

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/CTD/MN/113/BNG

Mine code : 40KAR07009

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sri.Sharnabasappa- Mining Engineer & Sri.Rajesh Satis
Official with
Designation
- (iv) Date of Inspection : 03/10/2019
- (v) Prev.inspection date : 17/06/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **HULLIKATTE 1991**
- (b) **Registration NO.** : **IBM/6384/2011**
- (c) **Category** : **A Other than Fully Mech.**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **DAWANGERE**
- Village : **HULLIKATTE**
- Taluka : **DEVANGERE**
- Post office : **HULLIKATTE**
- Pin Code :
- FAX No. : **---**
- E-mail : **bpco.co@gmail.com**
- Phone : **08192-220059 (O), 98809330!**
- (f) **Police Station** : **ANAJI**
- (g) **First opening date** : **07/05/1987**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **703/179, "SHANKARAKRUPA"4 TH MAIN,
5 TH CROSS,ANJANEYA LAYOUT,
DAWANGERE, KARNATAKA.**
3. (a) **Lease Number** : **KAR0370**
- (b) **Lease area** : **32.23**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **29/09/2025**
4. **Mineral worked** : **QUARTZITE** Associated
MANGANESE ORE Main

5. Name and Address of the

Lessee : BHARATH PARIKH & CO
 703/117,4 TH MAIN, 5 TH
 CROSS, ANJANEYA LAYOUT,
 DAWANGERE KARNATAKA
 Phone:08192-20059
 FAX :

Owner : BHARATH PARIKH & CO
 MEGHDOOT, 27TH B BLOCK,
 95,B MARINE DRIVE. GREATER
 BOMBAY MAHARASHTRA
 Phone:
 FAX :

Agent : H.R.NAGARAJA
 CHITRADURGA KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : P.D. Vasanth Kumar Rai,Full Time
 Qualification : Diploma in mining, 2nd class mines manag
 Appointment/ : 01/01/2013
 Termination date

Manager

Name : P.D.VASANTH KUMAR RAI
 Qualification : Diploma with I FCC
 Appointment/ : 01/01/2013
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	28/06/1990
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	07/08/1996
		Mining Scheme rule 12 MCDR1988	29/06/2001
		Renewal under rule 24 MCR1960	31/01/2005
		Mining Scheme rule 12 MCDR1988	07/05/2015
		MP modif under 17(3) MCR 2016	01/08/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil	No backlogs
1b	Exploration over lease area for geological axis 1 or 2	Not specified	G1-12.13Ha & G2-20.10 Ha Total Mineralized area- 9.50 Ha	Total 29 core bore holes were drilled with total Meterage of 1597 meters at a grind interval of 25X100m & 100m X100m in the previous years
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	Nil	Drilling carried out by the lessee. Expenditure incurred in drilling: 2010-15-Rs.2446302/-& 2017-18-Rs. 521000/-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not specified	Nil	9.50 Ha is mineralized & rest of the area is non mineralized.
1e	Balance reserve as on 01/04/20	Nil	660227 tonnes	As per AR submitted for FY:2018-19
1f	General remarks of inspecting officers on geology, exploration etc			No proposals of exploration.12 core bore holes were drilled amounting to 200 Mts in the FY2016-17.Entire mining lease area is covered under G1 & G2 level of exploration.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed location of development :N308-N629 and E718-E943	Actual location of development: N-375 to N621,E-718 to E-871	Advancement of the benches towards north -western to north eastern direction ,in between section line C-C', G-G',H-H' & I-I'.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No Separate benches in overburden and mineral proposed	All the benches contain overburden and ore	No top soil is generated as workings are within the broken up area
2c	Stripping ratio or ore to OB ratio	1:3.55	1:4.98	Bulk Density: Mn ore-2.5 t/cuM& OB-2t/cuM
2d	Quantity of topsoil generation in m3	No Proposal	Nil	No top soil generated
2e	Quantity of overburden generation in m3	142270 tonnes	38591 Tonnes	Less Mn ore extracted
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Advancement of the benches towards north -western to north eastern direction in between section line C-C', G-G',H-H' & I-I'.Less extraction of Mn ore & thus less handling of OB done as compared to the proposals

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit proposed	Actual working in one pit only(P1)	Appx. dimension of the pit: (650m*265m*64m) (L*W*D)
3b	Quantity of ROM mineral production proposed	40,000 Tonnes	7,734 Tonnes	Mine frequently stopped due to villagers issue
3c	Recovery of sailable/usable mineral from ROM production	50% recovery proposed	50% recovery achieved	Entire ore is initially dry screened
3d	Quantity of mineral reject generation	No proposal	Nil	No mineral reject generated
3e	Grade of mineral rejects generation and threshold value declared.	+10 to <28 Mn%	+10% Mn	Nil

