

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

Inspection under SDF for star rating of mines REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/433/BNG

Mine code : 30KAR03154

- (i) Name of the Inspecting : 130) PRASHANT S HEGDE
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : S/Shri K.V. Sreedhar & M.S. Devarajsetty, Mines Manag
Official with
Designation
- (iv) Date of Inspection : 01/08/2018
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : S.M.BLOCK
- (b) **Registration NO.** : IBM/211/2011
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : KARNATAKA
- District : BELLARY
- Village : NARAYANPURA
- Taluka : SANDUR
- Post office : NARAYANPURA
- Pin Code : 583119
- FAX No. : 08392-260269 (F),
- E-mail : mhraomines@gmail.com
- Phone : 08392 - 260170, 260626, 93
- (f) **Police Station** : SANDUR
- (g) **First opening date** : 15/05/2006
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : MR.ARUN CHIRANIA, NOM. OWNER,M/s M.Hanumantha Ra
H.NO 37, W.NO -17, PATEL NAGAR,Near Park
BELLARY - 583101.
3. (a) **Lease Number** : KAR1503
- (b) **Lease area** : 40.47
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 11/12/2025
4. **Mineral worked** : IRON ORE Main

5. Name and Address of the

Lessee : M. HANUMANTHA RAO
 H.No-37, W.No-17,Ground
 Floor Main Road, Near Park,
 Patel Nagar, Ballari
 BELLARY KARNATAKA
 Phone:08392-260170
 FAX :08392-260269

Owner : Arun Kumar Chirania, Partner M/s M.Hanumantha Rao
 H.No-37, W.No-17, Ground
 Floor Main Road, Near Park
 Patel Nagar, Ballari
 BELLARY KARNATAKA
 Phone: 08392-260170, 2
 FAX : 08392-260269

Mining Engineer

Name : M V Mahesh, Full Time
 Qualification : B. Tech. in Mining
 Appointment/ : 30/10/2017
 Termination date

Geologist

Name : C. Nagabhushana, Full Time
 Qualification : M.Sc. Geology
 Appointment/ : 02/11/2017
 Termination date

Manager

Name : K.V.Sreedhar
 Qualification : Dip. in Mining
 Appointment/ : 03/08/2006
 Termination date

Manager

Name : M.S.Devarajasetty
 Qualification : Dip. in Mining
 Appointment/ : 25/01/2007
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Modif.of approved Mining Plan	31/08/2006
		Modif.of approved Mining Plan	10/01/2008
		Mining Scheme rule 12 MCDR1988	05/03/2013
		Modif.approved Mining Scheme	18/06/2014
		Mining Scheme rule 12 MCDR1988	03/03/2016
		MS modif under MCR 1960	07/09/2016
		MP modif under 17(3) MCR 2016	16/02/2018
		Modif.approved Mining Scheme	21/03/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	NIL	G-1: 7.32 Ha and G-2: 0.66 Ha so far.	NIL
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 during year 2017-18. 32 Ha area to be covered during remaining MP period.	NIL	22 nos of Core BHs with 1100 total meterage proposed during year 2018-19 to 19-20 as per approved modified MP dated 21/3/2018.
1e	Balance reserve as on 01/04/20	-----	3. 88 million tonnes of reserves (+45 % Fe)	Based on approved Modified MP dated 21/3/2018.
1f	General remarks of inspecting officers on geology, exploration etc	-----	-----	Lessee had drilled 23 nos of BHs (6 Core+17 DTH) with 2023 total meterage so far. As per approved modified MP dated 21/3/2018, the balance area of 32 Ha area to be covered under proposed exploration of 22 nos of Core BHs during year 2018-19 to 19-20. Lessee had reported to be applied for tree cutting permission from Forest Dept. for execution of proposed exploration.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
--------	------	-----------	-------------	---------

