

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

Review and updation of Mining Plan REPORT

Bangalore regional office

Mine file No : KNT/HSN/CR/5/BNG

Mine code : 11KAR11001

- (i) Name of the Inspecting : 130) PRASHANT S HEGDE
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : S/Shri Lingappa DGM, R. Chandrashekar, Geologist and
Official with
Designation
- (iv) Date of Inspection : 13/04/2019
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : BHAKTHARAHALLI
- (b) **Registration NO.** : IBM/4369/2011
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : KARNATAKA
- District : HASSAN
- Village : BHAKTARAHALLI
- Taluka : CHANNARAYAPATNA
- Post office : NAVILE
- Pin Code :
- FAX No. : 080-25583172
- E-mail : info.mml@nic.in, managerbl
- Phone : 080-22278813-14-15-16
- (f) **Police Station** : Nuggehalli
- (g) **First opening date** :
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : M/s Karnataka State Minerals Corporation Limited
Technical Consultancy Division
Arasikere Road, Hassan-573 201 Karnataka
3. (a) **Lease Number** : KAR0527
- (b) **Lease area** : 259
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 03/02/2020
4. **Mineral worked** : CHROMITE 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
 blcok,5th Floor BMTC Bus
 station, Shanthinagar
 BANGALORE KARNATAKA
 Phone: 080-22278813-14-15-16
 FAX : 080-22213172

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	02/02/1994
Plan/Scheme of Mining		Renewal under rule 22 MCR1960	03/03/2000
		Mining Scheme rule 12 MCDR1988	24/07/2010
		Mining Scheme rule 12 MCDR1988	15/12/2014

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	20 nos of BHs with 1080 total meterage	NIL	Non-working Mine since June 2013.
1b	Exploration over lease area for geological axis 1 or 2	45 Ha area cover under G-1 out of total 70 Ha mineralised area.	45 Ha area cover under G-1 out of total 70 Ha mineralised area.	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	8.31 lakhs	NIL	Non-Working Mine.
1d	Balance area to be explored to bring Geological axis in 1 or 2	25 Ha	NIL	Non-working mine.
1e	Balance reserve as on 01/04/20	-----	197,825 tonnes of Chromite ore as on date (+10 % Cr2O3 grade)	Based on last approved SOM dated 15/12/2014.
1f	General remarks of inspecting officers on geology, exploration etc	-----	-----	35 nos of BHs with 2225 total meterage were drilled so far in the mine. Balance area of 25 Ha out of total 70 Ha of mineralised area yet be covered under exploration and proposed in the draft RMP which is under process.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Northern side of the ML area in Pit No-1(N-2015 to N-2235 & E-1538 to E-1733), Pit No-3 (N-2030 to N-2085 & E-2096 to E-2211), Pit no-4 (N-2330 to N-2467 & E-1625 to E-1820) and pit No 5 (N-1355 to N-1624 & E-910 to E-1160)	NIL	Mining operation was temporarily discontinued since June 2013 due to low demand for ore in the market.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in topsoil, OB, and minerals.	NIL	Non-working mine.
2c	Stripping ratio or ore to OB ratio	1: 24.65	NIL	Non-working mine and tonnes data.
2d	Quantity of topsoil generation in m3	4200	NIL	Non-workinig mine.
2e	Quantity of overburden generation in m3	1,67,850	NIL	Non-working mine.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-----	-----	Mining operation was temporarily discontinued since June 2013 due to low demand for ore in the market.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	4 nos of pits (Pit No-1, 3, 4 and 5)	NIL	Non-Working Mine. Existing pits (6 nos) dimensions were: Pit No1: 460mX95mX30m; Pit No2: 289mX125mX38m; Pit No3: 160mX138mX20m; Pit No4: 210mX114mX30m; Pit No5: 225mX94mX16m and Pit No6:120mX69mX6m.
3b	Quantity of ROM mineral production proposed	15,390 tonnes	NIL	Non-Working Mine.
3c	Recovery of sailable/usable mineral from ROM production	90 %	NIL	Non-Working Mine.
3d	Quantity of mineral reject generation	770 tonnes	NIL	Non-Working Mine.
3e	Grade of mineral rejects generation and threshold value declared.	10 to 15 % Cr2O3 grade of Chromite ore stacked as +10 %Cr2O3 threshold value.	NIL	Non-Working Mine.
3g	Grade of sub grade mineral generation	10 to 15 % Cr2O3 grade	NIL	Non-working Mine.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	NIL	Non-working mine.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	100 mm diameter with 7 m depth drill holes proposed for blasting.	NIL	Non-working mine.

3k	Provision of mining machineries in mineral benches	Mechanised open-cast mining method.	NIL	Non-working mine.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 m height with 8 m width benches.	NIL	Non-working mine.
3m	Total area covered under excavation/pits	17.40 Ha	15.50 Ha	Non-working mine.
3n	Ore to OB ratio for the pit/mine during the year.	1: 24.65	NIL	Non-working mine.
3o	Total area put in use under different heads at the end of year	Pit: 17.40 Ha Dumps: 16.20 Ha Green Belt: 12.72 Ha	Pit: 15.50 Ha Dumps: 16.20 Ha Green Belt: 9.60 Ha	Non-working mine.
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 17,406 tonnes 2015-16: 11,718 tonnes 2016-17: 10,116 tonnes 2017-18: 12,150 tonnes 2018-19: 15,390 tonnes	2014-15: NIL 2015-16: NIL 2016-17: NIL 2017-18: NIL 2018-19: NIL	Non-working mine.
3q	General remarks of inspecting officers on method of mining etc.	-----	-----	Mining operation was temporarily discontinued since June 2013 due to low demand for ore in the market.