3f	Quantity of sub grade mineral generation.	No proposal	Not applicable	No proposal of sub grade mineral
3g	Grade of sub grade mineral generation	No proposal	Not applicable	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	ROM proposed to be passed thru vibratory screen & manual sorting & sizing	Excavated ROM is passed thru the screen & manually sizing & sorting done	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No such beneficiation study carried out	Only dry screening & manual sorting adopted
3j	Provision of drilling and blasting in mineral benches	Provision is made for Drilling & blasting in hard zone	No drilling & blasting carried out.	Worked in soft strata. Rock breaker used as & when required
3k	Provision of mining machineries in mineral benches	Provision of mining machineries is made Excavator-02 Nos, Rock Breaker-01 No., Tippers-05 Nos., WL & Drill-01 No.	Excavators-02no's Tippers-07 no's, Screening unit -1 No.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height- 09Mtrs & Bench Width-09 Mtrs proposed	Bench Height of 5-6 Mts & Width of 8-10 Mts maintained	Nil
3m	Total area covered under excavation/pits	9.5 Ha in the plan period	9.32 Ha covered under excavation	No change
3n	Ore to OB ratio for the pit/mine during the year.	1:3.55	1:4.98	Bulk Density: Mn ore-2.5 t/cuM & OB-2t/cuM

3o	Total area put in use under different heads at the end of year	Area under mining-9.5 Ha, waste dump site-11.4 Ha, infrastructure (work shop, administrative building etc.)-0.1 Ha, Roads-1.4 Ha, Mineral separation plant-1.0Ha, Green belt-2.5 Ha, Untouched area-4.8 Ha in the plan period	Opencast (O/C) mining-10.760Ha, Covered under current o/c workings-9.320Ha, used for waste disposal-7.500Ha, occupied by plant, buildings, residential, welfare buildings & roads-4.2Ha, Reclaimed/Rehabilitated-0.2 Ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 40062 2015-16: 40000 2016-17: 40000 2017-18: 40000 2018-19: 40000 (in tonnes)	2014-15: 15112 2015-16: 250 2016-17: 22260 2017-18: 33,898 2018-19: 7734 (in tonnes)	Actual production is within the proposed limits
3q	General remarks of inspecting officers on method of mining etc.			Mining was carried out as per the proposal in one pit. No blasting was carried out in the mine. Only dry screening with manual sizing & sorting adopted.

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 for overburden proposed	Separate dumping carried out for over burden in the earmarked area	No top soil & mineral reject generated
4b	Location of topsoil, OB and mineral reject dumps	Location of OB proposed: N 121 to N 866, E 582 to E 818	OB Location: 128 to N 851, E 593 to E 786. Mineral reject (previous years) dump: N500-N580 & E300-E380	Terracing was proposed in the active dump which was not done. Violation issued.
4c	Number of dumps within lease area and outside of lease area	Within mining lease- 02 Nos.of dumps, Outside mining lease- Nil	Only 2 dumps present with in the Lease	There is no dump outside the lease area

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	The dump is proposed outside the UPL	Dump is located outside the UPL	Active dumping is carried out towards SW of the working pit.
4e	Number of active and alive dumps.	01 active dump proposed	01 active & alive dump maintained	Nil
4f	Number of dead dumps.	01	01 dead dump	Towards Eastern side of the mine pit (near BP-C)
4g	Number of dumps established.	01	01	Partially stabilized by plantation
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall or garland drain all along dumps proposed	RW & GD available all along the dump	Nil
4i	Length of Retaining wall or garland drain all along dumps	Retaining Wall & Garland drain of 600 Mts proposed in active dump No.1	Constructed RW & GD of 600 Mts as per proposal	Nil
4j	Number of settling ponds	No Proposal	Nil	2 Nos. of settling tanks are constructed in the previous years and are maintained
4k	Specific comments of inspecting officer on waste dump management			Terracing was proposed in the active dump which was not done. Violation of 11(1) was issued to the lessee

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	Mineral is not exhausted
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.			This chapter is not applicable because mineral is not found to be exhausted in the working pits & hence backfilling is not necessary as of now.

