

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

MCDR inspection REPORT

Bangalore regional office

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

Mine code : 30KAR03154

- (i) Name of the Inspecting : **278**) **KRISHNENDU CHATTERJEE**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Shri. M.S.Devaraj Setty, Manager mines
Official with
Designation
- (iv) Date of Inspection : 12/01/2018
- (v) Prev.inspection date : 15/05/2015

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 - 260170,08392260269**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **15/05/2006**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **MR.ARUN CHIRANIA & MR MARUTHI, NOMINATED OWNER,**
H.NO 37, W.NO -19, PATEL NAGAR,
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
 BELLARY KARNATAKA
 Phone:
 FAX :

Owner : M. HANUMANTHA RAO
 BELLARY KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : VINOD JADHAV, Full Time
 Qualification : B.E MINING
 Appointment/ : 25/03/2008
 Termination date

Manager

Name : DEVARAJA SHETTY
 Qualification :
 Appointment/ : 25/01/2007
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	31/08/2006
Plan/Scheme of Mining		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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	10 nos. of DTH holes	17.40 Ha. of ML area for which FC is available has been explored by 6 core and 10 DTH holes
1b	Exploration over lease area for geological axis 1 or 2	G1 and G2	G1 & G3.	FC is not available for 23.07 Ha. of ML area. Said area is remained un-explored.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Shri.Basavaraju , 7.8 Lakh Rupees	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1	G1& G3	
1e	Balance reserve as on 01/04/20	No proposal	3.72 million tonnes of total reserve.	As on 01.04.2018
1f	General remarks of inspecting officers on geology, exploration etc			No deviation w.r.t. exploration activity is observed during the course of inspection, FC obtained by the lessee for 17.40 Ha. in which exploration has been carried out.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Western side of the ML area	No change.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches are proposed for OB and minerals	Found to be maintained	
2c	Stripping ratio or ore to OB ratio	1:0.77	1:1.8	More development was carried out during 2016-17 due to regularizing of benches

2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	38426	91250	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			No deviation w.r.t. development activity was observed during the course of inspection.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two pits in western side of the ML area.	No change.	Eastern pit diamention 250m(L) x 80m(W) x 60m(D) Western pit diamention 400m(L) x 180m(W) x 80m(D)
3b	Quantity of ROM mineral production proposed	100000 tonnes	99990 tonnes	
3c	Recovery of sailable/usable mineral from ROM production	100% recovery	Entire ROM is salable.	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	No mineral reject generation	
3f	Quantity of sub grade mineral generation.	No proposal	No sub grade generation	
3g	Grade of sub grade mineral generation	No proposal	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Fully Mechanized	Fully Mechanized	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	Yes	Drilling and blasting has been adopted for top laterite benches.	
3k	Provision of mining machineries in mineral benches	Yes	3 nos. of excavators and 10 nos. of trucks	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, Bench height proposed for 10m	Bench height maintained at 8 to 10m	
3m	Total area covered under excavation/pits	Proposed for 13.73 Ha. during end of F.Y. 2017-18.	9.2 Ha. under excavation	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.77	1:1.8	
3o	Total area put in use under different heads at the end of year	19.23Ha	19.33 Ha. under mining and allied activities.	
3p	Production of ROM mineral during the last five year period as applicable	2012-13: Nil 2013-14: 100000 2014-15: 100000 2015-16: 100000 2016-17: 100000 (in tonnes)	2012-13: Nil 2013-14: 99940 2014-15: 99900 2015-16: 100000 2016-17: 99990 (in tonnes)	
3q	General remarks of inspecting officers on method of mining etc.			No deviation w.r.t. mineral exploitation was observed during the course of inspection.