2a	Location of development w.r.t. lease area	Western pit (DD' to EE' section; 95 % of development) Eastern pit (CC' section)	As per the proposals	Two pits. 1)Western Pit: 400m X 180 mX 82 m 2)Eastern Pit: 255 m X 80 m X 64m
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposals of separate benches in O/B and minerals	As per the proposals.	NIL
2c	Stripping ratio or ore to OB ratio	1: 1.11	1: 1.5	Based on tonnage data.
2d	Quantity of topsoil generation in m3	NIL	NIL	NIL
2e	Quantity of overburden generation in m3	55,455	74,993	BD: 2 considered. Deviation in development was due to regularisation of benches and accordingly modified MP also was approved on 16/2/18.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-----	-----	Modified MP was approved on 16/2/20018 for deviation in site of working & dumping. Subsequently, MP modified and approved on 21/3/18 for production enhancement of 0.1 to 0.144 MTPA.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two	As per the proposals in approved modified MPs.	Nil
3b	Quantity of ROM mineral production proposed	1,00,000 tonnes	99,990 tonnes	NIL

3c	Recovery of sailable/usable mineral from ROM production	100 %	100 %	NIL
3d	Quantity of mineral reject generation	NIL	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	NA	+45 % Fe ore are being utilized.	NIL
3f	Quantity of sub grade mineral generation.	NIL	NIL; +45 % Fe ore are being utilised.	NIL
3g	Grade of sub grade mineral generation	NA	NA	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	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	Drilling and blasting proposed in mineral benches.	Carried out as per the proposals.	NIL
3k	Provision of mining machineries in mineral benches	Excavators and tipper/dumpers combinations.	Excavators and tipper/dumpers combinations.	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8 to 10 m	8 to 10 m	Regularization width of benches was under progress as per the approved modified MP dated 20/02/2018 and 21/3/2018.
3m	Total area covered under excavation/pits	8.24 Ha	8.24 Ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1:1.11	1:1.5	Based on tonnage data.

3o	Total area put in use under different heads at the end of year	Mining: 8.24 Ha Dumps: 8.21 Ha Road: 1 Ha	Mining: 8.24 Ha Dumps: 8.21 Ha Road: 1 Ha	NIL
3p	Production of ROM mineral during the last five year period as applicable	2013-14: 1,00,000 tonnes 2014-15: 1,00,000 tonnes 2015-16: 1,00,000 tonnes 2016-17: 1,00,000 tonnes 2017-18: 1,00,000 tonnes	2013-14: 99,940 tonnes 2014-15: 99,900 tonnes 2015-16: 1,00,000 tonnes 2016-17: 99,990 tonnes 2017-18: 99,990 tonnes	NIL
3q	General remarks of inspecting officers on method of mining etc.	-----	-----	Mining operation is being carried out as per approved Modified MPs.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Surface dumping of OB waste proposed	Carried out as per the proposals.	No top soil generation.
4b	Location of topsoil, OB and mineral reject dumps	Northern side of lease area (Dump No-3)	Dumping carried out as per the proposals.	NIL
4c	Number of dumps within lease area and outside of lease area	Within ML: Three	Within ML: Three	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumping proposed due constraints of space.	Dumping as per the proposals.	Temporary back-filling started in western block from March-2018 onwards as per approved Modified MP dated 16/02/2018.
4e	Number of active and alive dumps.	One	One	NIL
4f	Number of dead dumps.	Two	Two	NIL

4g	Number of dumps established.	Two	Dumps stabilization are being carried out as per the proposals	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed along dumps	Carried out as per the proposals.	NIL
4i	Length of Retaining wall or garland drain all along dumps	Retaining Wall: NIL Garland Drain: 890 m	Retaining Wall: NIL Garland drain: 420 m + remaining completed as on date of inspection	Cum. of 978 m retaining wall and cum. of 1369 m garland drain constructed so far.
4j	Number of settling ponds	NIL	NIL	NIL
4k	Specific comments of inspecting officer on waste dump management	-----	-----	Waste dumps management are being carried out as per the modified MPs and approved R & R plan.

