end of year	Pit: 9.2Ha Dumps: 19.1 Ha Green belt & afforestation: 6.1 Ha Road & Infra.: 0.85 Ha	Pit: 9.2Ha Dumps: 19.1 Ha Green belt & afforestation: 6.5 Ha Road & Infra.: 0.85 Ha	NIL

3p	Production of ROM mineral during the last five year period as applicable	2014-15: 18,389 2015-16: 19,544 2016-17: 22,085 2017-18: 23,975 2018-19: 17,059	2014-15: 2,429 2015-16: 2,731 2016-17: 3,926 2017-18: 2,439 2018-19: 2,618	Unit: in tonnes Besides, 69,521 tonnes of Dunite (Minor Mineral) produced against the proposal of 255,885 tonnes during year 2018-19.
3q	General remarks of inspecting officers on method of mining etc.	-----	-----	Mining is being carried out as per the approved RMP.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB proposed and no top soil generation.	Carried out as per the approved proposals.	NIL
4b	Location of topsoil, OB and mineral reject dumps	Dump No: 3 (E-750 to 590 & N-1000 to 1400)	Carried out as per the proposals.	NIL
4c	Number of dumps within lease area and outside of lease area	3 nos Dumps within ML	Actual also same.	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed outside the UPL.	Carried out as per the approved proposals.	NIL
4e	Number of active and alive dumps.	One	One	NIL
4f	Number of dead dumps.	Two	Two	NIL
4g	Number of dumps established.	Two	Two	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Carried out as per the approved proposals.	NIL
4i	Length of Retaining wall or garland drain all along dumps	20 m Retaining wall and garland drain	20 m Retaining wall and garland drain	cum. 548 m Retaining wall and garland drain.

4j	Number of settling ponds	One	One	NIL
4k	Specific comments of inspecting officer on waste dump management	-----	-----	Waste dump management is being carried out as per approved RMP.

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.	NIL	NIL	Pit is not matured for back-filling as ore not exhausted.
5b	Area under backfilling of mined out area	NIL	NIL	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NIL	NIL
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-----	-----	Pit is not matured for back-filling so far as ore not exhausted.

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).	1 st July of every year.	Submitted.	Nil
6b	Area available for rehabilitation (ha) .	NIL	NIL	NIL

6d	No. of saplings planted during the year	400 nos of saplings.	500 nos of saplings.	NIL
6e	Cumulative no .of plants	NA	12,000 nos of plants	NIL
6f	Any other method of rehabilitation	Afforestation.	Afforestation.	NIL
6g	Cost incurred on watch and care during the year	NA	1 lakhs	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL	Pit is not matured for back-filling as ore not exhausted.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NIL	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	250 nos saplings	250 nos saplings	NIL

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.22 Ha	0.22 Ha	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation.	Afforestation.	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Season-wise environmental monitoring was proposed.	Season-wise environmental monitoring carried out and all parameters are within the limit.	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	----- -	-----	PMCP implementation is being 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	Manual sorting of magnesite within ML.	As the proposals.	NIL
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	NIL
7c	Different grade of mineral sorted out at mines.	Different grade of Magnesite ore based on SiO2 content	Actual also same.	NIL.
7d	Any beneficiation process at mines	NIL	NIL	NIL

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	----- --		There is no mineral conservation issue as entire Magnesite produced is being utilised after blending..
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NIL	NIL	No top-soil generation during year 2018-19.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of OB/wastes proposed at Dump: No-3.	Carried out as per the proposals.	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NIL	NIL	Pit is not matured for back-filling as ore not exhausted.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	NIL	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation of 400 nos saplings proposed during year 2018-19.	500 nos saplings planted (cum. plantation of 12,000 nos)	Nil
8g	Survival rate	75 %	75 %	NIL
8h	Water sprinkling on roads to control airborne dust	Proposed	One water tanker provided for this purpose.	NIL.

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-----	-----	Aesthetic beauty in and around mining area is satisfactory as the mining is being carried out proposals of approved RMP.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	-----	Submission of ARs& MRs are regular.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	ME & MM: Shri H. J. Basavarajappa, Geologist: R Chandrashekar	Actual also same.	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 9.2 Ha Dumps: 19.1 Ha Road and Infra.: 0.85 Ha	Actual also same.	NIL
9d	Scrutiny of Annual return on afforestation	500 nos within ML	Actual also same.	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	Actual also same.	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock NIL Magnesite stock: 2928 tonns	Same at that time.	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex.Mine price of magnesite per tonne : Rs 7894/-- Cost of prodction per tonne: Rs 5855/--	Actual also same.	NIL
9h	Scrutiny of Annual return on fixed assets	Rs 1,27,70,525	Actual appear to be same.	NIL

9k	Scrutiny of Annual return on mining machineries	SHOVEL (HYDRAULIC) (1.000 CUM) : 2 nos AIR COMPRESSOR :One nos TIPPER (6.000 CUM) : 6 nos.	Actual also same.	NIL
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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 35(2)	30/12/2019	16/03/2020			

Date :

(Prashant S Hegde)

Indian Bureau of Mines