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)	seperate dumping proposed for OB and mineral	Found to be maintained.	
4b	Location of topsoil, OB and mineral reject dumps	North side of the lease area	No change in location for waste dump.	
4c	Number of dumps within lease area and outside of lease area	3 nos. within lease area	3 nos. within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed within the UPL	Dumps are located within the UPL.	
4e	Number of active and alive dumps.	1 active dump	1 active dump	
4f	Number of dead dumps.	2 inactive dumps	2 inactive dead dumps	
4g	Number of dumps established.	2 nos. of dead dumps	No cahnge.	
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Retaining was and garland drains were not constructed all along the dump periphery.	Violation of Rule 11(1) of MCDR,2017 was issued to the lessee dated 25.01.2018
4i	Length of Retaining wall or garland drain all along dumps	230 meters of retaining wall and 550meters of garland drains during F.Y. 2016-17.	80m of retaining wall and 270m of garland drain was constructed upto the date of inspection.	
4j	Number of settling ponds	Proposed as per approved R&R plan.	21 nos. of check dams were constructed within the ML area.	
4k	Specific comments of inspecting officer on waste dump management			Violation of Rule 11(1) of MCDR, 2017 was issued to the lessee vide letter no. KNT/BLR/FE/433/BNG dated 25.01.2018 for non construction of retaining wall and garland drain as per the approved proposal.

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.	No proposal during 2016-17.	Nil	
5b	Area under backfilling of mined out area	No proposal	Nil	Mining area not matured for backfilling.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	No topsoil generated	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			ML area was not matured for backfilling as mineral was not exhausted in the working pit.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Annual report submitted.	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	0.85 Ha. cumulative	0.80 Ha.	
6d	No. of saplings planted during the year	500 nos.	900 nos.	
6e	Cumulative no .of plants	8800 nos.	Appox. 8000 nos. within ML area	
6f	Any other method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch and care during the year	Not specified.	approx. 3 lakh	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	No waste land involved within the ML area.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	No waste land within the ML area.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	

6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	9 Air Monitoring, 9 Water sampling, 9 Noise Monitoring stations and 5 Soil sampling stations.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No deviation in respect of progressive mine closure plan was observed.

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.	Grade wise sorting of below 55% Fe and 60-62% Fe	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	Yes proposed	45%Fe to 55%Fe 60%Fe to 62%Fe	
7d	Any beneficiation process at mines	No proposal	Crushing and Dry 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 inspection.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	No top soil generation during F.Y. 2016-17.	

8b	Concurrent use or storage of topsoil	No proposal	ML area deviod of any top soil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate disposal for waste and mineral is proposed.	Found to be maintained, no mineral reject generation.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Mineral was not exhausted in working pit	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not applicable.	ML area was not matured for phased restoration, reclamation and rehabilitation.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed	Yes	
8g	Survival rate	50-60%	apprx. 50%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out by water tankers.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty surrounding the ML area was not affected due to the mining operation. Environment monitoring was carried out in accordance with the approved R&R plan.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns		M.R. Submitted up to Feb- 2018 A.R. Submitted up to 2016-2017
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer and manager : M.S.Devaraja setty M.S.Devaraja setty Geologist: Nagbhusan	Mining Engineer and manager : M.S.Devaraja setty Geologist: Nagbhusan
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under current O/C working: 7.5 Ha. Used for waste disposal: 8.53 Ha. Green Belt: 0.80 Ha. Infrastructure : 1.34 Ha	Appear to be correct.
9d	Scrutiny of Annual return on afforestation	900 nos.	No change.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject generation during 2016-17.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Lumps below 55%Fe: 3797 tonnes Lumps 60-62%Fe: 4270 tonnes Fines 60-62% Fe: 3564 tonnes	Temporary stacked within the ML area.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex. Mine price Lumps below 55%Fe: Rs. 756/ tonne Lumps 60-62%Fe: Rs. 1736/ tonne Fines 60-62% Fe: Rs. 1625/ tonne Production Cost: Rs. 700/ tonne	Appear to be correct

9h	Scrutiny of Annual return on fixed assets	Rs. 20428014/-	Office building, Mining machineries, Crushers & dry screens were found to be present within the ML area.
9k	Scrutiny of Annual return on mining machineries	3 nos. of hydraulic excavators, 10 nos. of trucks, 2 nos. of wheel loader and 2 nos. of water tankers	No change.

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)	25/01/2018			
MCDR17	Rule 35(2)	25/01/2018			

Date :

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines