

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

**MCDR INSPECTION REPORT**

**Bangalore regional office**

**Mine file No :** KNT/BLR/FE/414/BNG

**Mine code :** 30KAR03134

- (i) Name of the Inspecting : **A101** ) **ARUN KUMAR**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shanmukhappa Mandal, Nandhakumar HM, Imran Shaik, Ani  
Official with  
Designation
- (iv) Date of Inspection : 09/10/2017
- (v) Prev.inspection date : 21/12/2014

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **RM BLOCK (ML 2296) 51HA**
- (b) **Registration NO.** : **IBM/178/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **RAMGAD**
- Taluka : **SANDUR**
- Post office :
- Pin Code :
- FAX No. : **08395-260676 (F),0839526011**
- E-mail : **vescosdr@yahoo.com**
- Phone : **08395 - 260348, 9611786655**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** :
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **M/S.VEERABHADRAPPA SANGAPPA & COMPANY**  
**2-138, BELLARY ROAD,**  
**SANDUR - 583119**
3. (a) **Lease Number** : **KAR1204**
- (b) **Lease area** : **51**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **16/02/2021**
4. **Mineral worked** : **IRON ORE** **Main**

## 5. Name and Address of the

Lessee : VEERABHADRAPPA SANGAPPA & COMPANY  
 # 2/138, BELLARY ROAD,  
 HOSPET, BELLARY KARNATAKA  
 Phone:  
 FAX :

Owner : VEERABHADRAPPA SANGAPPA & COMPANY  
 NO.2/138, BELLARY ROAD,  
 SANDUR, BELLARY KARNATAKA  
 Phone:  
 FAX :

## Mining Engineer

Name : NANDAKUMAR, Full Time  
 Qualification : B.E.MINING  
 Appointment/ :  
 Termination date

## Geologist

Name : S.MANDAL, Full Time  
 Qualification : M.SC(MINERAL EXPLORATION)  
 Appointment/ :  
 Termination date

## Manager

Name : N.MALLESH  
 Qualification : FCC  
 Appointment/ :  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Fresh under rule 22 MCR1960	08/12/1995
		Modif.of approved Mining Plan	06/03/2003
		Mining Scheme rule 12 MCDR1988	28/07/2006
		Mining Scheme rule 12 MCDR1988	01/10/2012
		Modif.approved Mining Scheme	31/12/2013
		Modif.of approved Mining Plan	24/02/2016
		Modif.of approved Mining Plan	16/09/2016

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	No proposals	
1b	Exploration over lease area for geological axis 1 or 2	G1+G2= 39.73 Ha.	G1+G2= 39.73 Ha.	Exploration conducted till 2014
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	5.82 Ha	Nil	7.61Ha of non mineralized area used for dumping
1e	Balance reserve as on 01/04/20		G1-34818477, G2-3869389. as on 01.04.2017	As per AR
1f	General remarks of inspecting officers on geology, exploration etc			06 core boreholes , each of 60 mts depth is proposed in the year 2018-19 at 100 X100 mts grid interval. 07.61Ha of non mineralized area used for dumping.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N-1668880-1669438, E-659238-659700	Development done as per proposal	complied
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	OB-2 benches MB-11 benches	OB-1 benches MB-11 benches	Ob bench not developed due to non permission of tree cutting in the forest area.Violation pointed out
2c	Stripping ratio or ore to OB ratio	1:0.51	1:0.15	Production proposals is for 1.1MT but CEC has reduced production to 0.845MT
2d	Quantity of topsoil generation in m3	No proposal	NA	Generated small quantity utilized for plantation

2e	Quantity of overburden generation in m3	172319	61611	Production proposals is for 1.1MT but CEC has reduced production to 0.845MT
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The locations of the developments were found to be in line with the proposal. However very little advancement of benches were observed in between section line R6R6' & R4R4' distorting the stripping ratio.

