

**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 : **S19**) **SANDEEP KUMAR SINGH**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri R. Nirmal Kumar, Mine Manager & Shri R. Chandras
Official with
Designation
- (iv) Date of Inspection : 09/03/2021
- (v) Prev.inspection date : 14/12/2019

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 correspondance** : Karya Magnesite Mine of M/s KSMCL
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	8 boreholes with total meterage of 240 m proposed for the year 2018-19.	No Exploration carried out during the year 2018-19	Nil
1b	Exploration over lease area for geological axis 1 or 2	8 boreholes with total meterage of 140 m proposed for the year 2019-20	Total 17 nos. of boreholes with total meterage of 495 m completed during the year 2019-20	No Exploration backlog.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Total 24 lakhs (2018-19- 12 lakhs & 2019-20- 12 lakhs)	Drilling carried out by M/s PRB Infrastructure Pvt. Ltd, Nagpur, Maharashtra and total expenditure incurred is Rs 31,54,287.	As reported by the Lessee.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Exploration completed as per the approved proposals.
1e	Balance reserve as on 01/04/20	2,12,625 tonnes of Magnesite with grade 1 to +6% SiO ₂ and 33,09,057 tonnes of Dunite as on 1/02/2018.	1,82,135 tonnes of Magnesite and 28,51,708 tonnes of Dunite as on 1.04.2020	(As per AR 2019-20).The Mineral Reserve & Resources are not updated as on 1.4.2020 after depletion of the production for the year 2018-19 & 2019-20 from the last approved document. Violation issued under Rule 45(7)

1f	General remarks of inspecting officers on geology, exploration etc	Nil	Nil	<p>i)The Exploratory drilling have been carried out as per the proposals.</p> <p>ii)The details of Mineral Reserve & Resources as given in Sec 3 are not correct as per the last approved document. The production quantity for the year 2018-19 & 2019-20 to be depleted from the reserves and figures to be reported accordingly. The Resource figures will remain same. Violation issued under Rule 45(7)</p>
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Development proposed in Section F-F', G-G', H-H', I-I' & J-J' N-1030-1260 E-740-980	The development carried out within the proposed extent as per the proposal. N-1030-1250 E-740-980	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed in OB & mineral.	Separate benches maintained in OB & mineral	OB-3 benches, 6 metres height and mineral 3 benches 6 metres height.The details of no of benches, Average height & Depth of the deepest working from adjacent ground are not reported correctly in section 4.2(open cast) of AR 2019-20. Violation issued under Rule 45(7).

2c	Stripping ratio or ore to OB ratio	1:0.25(in Cum) (ROM)	1:0.97(in Cum) (ROM)	Magnesite Ore production- 2198 tons~785 Cum, Dunite production- 61260 tons~21878 Cum, Total ROM- (785+21878) Cum=22,663 Cum OB- 39948 tons~22193 Cum.
2d	Quantity of topsoil generation in m3	No Proposal	Nil	Nil
2e	Quantity of overburden generation in m3	25490 Cum of OB proposed	22198 Cum of OB handled.	As per AR 2019-20(39948 tons)
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	i)The development in the mine carried out within the proposed extent as per the proposal. ii) The details of no of benches, Average height & Depth of the deepest working from adjacent ground are not reported correctly in section 4.2(open cast) of AR 2019-20. Violation issued under Rule 45(7).

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit proposed.	Actual working carried out in one pit.	Nil
3b	Quantity of ROM mineral production proposed	17843 tons of Magnesite and 267645 tons of Dunite proposed	2198 tons of Magnesite and 61260 tons of Dunite production issued.	(As reported in AR 2019-20). Violation issued.
3c	Recovery of sailable/usable mineral from ROM production	100 % proposed	100 % achieved.	Nil

3d	Quantity of mineral reject generation	No proposal	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Nil	Nil
3f	Quantity of sub grade mineral generation.	No proposal	Nil	Nil
3g	Grade of sub grade mineral generation	No proposal	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sorting and sizing of the Magnesite ore proposed	Manual sorting and sizing of the magnesite ore carried out.	Magnesite ore size- 10 mm to 300mm.
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	Drilling and blasting proposed.	Drilling and blasting carried out. 100 mm dia drilling is done and 83 mm slurry explosive is used in conjunction with ordinary delay detonator.	Nil
3k	Provision of mining machineries in mineral benches	i)Excavator-1 Cum-1no. ii)Tipper-10 tons-5 nos. iii)Wagon drill-1 no. iv)Water tanker (mounted on 10 tons tipper) - 1no.	i)Shovel-1.3 Cum -1 no & 1 Cum- 1no. ii) Tipper-10 tons- 7 nos. iii)Drill-100 mm-1 no. iv)Water tanker-5000 litres-1 No v)Wheel Loader- 1no.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed Height 6m for Mineral bench and OB bench.	Height of the bench maintained 6m for both mineral & OB bench	OB-3 benches, 6 metres height and mineral 3 benches 6 metres height.
3m	Total area covered under excavation/pits	9.20ha at the end of plan period (2022-23)	9.20 ha. area under excavation pits as on 1.04.2020.	As per AR 2019-20.

