### INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

### MCDR inspection REPORT

### Bangalore regional office

	Mine f	Eile No : KNT/MYS/MG/2	/BI	NG	Mine code : 39KAR14002
	(i)	Name of the Inspecting Officer and ID No.	:	S21 ) H M Shivakuma	r
	(ii)	Designation	:	Assistant Mining Engin	eer
	(iii)	Accompaning mine Official with Designation	:	1. Sri.R.Nirmal Kumar,	Asst. General Manager (P),2. S
	(iv)	Date of Inspection	:	05/10/2021	
	(v)	Prev.inspection date	:	09/03/2021	
		ION			
1.	(a)	Mine Name	:	KARYA(282H)	
	(b)	Registration NO.	:	IBM/4369/2011	
	(c) (d) (e)	Category Type of Working Postal address	:	A Mechanised Opencast	
		State	:	KARNATAKA	
		District	:	MYSORE	
		Village	:	KARYA	
		Taluka	:	NANJANGUD	
		Post office Pin Code		HULLAHALLI	
		FAX No.	:	571314 080-25583172 (F),	
		E-mail	:	karyaminesmml@gmail.c	Om
		Phone	:	080-22278813 (0), 082	
	(f)	Police Station	:	Nanjangud	
	(g)	First opening date	:	24/05/1983	
	(h)	Weekly day of rest	:	SUN	
2.		ess for espondance		Karya Magnesite Mine o Po-Hullahalli, Tq-Nanj Dist-Mysore, Karnataka	angud
3.	(a)	Lease Number	:	KAR0556	
	(b)	Lease area	:	86.25	
	(C)	Period of lease	:	20	
	(d)	Date of Expiry	:	23/05/2023	
4.	Miner	al worked	:	DUNITE MAGNESITE	Associated Main

5.	Name	and Address of	the			
		Lessee	:	Karnataka	State Minerals Corp. Ltd	
				TTMC, A Bl BMTC Build Shanthinag BANGALORE	Lock, 5th Floor, ding, K.H.Road, gar Bengaluru KARNATAKA -22278813-14-15-16	
		Owner	:	Karanataka Corporati Block, 5th stand,Shar BANGALORE	Kapashi, IAS Managing Director A State Minerals TTMC Building "A" A Floor BMTC Bus Athinagara, Benga KARNATAKA -22278813/4/	
l		Agont	:	H.D.RAJU		
		Agent	•	Karanataka Corporati Block, 5th stand,Shar BANGALORE	a State Minerals TTMC Building "A" n Floor BMTC Bus nthinagara,BANGAL KARNATAKA 8303626, 080-22278813/4/5/6	
		Mining Enginee	er			
		Name	:	NIRMAL KUM	MAR,Full Time	
		Qualification	:	B.E.(MININ	1G )	
		Appointment/ Termination da		03/08/2020	)	
		Geologist				
		Name	:	R.CHANDRAS	SHEKAR,Full Time	
		Qualification	:	MSc (Geolo	ogy)	
		Appointment/ Termination da	: ite	01/02/2018	3	
		Manager				
		Name	:	R.Nirmal K	Tumar	
		Qualification	:	BE (Mining	1)	
		Appointment/ Termination da	: ite	03/08/2020	)	
б.		of approval of Scheme of Minin		ng :	Existing rule 11 MCDR1988 Mining Scheme rule 12 MCDR1988 Renewal under rule 22 MCR1960 Modif.of approved Mining Plan Mining Scheme rule 12 MCDR1988 MP review under 17(1) MCR 2016	14/07/1992 16/12/1997 18/06/2003 19/12/2008 06/12/2013 02/02/2018

#### PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
la	Backlog of previous year	No proposals		
lb	Exploration over lease area for geological axis 1 or 2	2019-20 16 Boreholes	17 Boreholes	No exploration backlog
lc	Exploration Agencies and Expenditure in lakh rupees during the year	M/s.PRB infrastructur e Pvt Ltd. Nagpur, Maharashtra Rs.31,54,827= 00	M/s.PRB infrastructure Pvt Ltd. Nagpur, Maharashtra Rs.31,54,827=00	As reported by lessee.
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	Exploration is completed in the past as per proposals.
le	Balance reserve as on 01/04/20	Magnesite: 205403 MTs Dunite: 3105347 MTs		As per the AR 2020-21.
lf	General remarks of inspecting officers on geology, exploration etc			The exploration in the lease area has been completed in the past as per proposals and the balance reserves of magnesite & dunite are arrived after depleting the production carried out during 2020-21.

# Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	686	W RL 720 to 686 E RL 715 to 686	Development is carried out within the proposed location. However bench advancement is lacking due to less production.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	burden	3 in over burden 4 in Mineral Zone	NIL
2c	Stripping ratio or ore to OB ratio	1:2.77	1:2	Mg production - 2406T/860 cum Dunite - 72929T/26046 cum Total ROM (860+26046) = 26906cum OB: 53621 cum
2d	Quantity of topsoil generation in m3	NIL	NIL	NIL
2e	Quantity of overburden generation in m3	33050	53621	As per AR 2020-21 ( 68635 tonnes).
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development in the mine is carried out within the proposed locations.

# Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	NIL
3b	Quantity of ROM mineral production proposed	Magnesite: 21455 Dunite: 321825	Magnesite: 2406 Dunite: 72929	As reported in AR 2020-21 violation issued for achieving less production and deviating from the approved proposals.
3c	Recovery of sailable/usable mineral from ROM production		100%	NIL
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.	Nil	Nil	NIL
3g	Grade of sub grade mineral generation	Nil	Nil	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual sorting & sizing of magnesite ore is carried out.	Magnesite ore size 10mm to 300 mm.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No	No	NIL
3ј	Provision of drilling and blasting in mineral benches	Yes	Yes	Drilling & blasting is carried out . 100mm dia drilling is done and 83 mm slurry explosive is used in conjuction with ordinary delay detonator.
3k	Provision of mining machineries in mineral benches	Yes	Yes	Shovel- 2nos(1.3cum+1cum) Tipper - 7 nos , 10 tonnes each Drill- 1 nos 100mm Wheel loader - 1 no Water tanker - 1 (500 ltr)
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	3 Benches OB 6mtr each. 4 Benches mineral 6mtrs.
3m	Total area covered under excavation/pits	9.20Ha 490x225mtrs	9.20Ha 490x225mtrs	Excavation carried out as per AR
3n	Ore to OB ratio for the pit/mine during the year.	1:2.77	1:2	1:2

30	Total area put in use under different heads at the end of year	9.20Ha	9.20Ha	(As per AR 2020- 21) Mine pit - 9.2 ha Dumps - 19 ha Infrastructure - 0.850 ha Afforestation & Mineral storage - 7.120 ha Violation issued for additional Mineral stacks and static crusher site preparation.
3р	Production of ROM mineral during the last five year period as applicable	Magnesite 2015-16 : 2731 2016-17 : 3926 2017-18 : 2439 2018-19 : 2618 2019-20 : 2198 2020-21 : 2406 ( in tonnes)	2016-17: 28600 2017-18: 35594 2018-19: 69521 2019-20: 61260	NIL
3q	General remarks of inspecting officers on method of mining etc.			It was proposed to produce 21455 T of Magnesite and 321825 T of Dunite against which 2406 T of Mg & 72929T of Dunite only is produced. V/L issued for achieving only 11% & 22 % of proposed production respectively.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)		As per proposal	NIL
4b	Location of topsoil, OB and mineral reject dumps		As per proposal	NIL

4c	Number of dumps within lease area and outside of lease area	ML area	As per proposal	2 inactive dumps on eastern part of the lease and one active dump on eastern side of the dump.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	NIL
4e	Number of active and alive dumps.	1	1	NIL
4f	Number of dead dumps.	2	2	NIL
4g	Number of dumps established.	2	2	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	NIL
4i	Length of Retaining wall or garland drain all along dumps	20X1X1 mtrs	20X1X1 mtrs	cumalitively over 634 mtrs of retaining has been constructed.
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management			The waste dumping is being carried out on Dump No 3 on eastern part of the lease area. However violation is issued for stacking mineral on the same dump.