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).	To be submitted by 1st July every year	Annual report on PMCP not submitted	Violation issued.
6b	Area available for rehabilitation (ha) .	No Proposal	Nil	Nil
6c	afforestation done (ha).	0.83 Ha	0.98 Ha covered under afforestation	Nil
6d	No. of saplings planted during the year	1000 Saplings proposed	1275 No of saplings planted	Along the 7.5mts buffer zone of boundary point AtoB and Ato C and near stack yard and office
6e	Cumulative no .of plants	42350 Nos on dumps & 2200 No of saplings in buffer zone & avenue plantation	Approx.45000 along inactive dump, green belt area,safety barrier & mine office	Nil
6f	Any other method of rehabilitation	No proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	No proposal	Nil	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	1000 saplings proposed	1275 saplings planted	In buffer zone, haulage roads, office area.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.83 Ha	0.98 Ha	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 in core zone & buffer zone proposed	Environmental monitoring is carried out on quarterly basis for air, water & noise	All the environmental parameters were within the permissible limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Plantation was done in the safety barrier, near boundary & stack yard area. Violation was issued for non submission of annual report on PMCP

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting of ROM by dry screening of ore proposed within the ML area	Grade wise sorting & dispatch done within the lease area	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	ROM proposed to be passed thru vibratory screen & manual sorting & sizing	Excavated ROM is passed thru the screen & manually sizing & sorting done	Nil
7c	Different grade of mineral sorted out at mines.	-6mm Fines (Mineral Reject), -10mm to +6mm (Fines), -40mm to +10mm (C-ore)	Below 25%Mn & 25 to 35%Mn	Nil
7d	Any beneficiation process at mines	No Proposal	No beneficiation carried out	Dry crushing & screening
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No deviation w.r.t mineral conservation was observed during the course of MCDR inspection

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	Nil	No top soil generated during the year since workings are being carried out in broken up area
8b	Concurrent use or storage of topsoil	No Proposal	Nil	No top soil generated during the year
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for overburden proposed	Separate dump for overburden maintained	Apart from overburden dump, there is a mineral reject dump located at N500-N580 & E300-E380 stacked in the previous years
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB & waste will be used during FMCP for backfilling	Not applicable	Mineral is not found exhausted in the working pit.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Will be complied during FMCP	Not applicable	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Tree species found with ML area are Eucalyptus,prospits,Juleflora,Acasia,Azhader Chana indica etc	0.98 Ha area is covered under green belt.	Nil
8g	Survival rate	Not specified	85% survival rate	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads proposed to control airborne dust	Water sprinkling on roads is done regularly to control airborne dust	Water tanker of 8000 liter capacity is being used for water sprinkling on roads to to prevent generation of borne dust

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Entire ML is non forest, patta land with thin to moderate vegetation. Most of the ML area is found to be degraded by mining & allied activities .Mining operation is carried out above ground level. Aesthetic environment outside the ML area is not found to be affected by the mining operation. Healthy population of natural vegetation can be seen outside the ML area.
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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-2018 A.R. Submitted for FY 2018-19	Annual return submitted on 02/05/2019	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager & Mining Engineer : Sharana Basava Geologist: Rajesh Satish Kore	Same mine officials were present during the inspection	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited & abandoned by opencast (O/C) mining- 10.760Ha, Covered under current o/c workings- 9.320Ha, used for waste disposal- 7.500Ha, occupied by plant, buildings, residential, welfare buildings & roads-4.2Ha, Reclaimed/Rehabilitated- 0.200	Appears to be correct
9d	Scrutiny of Annual return on afforestation	WML:1275@ 70% survival	Appears to be correct
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	21665Tons	Mineral reject stacked in the previous year. No mineral reject generation in Fy 2018-19
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: opening stock- 10250Tons, production- 7734 Tons, closing stock- 650 Tons	Appears to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value: 6557.38 Rs/ton, Ex mine price: 6557.38 Rs/ton, cost of production: 255 8.00Rs/ton	Appears to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 910053 including industrial & Residential	Appears to be correct
9k	Scrutiny of Annual return on mining machineries	Excavators- 02no's Tippers-07 no's	Appears to be correct

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed				Show cause position			
Rule NO.		Issued on	Compliance on	Rule NO.		Issued on	Compliance on
MCDR17	Rule 11(1)	29/10/2019	23/12/2019				
MCDR17	Rule 11(4)	29/10/2019	23/12/2019				
MCDR17	Rule 35(2)	29/10/2019	23/12/2019				
MCDR17	Rule 26(2)	29/10/2019	23/12/2019				

Date :

(ARUN KUMAR)

Indian Bureau of Mines