3n	Ore to OB ratio for the pit/mine during the year.	1:0.25(in Cum) 1:0.97(in Cum)	Magnesite Ore production- 2198 tons~785 Cum, Dunite production- 61260 tons~21878 Cum, Total ROM- (785+21878) Cum=22,663 Cum OB- 39948 tons~22193 Cum.	
3o	Total area put in use under different heads at the end of year	i)Area under Mining- 9.2 ha ii) Wastedump- 19.9 ha iii)Mineral storage- 1.3 ha iv)Infrastruct ure& roads- 0.85 ha. v)Others(Green belt)- 6.12 ha till end of plan period(2022-23)	i)Covered under current(O/c) workings- 9.2 ha. ii)Waste disposal- 20.33 ha iv)Occupied by Plants, buildings, residential, welfare& roads-0.80 ha. v)Other purpose- 8.00 ha	As per land use reported in AR 2019-20.The land use (area in ha) as given in Part-I (12) under 12(iv),(v) &(vi)of AR 2019-20 are not reported correctly as per the last approved document. Violation issued under Rule 45(7).
3p	Production of ROM mineral during the last five year period as applicable	2015-16: 19544 tons (Magnesite) 293160 tons (Dunite) 2016-17:22085 tons (Magnesite) 331275 tons (Dunite) 2017-18:23975 tons (Magnesite) & 359625 tons (Dunite) 2018-19: 17059 tons (Magnesite) 255885 tons (Dunite) 2019-20: 17843 tons (Magnesite) 267645 tons (Dunite) (in tonnes)	2015-16: 2731 tons (Magnesite) 5000 tons (Dunite) 2016-17: 3926 tons (Magnesite) 28600 tons (Dunite) 2017-18: 2439 tons (Magnesite) & 35594 tons (Dunite) 2018-19: 2618 tons (Magnesite) 69521 tons (Dunite) 2019-20: 2198 tons (Magnesite) 61260 tons(Dunite) (in tonnes)	Nil

3q	General remarks of inspecting officers on method of mining etc.	-	-	i)The total Magnesite ore production proposed for the year 2019-20 is 17843 tonnes against which only 2198 tonnes of Magnesite ore production has been done. The deviation in the overall Magnesite ore production is 88 % less than the approved proposal. Violation issued ii)The land use (area in ha) as given in Part-I (12) under 12(iv),(v) &(vi) of AR 2019-20 are not reported correctly as per the last approved document.Violation issued under Rule 45(7).
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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 proposed for OB. (Dump no 3)	Separate dumping maintained for OB as per the proposal (Dump no 3)	Nil
4b	Location of topsoil, OB and mineral reject dumps	OB-dump (Dump no 3). Sec- aa'-dd' N-1000 to 1400 E 540 to 760.	OB dump maintained within the proposed extent as per the proposal. OB-dump (Dump no 3). Sec- aa'-dd' N-1000 to 1400 E 540 to 760.	OB dump is at the western portion of the Lease

4c	Number of dumps within lease area and outside of lease area	3 OB dumps(1 Active dump(Dump no 3)) + 2 dead dumps(Dump no 1 &2)) inside the Lease area	3 OB dumps (1 Active dump(Dump no 3)) + 2 dead dumps(Dump no 1 &2)) inside the Lease area	1 Active OB dump present at the western portion of the lease(Dump no 3) and 2 inactive OB dumps(Dump No 1 & Dump no 2) present at the eastern portion of the lease and northern portion of the lease respectively.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed dump outside UPL	Active Waste dump (Dump no 3) at the earmarked location as per the proposal.	Nil
4e	Number of active and alive dumps.	1 active OB dump proposed. (Dump no 3)	1 active OB dump present and used for waste dumping. (Dump no 3)	Dump no 3 present at the western portion of the lease.
4f	Number of dead dumps.	2 dead inactive OB dumps within the lease. (Dump no 1 & Dump no 2)	2 dead inactive OB dumps present within the lease. (Dump no 1 & Dump no 2)	Nil
4g	Number of dumps established.	No proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall & Garland drain proposed along the active OB dump	Retaining wall and garland drain construction have been completed as per the proposal.	(Dump no 3-Active OB dump)
4i	Length of Retaining wall or garland drain all along dumps	20 m Retaining wall, 20 m garland drain proposed along the active OB dump	Retaining wall and garland drain construction have been completed as per the proposal	Nil
4j	Number of settling ponds	One Check dam & two Gully plugs construction proposed inside the lease area for the year 2019-20.	The Check dam and Gully plugs construction have not been carried out as per the proposal.	Violation issued

4k	Specific comments of inspecting officer on waste dump management	-	-	<p>i)The waste dumping has been carried out at the earmarked location as per the proposal.</p> <p>ii)One check dam and two gully plugs construction have been proposed in the year 2019-20. It was observed during inspection that no Check dam & Gully plugs construction has been carried out as per the proposal.</p> <p>Violation issued.</p>
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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	Nil
5b	Area under backfilling of mined out area	No proposal	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	There is no specific backfilling reclamation proposal

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted before 1st of July every year	Annual PMCP report for the year 2019-20 submitted on 09.07.2020.	Submitted.
6b	Area available for rehabilitation (ha) .	1.22 ha for afforestation (1 Ha in Dump no 1 for afforestation + 0.22 ha afforestation all along the road, barren land etc.) inside the Lease area.	0.29 ha (afforestation along the road, barren land etc.) inside the lease area	As reported by the Lessee.
6c	afforestation done (ha).	1.22 ha for afforestation (1 Ha in Dump no 1 for afforestation + 0.22 ha afforestation all along the road, barren land etc.) inside the Lease area.	0.29 ha (afforestation along the road, barren land etc.) inside the lease area	As reported by the Lessee.
6d	No. of saplings planted during the year	400 nos. of plants proposed (150 nos. on slope of dump no 1 and 250 nos. along the road, barren land etc.) inside the lease area.	500 nos. of plants inside ML area with 99 % survival rate. (afforestation along the road, barren land etc.)	As reported in AR 2019-20.
6e	Cumulative no .of plants	Not mentioned	12500 nos. of plants.(Inside ML area)	As reported by the Lessee during inspection.
6f	Any other method of rehabilitation	No proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	Rs 9,000 for plantation work.	As per the proposal.	Nil

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 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	No proposal	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	Nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed for both Core and buffer zone for Air, water, Noise & Soil.	Environmental monitoring carried out for Air, Water, Noise & Soil in both Core and buffer zone.	Environmental Report of March 2020 available. All environmental parameters within limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	—	—	The PMCP work have been carried out inside the mine as per the proposals.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manual sorting & sizing of Magnesite ore proposed	Manual sorting & sizing carried out for Magnesite ore.	—
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting & sizing of Magnesite ore	Manual sorting & sizing carried out for Magnesite ore	Size: - 10 mm to 300 mm Grade:- MgO-35%+
7c	Different grade of mineral sorted out at mines.	No grade wise sorting proposed	Nil	Nil
7d	Any beneficiation process at mines	No proposal	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	—	—	The Mineral conservation activities carried out inside the mine as per the proposal.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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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)	Separate dumping proposed for overburden/waste.	Separate dumping maintained for OB/waste at the proposed location.	Dump No-3 present at the western portion of the lease is the active dump and used for OB/waste dumping.
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)	Not mentioned	12500 nos. of plants.(Inside ML area)Nil	
8g	Survival rate	Not mentioned	99 % survival rate within ML area.	As reported in AR 2019-20.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads proposed	Water sprinkling carried out as per the proposal	One Water sprinkler of capacity 5 KL used in the mines for water sprinkling.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	—	—	The aesthetic beauty in and around the mine looks good.

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 Jan-2021. ***** A.R. of the year 2019-20 submitted on 27.06.2020	M.R. Submitted up to Jan-2021. ***** A.R. of the year 2019-20 submitted on 27.06.2020	Submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	i)Mining Engineer- Shri M.R.K Bhagavan ii) Geologist- Shri P.S Gopalakrishnapa iii) Manager- Shri M.R.K Bhagavan	Information Provided. A whole time 'Mining Engineer' and 'Geologist' have not been appointed as per the provision of Rule(55)	Violation issued under Rule 55.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	i) Covered under current (O/c) workings- 9.2 ha. ii)Waste disposal- 20.33 ha iv)Occupied by Plants, buildings, residential, welfare& roads-0.80 ha. v)Other purpose- 8.00 ha	The land use (area in ha) as given in Part-I (12) under 12(iv),(v) &(vi)are not reported correctly as per the last approved document.	Violation issued.
9d	Scrutiny of Annual return on afforestation	500 nos. of plants with 99 % survival rate within the ML area	Appears to be correct	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Appears to be correct.	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	i) Magnesite: O/s- 0 tons ROM Production- 2198 tons (Magnesite) C/s- 0 tons ii) Dunite O/s- 0 tons ROM Production- 61260 tons (Dunite) C/s- 0 tons	Appears to be correct.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production- Rs 6894/ton Ex mine price- Rs. 7643/ton	Appears to be correct	Nil
9h	Scrutiny of Annual return on fixed assets	Rs. 13502201	Appears to be correct.	Nil
9k	Scrutiny of Annual return on mining machineries) Shovel-1.3 Cum -1 no & 1 Cum- 1 no. ii) Tipper-10 Cum- 7 nos. iii) Wheel loader- 1no.	The machineries details like tipper capacity and the drill machine details have not been reported correctly in Sec (5).	Violation issued.

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)	01/04/2021			
MCDR17	Rule 31(4)	01/04/2021			
MCDR17	Rule 35(2)	01/04/2021			
MCDR17	Rule 55(1)(1	01/04/2021			
MCDR17	Rule 45(7)(a)	01/04/2021			

Date :

(SANDEEP KUMAR SINGH)

Indian Bureau of Mines