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 fully 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	No top soil generation.
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	NIL

5e	General remarks of inspecting officers on backfilling and reclamation etc.	-----	As per the approved modified MP date 16/02/2018, temporarily backfilling of the worked out pit started (March-2018 onwards) in western block to overcome space constraints during year 2018-19 and 2019-20, during which period the exploration work shall be completed in the second block of ML area of 23.07 Ha.
----	--	-------	---

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	Submitted.	NIL
6b	Area available for rehabilitation (ha) .	0.4 Ha	0.4 Ha	Under dump management.
6c	afforestation done (ha).	0.4 Ha	0.4 Ha	NIL
6d	No. of saplings planted during the year	640 nos of saplings	200 nos of saplings.	Under dumps management.V/L letter issued on 24/08/2018 regarding deviation in afforestation
6e	Cumulative no .of plants	68,800 nos	68,360 nos	NIL
6f	Any other method of rehabilitation	NIL	NIL	NIL
6g	Cost incurred on watch and care during the year	NA	Rs 31,250=00	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 completed 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	480 nos of saplings	425 nos of saplings	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.3 Ha	0.3 Ha	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation	Afforestation	NIL

6p	Compliance of environmental monitoring (core zone and buffer zone)	Season-wise environmental monitoring of air, water, noise, soil etc proposed.	Season-wise environmental monitoring was carried out and parameters are within the limit.	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	----- --	----- --	Lessee is implementing PMCP proposals as per approval except afforestation during year 2017-18. V/L issued on 24/08/2018 regarding deviation in afforestation.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting within lease area proposed.	Grade-wise sorting carried out within lease area.	NIL
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical using mobile crushers and screening plant.	Mechanical sorting done using mobile crushers & screening plant (200 TPH capacity) and screening plant (capacity 150 TPH).	NIL
7c	Different grade of mineral sorted out at mines.	Different grade of Lumps and fines.	Lumps and fines of 60 to 62 % Fe grade.	NIL
7d	Any beneficiation process at mines	NIL except dry crushing and screening.	NIL except dry crushing and screening.	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	----- --	----- --	Mineral conservation is being carried out as per approved proposals.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

8a	Separate removal and utilization of topsoil (Rule 32)	NIL	NIL	No top-soil generation.
8b	Concurrent use or storage of topsoil	NIL	NIL	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of waste in northrn side of ML (Dump No-3)	Carried out 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	Pit not matured for back-filling. However, temp. back-filling in western block started from March-2018 onwards as per approved modified MP due to space constrains.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	4.77 Ha of dumps area afforested so far.	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Entire ML falls under forest. 1120 nos of sapings proposed within ML during year 2017-18.	625 nos of within ML and 1200 nos of saplings OML were planted.	Cum. of 68,360 nos of saplings were planted so far in the mining area.
8g	Survival rate	NA	50 %	NIL
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on road proposed.	Water sprinkling on road is being carried out.	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-----	-----	Aesthetic beauty in and around mining area is good as the lessee had implementing proposals of modified MP and approved R & R Plan.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR upto June 2018 and AR-2017-18 received.	MRs and AR submission were regular.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri K.V. Sreedhar, Mines Manager, Shri M.V. Mahesh, ME Shri C. Nagabushana, Geologist	Actual as same.	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 8.24 Ha Dumps: 8.21 Ha Infrastructure & Road: 1.34 ha	Actual as same.	NIL
9d	Scrutiny of Annual return on afforestation	WML: 625 nos OWL: 1200 nos	Actual also same.	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	Actual also same.	+45 % Fe ore being utilised.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	No ROM stock	Actual also same.	Graded/sorted ore dispatches through e-auction only.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price per tonne: Lumps (60-62 % Fe): Rs 2391=00 Fines (60-62% Fe): Rs 2342=00 Cost of production per tonne Rs 899=70	Appear to be correct.	NIL
9h	Scrutiny of Annual return on fixed assets	Rs 1,64,50,075	Appear to be correct.	NIL

9k	Scrutiny of Annual return on mining machineries	Back Hoe (2.5 cum): 1 nos. Back Hoe (0.9 cum): 1 nos Back Hoe(1.3 cum): 2 nos Wheel loader (2.5 cum): 3 nos Tipper (10 cum): 4 nos Water tankers: 2 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)	24/08/2018	30/11/2018	MCDR17	Rule 11(1)	24/08/2018	30/11/2018

Date :

(PRASHANT S HEGDE)

Indian Bureau of Mines