## 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	NIL
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.			There are no backfilling proposals for the year 2020-21 in the mining lease.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Submitted	Submitted	Submitted on 21/06/2021
6b	Area available for rehabilitation (ha) .	NIL	NIL	NIL
бс	afforestation done (ha).	0.22	0.2	As reported by lessee.
6d	No. of saplings planted during the year	250	250	As per AR 2020-21.
бе	Cumulative no .of plants		18376	As reported by lessee during inspection.
бf	Any other method of rehabilitation	NIL	NIL	NIL
бд	Cost incurred on watch and care during the year			Details was not provided.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	NIL	NIL

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)Afforestati on on backfilled area	NIL	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	NIL
61	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	NIL	NIL	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NIL	NIL
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NIL	NIL
бр	Compliance of environmental monitoring (core zone and buffer zone)	Done by M/s. SUMS TECHNO LABS PVT.LTD., Hosapete Updated upto Aug-2021	Done by M/s. SUMS TECHNO LABS PVT.LTD., Hosapete Updated upto Aug-2021	

6q General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. The PMCP work have been carried out by the lessee within the lease area as per the proposals.

### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Yes	The different grade of Magnesite sorted and stocked separately at mine head.
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Manual	Manual	Size of Magnesite mineral 10mm to 300mm Mgo-35%
7c	Different grade of mineral sorted out at mines.	+35% MgO +3%CaO 3% Fe2O3	+35% MgO +3%CaO 3% Fe2O3	NIL
7d	Any beneficiation process at mines	Hand sorting of Mineral	Hand sorting of Mineral	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation aspect is taken care by the lessee by handpicking of the small specks of mineral also from ore burden before waste is disposed in the dumps.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks

8a	Separate removal and utilization of topsoil (Rule 32)	NA	NA	The Mining operation is carrying out in existing pit, No top soil is generating.
8b	Concurrent use or storage of topsoil	NA	NA	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	NA	NA	Dump 3 on eastern part of the lease is used for dumping OB.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	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)	-	5.82 На	18376 plants are planted over 5.82 ha within the lease cumulatively as reported by the lessee.
8g	Survival rate	80%	About 80%	As per AR
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	One water tanker of 5KL used for sprinkling on Haulage Road.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Good asthetices is maintained in and around the mine by carrying out plantation.

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-2021 ***** A.R. Submitted up to 2020-21		Submitted
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer / manager: R Nirmal Kumar Geologist: R Chandrashekar	appointed	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(O/C) working : 9.2 Ha * Used for	* Afforestation and Mineral Storage: 7.12 ha	NIL
9d	Scrutiny of Annual return on afforestation	250 No's saplings	250 No's saplings	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	MTs	Magnesite 2406 MTs Dunite 72929 MTs	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		Magnesite 7456 Rs. Dunite 886 Rs.	Violation issued for not including Royality, DMF & NMET details.
9h	Scrutiny of Annual return on fixed assets		Rs. 11946377/-	NIL

9k	Scrutiny of Annual return on	· 1 /	Shovel (Hyd.): 01 Shovel (Hyd.): 01	NIL
	mining	-	Other HEM Mach.: 01	
	machineries	01	Air Compressor: 01	
		Other HEM	Tractor: 01	
		Mach.: 01	Tipper: 07	
		Air		
		Compressor: 01		
		Tractor: 01		
		Tipper: 07		

Details of violations observed during current inspection and compliance position of violation pointed out					
Violation	n observed		Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on Compliance on	
MCDR17 Rule 11(1)	13/10/2021				
MCDR17 Rule 33	13/10/2021				
MCDR17 Rule 45(7)(a)13/10/2021					

Date :

#### (H M Shivakumar)

Indian Bureau of Mines