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 topsoil and OB proposed.	NIL	Non-working mine.

4b	Location of topsoil, OB and mineral reject dumps	Proposed on Dump Yard no-D1 (N-1977 to 2300 & E-1421 to 1579) and D2 (N-2125 to 2517 & E-1777 to 2240). Top soil stock/location at N-1855 to 1910 & E-1668 to 1740	NIL	Non-working mine.
4c	Number of dumps within lease area and outside of lease area	Within ML: 5 nos Outside ML: NIL	Same	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Same	Non-working Mine.
4e	Number of active and alive dumps.	5 nos	5 nos	NIL
4f	Number of dead dumps.	NIL	NIL	NIL
4g	Number of dumps established.	NIL	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	NIL	Non-workinig mine.
4i	Length of Retaining wall or garland drain all along dumps	340 m retaining wall and garland drain	NIL	200 m retaining wall and garland drain constructed so far.
4j	Number of settling ponds	NIL	NIL	NIL
4k	Specific comments of inspecting officer on waste dump management	-----	-----	Mining operation was temporarily discontinued since June 2013 due to low demand for ore in the market. All pending protective measures were proposed in submitted draft RMP.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	NIL	NIL	Pits were not matured for backfilling 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.	-----	-----	Mining operation was temporarily discontinued since June 2013 due to low demand for ore in the market. Pits were not matured for backfilling 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).	1st July of every year.	Not submitted due to non-workiiing mine. All pending protective measures were proposed in submitted draft RMP.	NIL
6b	Area available for rehabilitation (ha) .	NIL	NIL	NIL
6c	afforestation done (ha).	0.44 Ha on dumps	NIL	Non-working mine.
6d	No. of saplings planted during the year	1000 nos of saplings on dumps	NIL	Non-working Mine.
6e	Cumulative no .of plants	NIL	50,000 of saplings planted so far.	NIL

6f	Any other method of rehabilitation	NIL	NIL	NIL
6g	Cost incurred on watch and care during the year	NIL	NIL	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL	Pits were not matured for backfilling 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 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	NIL	NIL	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NIL	NIL

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NIL	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed.	Environmental monitoring not carried out as non-working mine.	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-----	-----	Mining operation was temporarily discontinued since June 2013 due to low demand for ore in the market. All pending protective measures were proposed in submitted draft RMP.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manual sizing and sorting proposed within ML.	NIL	Non-working mine.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	NIL	Non-working mine.
7c	Different grade of mineral sorted out at mines.	Manual soring and sizing of 10 mm to 100 mm size as per the requirement of buyers.	NIL	Non-working mine.
7d	Any beneficiation process at mines	NIL	NIL	NIL

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-----	-----	<p>Mining operation was temporarily discontinued since June 2013 due to low demand for ore in the market. Presently draft RMP submitted with utilization +10 % Cr2O3 grade Chromite ore with blending and pick-up market demand.</p>
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed generation/stocking/utilization of 4200 M3 of top-soil.	NIL	Non-working mine.
8b	Concurrent use or storage of topsoil	Storage and utilization for afforestation.	NIL	Non-working mine.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NIL	NIL	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	NIL	Pits and dumps were not matured for reclamation and rehabilitation at this stage.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation of 1000 nos of saplings proposed for year 2018-19.	NIL	Non-forest land. Cumulative of 50,000 nos of saplings planted so far.
8g	Survival rate	NA	NA	Non-working mine.

8h	Water sprinkling on roads to control airborne dust	Proposed	Not carried out as non-working mine at present.	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-----	-----	Aesthetic beauty in and around mine area is good as lessee carried out plantation and presently mine is non-working since long.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Received upto March-2019 and AR 2018-19.	Submission of AR and MRs are regular.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Geologist I/c : Shri R. Chandrashekar (part-time only) Mine Manager I/c: Shri M. Halappa, Mine-mate	Actual also same on date of inspection.	Non-working mine.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pits: 0 Dumps: 0 Green-belt: 0	Pits: 15.50 Ha Dumps:16.20 Ha Green-belt: 9.6 Ha	V/L issued on 6/5/19.
9d	Scrutiny of Annual return on afforestation	NIL	NIL	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	Non-working mine.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock: 10 tonnes	Actual also same.	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	NIL as non-working mine	Actual also same.	NIL

9h	Scrutiny of Annual return on fixed assets	NIL	NIL as non-working mine and no infrastructure at present.	NIL
9k	Scrutiny of Annual return on mining machineries	NIL	NIL	Non-working mine.

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 45(7)(a)	06/05/2019	01/07/2019			

Date :**(PRASHANT S HEGDE)**

Indian Bureau of Mines