

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/CTD/FE/6/BNG

Mine code : 30KAR07001

- (i) Name of the Inspecting : 257) Prashant S Hegde
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Shri Manjunath J, Mines Manager and other mine offici
Official with
Designation
- (iv) Date of Inspection : 16/12/2019
- (v) Prev.inspection date : 11/06/2014

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : B.B.H. M.L.1074
- (b) **Registration NO.** : IBM/4247/2011
- (c) **Category** : A Other than Fully Mech.
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : KARNATAKA
- District : CHITRADURGA
- Village : B. B. HALLI
- Taluka : CHITRADURGA
- Post office : BHEEMASAMUDRA
- Pin Code : 577520
- FAX No. : 080-42459737 (F), 96112176
- E-mail : bbh@mel.co.in, minent@me
- Phone : 080-42459797 (O),081942070
- (f) **Police Station** : Bheemasamudra
- (g) **First opening date** : 01/04/1972
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : M/s Mineral Enterprises Ltd
No.49, 3rd Floor, Khanija Bhavan
West Wing, Race Course Road,BANGALORE-560001
3. (a) **Lease Number** : KAR0283
- (b) **Lease area** : 103.81
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 06/10/2012
4. **Mineral worked** : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : MINERAL ENTERPRISES (P)LTD
 # 300, 1/B, 16TH CROSS,
 SADASHIVNAGAR, BANGALORE
 KARNATAKA
 Phone:080-3612569, 3613182
 FAX :080-3612737

Owner : Ashwin Paul, Director, M/s MEL
 No.49, 3rd Floor, Khanija
 Bhavan Race Course Road,
 Bangalore BANGALORE
 KARNATAKA
 Phone: 08042459797
 FAX : 08042459737

Agent : N.B.SANJAY
 M/s MEL No.49, 3rd Floor,
 Khanija Bhavan Race Course
 Road, Bangalore BANGALORE
 KARNATAKA
 Phone: 9880788817
 FAX :

Mining Engineer

Name : Manjunath J, Full Time
 Qualification : BE (Mining)
 Appointment/ : 19/01/2017
 Termination date

Geologist

Name : Mohan M.B., Full Time
 Qualification : Msc (Geology)
 Appointment/ : 23/05/2011
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	20/11/1992
Plan/Scheme of Mining		Renewal under rule 22 MCR1960	09/08/1999
		Modif.of approved Mining Plan	08/04/2003
		Mining Scheme rule 12 MCDR1988	08/03/2004
		Modif.approved Mining Scheme	20/10/2008
		Mining Scheme rule 12 MCDR1988	17/06/2009
		Modif.approved Mining Scheme	07/09/2012
		Renewal under rule 24 MCR1960	26/12/2012
		Modif.of approved Mining Plan	10/03/2016
		MP modif under 17(3) MCR 2016	03/11/2016
		MP modif under 17(3) MCR 2016	06/12/2017
		MP modif under 17(3) MCR 2016	03/07/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	No exploration proposals in last approved modified RMP dated 2/7/2018. As reported in GR dated 24/4/19, 3 nos of core boreholes (in-house) drilled in block no-4.
1b	Exploration over lease area for geological axis 1 or 2	NIL	NIL	G1:56.69 Ha and G-2: 14.74 Ha already covered under exploration.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NIL	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	Entire potentially mineralised area already covered under exploration.
1e	Balance reserve as on 01/04/20	-----	54.90 Million tonnes as on 1/4/2019 (+45 % Fe)	Based on last approved modified RMP dated 2/7/18.
1f	General remarks of inspecting officers on geology, exploration etc	-----	-----	It is 2020 case mine and this mine was already e-auctioned on 24/7/19. MP of auctioned block was also already approved on 31/10/19 and 19 nos additional BHs was also proposed.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	Block-1 of ML :Pit no.1-- Cross section E-E' to U-U' between 949m to 868m RL Pit No: 3-- Cross section S-S' to U-U', between 868 and 862 m RL (Pit no.3)	As per the proposals.	NIL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No top soil generation. Separate benches for OB and mineral.	As per the proposals.	Total of 23 nos of benches were developed. All the benches from top RL to bottom RL contains ore
2c	Stripping ratio or ore to OB ratio	1:0.46	1:0.33	NIL
2d	Quantity of topsoil generation in m3	NIL	NIL	NIL
2e	Quantity of overburden generation in m3	269,506	194,159	BD: 1.7. V/L issued for deviation.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-----	-----	Development is being carried out as per approved modified RMP. V/L issued for deviation in quantity of development. Block No-1 of Mine was already e-auctioned on 24/7/19 as 2020 case mine. Corner BPs were well maintained at the time of inspection.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 Pits. (Pit no.1 & Pit no.3)	Carried out as per proposals.	NIL

