

MCDR INSPECTION REPORT

**General**

SL. No.	Particulars	Details
1	Name of the Mine	S M Block Iron Ore Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	17.81 Ha (forest) as per CE, but as per ML deed it is 40.47 Ha.
3	Minecode	30KAR03154
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/211/2011
5	Name of the lessee, Address, phone, email and fax number	M/s. M. Hanumantha Rao, H.No.37, W.No.17, Ground Floor, Main Road, Near Park, Patel Nagar, Bellary – 583 101. Ph. 08392-260170/260626, Fax-260269, E-mail <a href="mailto:mhraomines@gmail.com">mhraomines@gmail.com</a>
6	Village	Narayanapur
7	Taluka/Mandal	Sandur
8	District	Bellary
9	Pincode	583 112
10	State	Karnataka
11	Post office	Deogiri
12	Nearest police station	Sandur
13	Nearest Railway station	Toranagallu
14	Date of Grant of Mining Lease	Original mining lease was granted, over an Extent of 40.47 Ha. Under ML No.2505 for 20 years from 12.12.2005 to 11.12.2025
15	Date of Execution	12.12.2005
16	Date of opening of Mine	15.05.2006
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri. Arun Kumar Chirania M/s. M Hanumantha Rao, H.No.37, W.No.17, Ground Floor, Main Road, Near Park, Patel Nagar, Bellary – 583 101. Ph.08392-260170/260626, Fax -260269,. E-mail <a href="mailto:mhraomines@gmail.com">mhraomines@gmail.com</a>
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Nil
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Sri. M.S. Devaraja Setty, M/s. M Hanumantha Rao, H.No.37, W.No.17, Ground floor, Main Road, Near Park, Patel Nagar, Bellary – 583 101. Ph.08392-260170,260626, Fax-260269, Email:mhraomines @gmail.com
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and	Nil

	date of appointment in mine	
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Nil
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	MP approved vide letter No.279/119/89/BNG dated 03.01.1990. Next MP approved vide letter No.279/119/89/BNG667 dated 17/25.07.2002 for 17.40 Ha Modi. MP vide letter No.MP/BLR/Fe-145-SZ dated 31.08.2006. Modi. MP approved vide letter No. MP/BLR/Fe-145-SZ dated 10/01/2008 for 2007-08 to 2010-11
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	SOM approved vide letter No. KNT/BLR/MS/F2204 –SZ /554 dated 06.03.2013 for a period from 2011-12 to 2015-16. Latest modi. SOM approved vide letter No.279/119/89/BNG/1111 dated 18.06.2014 for a period from 2014-2015 to 2015-16. (4 <sup>th</sup> year & 5 <sup>th</sup> year).
27	Mineral(s) granted in lease and proved for mining	Iron Ore only.
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanised, Others or Manual)	A(FM)
30	Captive/Non Captive	Non-captive
31	Date of inspection of the mine	15/05/2015

Exploration:---

SL.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2014-15=8 BH (320m) Western reef	Nil	Not accomplished due to non availability of rigs.
1b	Exploration over lease area for Geological axis 1 or 2.	10,000 Sq.m	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	M/s. MHR		
1d	Balance area to be explored to bring Geological axis in 1 or 2			Balance area exploration proposal after obtaining FC clearance
1e	Balance reserves	1.285 million tonnes at 45%	NA	As per the modified scheme of mining

	as on 01.04.20...	cut off.		approved vide letter No.279/119/89/BNG/1111 dated 18.06.2014.
1f	General remarks of inspecting officer on geology, exploration etc.	During 14-15 8 Nos. DTH drill holes, each of 40m depth with 320 meterage during 15-16 31 Nos. of core drill & each of 50m depth	Not undertaken due to non availability of rigs.	Violation issued.

Development:--

SL.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Eastern pit and western pit along strike length removal of side burden during the year 2014-15, it was proposed for development mainly on the western pit in 855m RL to 785m RL and production in 795m RL.	Same is being followed in the mine.	NA
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches were proposed for ob & minerals	Separate benches followed as per the proposals	NA
2c	Stripping ratio or ore to OB ratio	1:1.79	1:1.85	NA
2d	Quantity of topsoil generation in m <sup>3</sup>	NA	NA	NA
2e	Quantity of overburden generation in m <sup>3</sup>	1,38,021 m <sup>3</sup> for the year 2014-15	92,425 m <sup>3</sup> was achieved	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Satisfactory	Within the proposals, but due to non sale of materials through e-auction, materials are accumulated in the mine, near by the workings & near the	NA

			waste dumps.	
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Exploitation:--