3b	Quantity of ROM mineral production proposed	1 million tonnes	999,315 tonnes	NIL
3c	Recovery of sailable/usable mineral from ROM production	100 %	As per the proposals.	Generated 20% of Sub grade/mineral reject (45 to 52 % Fe) during the period is blended along with the ore & sold
3d	Quantity of mineral reject generation	NIL	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NIL	+45 % Fe ore is being utilised.
3f	Quantity of sub grade mineral generation.	NIL	NIL	Generated 20% of Sub grade/mineral reject (+45 % to 52 Fe) during the period is blended along with the ore and sold.
3g	Grade of sub grade mineral generation	NA	NA	+45 % Fe ore is being utilised.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Carried out as per 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	No drilling & blasting proposed	No drilling & blasting carried out	Due to soft & friable nature of ore drilling blasting is not required, instead they were using Ripper dozer and Hydraulic rock breaker
3k	Provision of mining machineries in mineral benches	Yes. Mechanized method of mining proposed	Mechanized method adopted for mining with the help of HEMM	NIL

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Ht-6 Mtr Bench Width-7 Mtr	Carried out as per proposals.	NIL
3m	Total area covered under excavation/pits	45.82 Ha	45.82 Ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1:0.46	1:0.33	NIL
3o	Total area put in use under different heads at the end of year	1)Current workings - 45.82 Ha. 2) Waste disposal- 10.74 Ha. 3) Plants, Buildings & Roads- 2.65 Ha.	As per the proposals.	NIL
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 379966 2015-16: 379985 2016-17: 379985 2017-18: 570000 2018-19 : 1000000 (Unit: tonnes)	2014-15: NIL 2015-16: NIL 2016-17: 94985 2017-18: 568974 2018-19: 999315 Unit: in tonnes	Annual production of 999, 573 tonnes for current year (2019-20) was already achieved on Oct-2019.
3q	General remarks of inspecting officers on method of mining etc.	-----	-----	Mining is being carried out as per approved modified RMP. Block No-1 of Mine (93.60 Ha) was already e-auctioned on 24/7/19 as 2020 case mine. Subsequently, MP of auction block was also already approved on 31/10/19 .

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of Over burden or waste. No top soil generation.	As per the proposals.	NIL
4b	Location of topsoil, OB and mineral reject dumps	North eastern corner of block-1; (E- 632508 N- 1571751 to E- 632389 N- 1571773: E- 632248 N- 1571485 to E- 632399 N-1571443	As per the approved proposals.	NIL
4c	Number of dumps within lease area and outside of lease area	One within ML	One within ML	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL	NIL
4e	Number of active and alive dumps.	One	One	NIL
4f	Number of dead dumps.	NIL	NIL	Part of the active dump is Inactive
4g	Number of dumps established.	NIL	NIL	Partly dump was already stabilized.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes,	Yes	Already retaining wall of 1210 mtr & garland drains- 1381 mtr have been constructed during the year 2012-13.
4i	Length of Retaining wall or garland drain all along dumps	NIL	NIL	Already retaining wall of 1210 mtr & garland drains- 1381 mtr have been constructed so far. There is no proposal for the year 2018-19.
4j	Number of settling ponds	NIL	NIL	6 no's of settling ponds are completed as per R&R recommendation by ICFRE in the year 2012-13.

4k	Specific comments of inspecting officer on waste dump management	-----	-----	Dump management is being carried out as per the approved modified RMP.
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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.	NIL	NIL	Pit is not matured for back-filling as ore not exhausted so far.
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 as ore not exhausted so far.

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 the year	Submitted.	NIL
6b	Area available for rehabilitation (ha) .	NIL	NIL	NIL
6c	afforestation done (ha).	0.9	2.78 Ha	Gap plantation on dumps.

6d	No. of saplings planted during the year	2000 nos	4341 nos	Gap plantation on dumps.
6e	Cumulative no .of plants	NA	41,769 nos	Afforestation on dumps. Currently all the ore benches are not exhausted.
6f	Any other method of rehabilitation	NIL	NIL	NIL
6g	Cost incurred on watch and care during the year	1.73 lakhs	2.56 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 so far.
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
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	1000 nos	1850 nos	Green-belt
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.5 Ha	1.9 Ha	NIL

6p	Compliance of environmental monitoring (core zone and buffer zone)	Season-wise environmental monitoring proposed.	Season-wise environmental monitoring was carried out and all parameter were 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 the approved proposals. The lessee has re-submitted FMCP on 19/12/2019 and was under process as 2020 case mine

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting within the ML.	Grade-wise sorting within the ML.	NIL
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	200 TPH screening plant is used for screening
7c	Different grade of mineral sorted out at mines.	screening plantfor separataion lumps & fines of Lumps 55%-58% Fe Lumps below 55% Fe Fines below 55% Fe	Carried out as per the proposals.	NIL
7d	Any beneficiation process at mines .	NIL except; dry screening plant is used to separate lumps & fines.	NIL except; dry screening plant is used to separate lumps & fines.	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-----	-----	No Mineral conservation issue as +45 % Fe ore is being utilised by blending.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal of removal & utilization of topsoil	NIL	NIL
8b	Concurrent use or storage of topsoil	NIL	NIL	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Waste dumping proposed to be carried out in demarked area (NE corner part of Block-I of ML).	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	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	NIL	Pit is not matured for back-filling as ore not exhausted so far.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	6,125 nos of sapling during year 2018-19 within ML	Plantation of 10,000 nos of sapling were carried out during year 2018-19	Cum. of 480,612 number of saplings reported to be planted so far.
8g	Survival rate	70 %	80 %	NIL
8h	Water sprinkling on roads to control airborne dust	Proposed	20 KLD tanker is used/provided for water sprinkling on roads to control airborne dust	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-----	-----	Aesthetic beauty in and around mine was good as the lessee implementing modified RMP proposals.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	-----	Submission of ARs and MRs are regular.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	ME & MM: Shri MANJUNATH J Geologist: Shri MOHAN M B	Actual also same.	NIL.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings: 45.82 Ha Used for waste disposal: 10.74 Ha Plant, Infra. & Road :2.65 Ha	Actual also same.	NIL
9d	Scrutiny of Annual return on afforestation	10,000 nos saplings within ML.	Actual also same.	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	ROM stock: 447 tonnes Lumps(Below 55%): 7441 tonnes Lumps(55% to below 58%): 80952 tonnes Fines: (Below 55%): 533802 tonnes	Actual also same at that time.	NIL

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production per tonne: Rs 671 Ex mine price: Lumps(Below 55%): Rs 1453.61 Lumps(55% to below 58%): Rs 2260.85 Fines: (Below 55%): Rs 670.83 ~ 678	Actual also matching.	NIL
9h	Scrutiny of Annual return on fixed assets	Rs 1,81,31,565	Actual also appear to be same.	NIL
9k	Scrutiny of Annual return on mining machineries	BACK HOE (0.500 CUM) : 2 nos BACK HOE (0.900 CUM): 4 nos TIPPER (4.500 CUM) : 2 nos LOAD HAUL DUMPER (15.000 CUM): 17 nos WATER TANKER: 2 nos DOZER (443.000 HP) : 1 nos WHEEL LOADER (1.700 CUM): 3 NOS	Actual also same.	NIL

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)	02/01/2020			

Date :

(Prashant S Hegde)

Indian Bureau of Mines