SL.No.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	4 <sup>th</sup> year 2014-15 proposal to produce in Eastern pit and western pit.	Same is being followed in the mine	NA
3b	Quantity of ROM mineral production proposed	1 lakh tonnes in 2014-15 & 2015-16	99,900 tonnes produced in 2014-15	NA
3c	Recovery of salable/usable mineral from ROM production	80%	80%	NA
3d	Quantity of mineral reject generation	--	2014-15=85200 tonnes	
3e	Grade of mineral reject generation and threshold value declared	35% Fe	35% Fe	Nil
3f	Quantity of sub-grade mineral generation	20% of ROM	There is no sub grade generation as the entire ROM ore produced is marketable. Iron ore of +45-55% Fe. Grade which can be considered as sub grade constitutes about 20% of ROM. This was separately stacked blending with high grade.	
3g	Grade of sub-grade mineral generation	Cut off at 45%-55% Fe.	Cut off at 45%-55% Fe.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised Method	Nil

3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No beneficiation is done.	No beneficiation is done.	Nil
3j	Provision of drilling & blasting in mineral benches	Blast hole drilling machines of 115 mm dia DTH drilling are use. Blast holes are drilled vertically for 11m depth ( effective depth 10m) 3.0m spacing and 2.5m burden.	The same is maintained.	Nil
3k	Provision of mining machineries in mineral benches	A – (FM-fully Mechanised) mining operations are being carried out in the mine, with all provisions of machineries in the mine.	A-(FM-fully mechanised) mining operations are being followed in the mine for developing the benches.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10m bench height & width in overburden/side burden and mineral zone benches.	The same is being followed in the mine working, which are suitable as per the SOM.	
3m	Total area covered under excavation/pits	9.02 ha in 2014-15	9.51 ha in 2015-16	
3n	Ore to OB ratio for the pit/mine during the year	1:2.76 in 2014-15 & 1:1.43 in 2015-16	1:1.85	

3o	Total area put in use under different heads at the end of year	18.28 ha	18.28 Ha	Nil
3p	Production of ROM mineral during last five-year period, as applicable	2010-11=3.76 Lt 2011-12=3.9 Lt 2012-13=0.1 Lt 2013-14=1 L.t 2014-15=1 L.t	2010-11=1.66 Lt 2011-12=20440t 2012-13=Nil 2013-14=99940t 2014-15=99900t	2011-12 to 12-13 mining banned as per Hon'ble Supreme Court resumed 16/05/13
3q	General remarks of inspecting officer on method of mining etc.	Systematic proposals made	Same is maintained	Nil

### Solid Waste Management-Dumping:--

SL.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Yes proposal made & also in R & R Plan, recommended mineral reject were temporarily dumped in the northern part of western pit	During the inspection, it was observed that the above mineral reject were temporarily dumped in the Northern part of western pit.	The mineral reject creating problem in stacking other ROM due to stoppage of e-auction
4b	Location of topsoil, OB & mineral reject dumps	On the northwestern portion of the lease OB were earmarked for dumping during the 2014-15 & 15-16 period.	Same are followed, but getting mixed up with ore.	Violation issued under rule 16.
4c	Number of dumps within lease area and outside lease area	3 dumps in the ML area. One is outside the lease area.	The OB is dumped within the lease area in northwestern portion. Remaining all stabilized dumps.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	As on date the waste dumps are located within the periphery of the ML boundaries	It may vary in the future if the working goes down from top RL to bottom RL.	Within the UPL.
4e	Number of active & alive dumps	1 No. is active & alive dump	On the day of inspection, 1 is the active & alive dump conditions.	Nil
4f	Number of dead dumps	2 waste dumps in dead.	2 waste dumps are in dead were stabilized.	Nil
4g	Number of dumps stabilised	2 dumps were	2 dumps were	Nil

		stabilised	stabilised	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes retaining walls were present all along the waste dumps.	Yes retaining walls are present all along the waste dumps as per the R & R plan	Satisfactory.
4i	Length of Retaining wall or garland drain all along dump	801m of Retaining wall : 968m Garland drain	801m Retaining wall, 968 mts garland drain constructed.	Nil
4j	Number of settling ponds	One	One	Nil
4k	Specific comments of inspecting officer on waste dump management	NA	Things are going well, but due to fall in the market price of the ore e-auction is not taking place & Ore is getting accumulated within the ML area & also on the waste dumps.	

#### Solid Waste Management-Backfilling:--

SL.No.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	NA	NA	NA
5b	Area under backfilling of mined out area	NA	NA	NA
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	NA	NA	NA
5d	Total area fully reclaimed & rehabilitated	NA	NA	NA
5e	General remarks of inspecting officer on backfilling, reclamation etc	NA	NA	NA

#### Progressive Mine Closure Plan:---

SL.N.	Item	Proposals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	Yes submitted.		NA
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	NA	NA	NA
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	NA	NA	NA
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	NA	NA	NA
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Nil	Information not furnished by the lessee.	Nil
6f	General remarks of	NA	The mine is	The mine is



	inspecting officer on PMCP compliance & progressive closure operations		operating in part of the lease in 17.81 ha only intermittently, due to non disposal of finished product from the mines.	well maintained.
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### Mineral Conservation:---

SL.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No such proposals in the approved Modified SOM	The ROM is directly sent to the crusher plant for preparing calibrated ore.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No such proposals in the approved modified SOM	Mechanical means.	Nil
7c	Different grade of mineral sorted out at mines	No such proposals in the approved modified SOM	10-20 & 10-40 & above are sorted out at mines.	Nil
7d	Any beneficiation process at mines	No	NA	NA
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Nil	Conservation part is taking care, but the protective measures for stacking is not upto the mark.	Violation issued.

### Environment:--

SL.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No	No top soil generation as such & the workings are at the lower benches.	Nil.
8b	Concurrent use or storage of topsoil	Nil	NA	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes, maintained	Stacked along with the calibrated ore by the side of dump is not appropriate.
8d	Use of overburden, waste rock, rejects and fines dumps for	Nil	No such activities as such.	

	restoring the land to its original use			
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	NA	Nil
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Yes	Adequate care is being taken by the company for protection & plantations.	Nil
8g	Survival rate	60%	60%	Nil
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	Maintained
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Nil	General aesthetic beauty in & around mines were maintained	Violation issued.

### Compliance of Rule 45

SL.No.	Item	COMMENTS		Remarks.
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto April, 2015 and the A.R. submitted for the year 2013-14 and the AR for the year 2014-15 is not recd.		
S.N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri. M S De varaja settee (Mines Manager)	Same observed during the inspection	Violation issued for ME & Geologist.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Not received 2014-15 AR.	The land use pattern on mining pits & dumps are carrying out as	Nil

			per proposals.	
9d	Scrutiny of Annual return on afforestation	As above	Plantation undertaken in the ML area at various places.	Nil.
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	As above	During the inspection, it was observed that the above mineral reject 85,200 tonnes were temporarily dumped in the Northern part of western pit	Nil.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	As above	Yes, the production and the stock from the dump working were present.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Not submitted to comment.	The cost varies depends on the quality of the ore, both lump & fines as per sales through Monitoring committee sale value of c-ore 60-62 grade is Rs.3500 and fines 60-62 grade is Rs. 2500.	Nil
9i	Scrutiny of Annual return on fixed assets	Not submitted as on date.	Nil	Nil
9k	Scrutiny of Annual return on mining machineries	As above	All the machineries were observed in the field during the mining operation as per the proposals.	Nil.

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

Rule 13(1)	The modified Scheme of Mining was approved vide letter No. 279/119/89/BNG dated 18.06.2014 for the period from 2014-15 to 2015-16. The deviations observed in mining operations vis-à-vis approved document are given below :
Rule 16	(i) In para 4, under future exploration programme, 8 Nos. of bore holes were proposed in western reef, each 40m depth during the year 2014-2015, but the same has not been drilled till date. Similarly for the year 2015-16, 31 Nos. of bore holes propose in block No.2, which is also not drilled.
42(1)(C) (i)	(ii) The calibrated ore & the ROM ore were dumped above the waste dump located on the NNE side, where the current year dumping for the year dumping for the 2015-16 has also been proposed. Besides, the ROM ore is getting mixed up with waste dumps. No measures have been taken to prevent from mining each other and also to protect from loss of materials.
	Whole time Mining Engineer & Geologist has not been employed in the mine, as the mine comes under category- 'A' mines, as per this rule.

Place: Bangalore  
Date: 18/06/2015

**Sd/-**  
(C Parameshwaran)  
Dy. Controller of Mines.