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	L- 530 mts, W-160mts, H- 83 mts	Complied
3b	Quantity of ROM mineral production proposed	1.1 MT	0.844 MT	As per CEC
3c	Recovery of sailable/usable mineral from ROM production	95%	98%	In between R4 & R8 sections lateritic lumpy ore recovery percentage is increased
3d	Quantity of mineral reject generation	28749 tons	5000 tons	BHQ of +32 to -45% Fe is considered as mineral rejects
3e	Grade of mineral rejects generation and threshold value declared.	+35 to -45% Fe	+35 to -45% Fe	BHQ of +32 to -45% Fe is considered as mineral rejects
3f	Quantity of sub grade mineral generation.	No proposal	Nil	
3g	Grade of sub grade mineral generation	No proposal	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised with deep hole drilling & blasting	Actual as per proposal	Complied

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	NA	
3j	Provision of drilling and blasting in mineral benches	Yes	Done in hard lumpy ores & BHQ	Only 10% of the total production requires blasting
3k	Provision of mining machineries in mineral benches	YES	Mining machineries like, excavator, tippers & loaders deployed.	Complied
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	YES Height- 7 to 7.5m, Width- 8m	Bench height & width are maintained.	Complied
3m	Total area covered under excavation/pits	26.470 Ha	26.470 Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.51	1:0.15	Production proposals is for 1.1MT but CEC has reduced production to 0.845MT.Higher recovery factor
3o	Total area put in use under different heads at the end of year	Pit- 26.470 Ha R&R- 0.392 Ha Dump- 4.350 Ha Buildings- 1.270 Ha Others- 20.678 Ha	As per proposed	
3p	Production of ROM mineral during the last five year period as applicable	2011-12: Nil 2012-13: 0.59MT 2013-14: 0.59MT 2015-16: 0.59MT 2016-17: 1.10MT	2011-12: Nil 2012-13: 0.228MT 2013-14: 0.588MT 2015-16: 0.588MT 2016-17: 0.844MT	Actual production within the limits proposed

3q	General remarks of inspecting officers on method of mining etc.	The locations of the exploitation were found to be in line with the proposal. However very little advancement of benches were observed in between section line R6R6' & R4R4' distorting the stripping ratio.
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## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	yes	Separate dumping for OB & mineral reject	
4b	Location of topsoil, OB and mineral reject dumps	N-1668650-1669050, E-659550-659905	Dumping as per proposal	complied
4c	Number of dumps within lease area and outside of lease area	1 WML	One dump inside the mining lease area	As per proposed
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed outside the UPL	Southwestern side 200 m away from UPL	In order
4e	Number of active and alive dumps.	One	One dump	Only one dump is alive and active
4f	Number of dead dumps.	No proposal	Nil	
4g	Number of dumps established.	No proposal	Nil	No dead dumps for stabilization
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes, Retaining wall and garland drain all along dumps are there.	complied
4i	Length of Retaining wall or garland drain all along dumps	Yes, proposed	Yes Retaining wall-75 m	Till date RW-1053m, GD-387m.
4j	Number of settling ponds	No proposal	Nil	3 csettling ponds constructed in 2015

4k	Specific comments of inspecting officer on waste dump management			The waste dump is dumped at earmarked place as proposed, but the terracing of the dumps is not done as per proposal. Violation pointed out.
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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.	No proposal	Nil	No area is available for backfilling.
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NA	
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			All the area is mineralized and no area is available for backfilling. There is no proposal as well.

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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).	Yes	PMCP report submitted on 26.07.2017	

6b	Area available for rehabilitation (ha) .	No proposal	Not applicable	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No proposal	NA	No area available for backfilling
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Yes	Afforestation- 0.32 Ha	Afforestation done on waste land within lease area covering 0.32 Ha
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes,Two locations of air, water & noise monitoring station proposed.	Environmental monitoring is being carried out as per proposal	Environmental parameters within the limits
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities were carried out as per the approved plan and plantation done, construction of retaining wall and garland drains in place.

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Yes, Crushing & screening unit installed in the mines.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical means of mineral sorting	Complied
7c	Different grade of mineral sorted out at mines.	Lumps: +10mm to -40mm Fe-62-63% Fe, Fines: -10mm Fe- 60-62%	58% to below 60%Fe 60% to below 62%Fe 62% to below 65%Fe 65%Fe and above	Both the Lumps and fines of the same grading are sorted out at mines

7d	Any beneficiation process at mines	No proposal	Not applicable	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			All the ROM except fines are crushed and screened. The fines and Lumps are segregated and sold in the domestic market.

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	Earlier generated quantity utilized for plantation.
8b	Concurrent use or storage of topsoil	No proposal	Not applicable	No top soil generated
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Separate dumps for OB, Mineral reject & fines	Generated waste, OB etc are dumped in dumping area
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not applicable	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 Saplings in 1 Ha area	350 saplings planted.	maintenance & upkeep of the plantation is taken care
8g	Survival rate	85 %	85 %	

8h	Water sprinkling on roads to control airborne dust	Yes, proposed	Dust suppression measures in place	Water sprinklers are installed around 1.4 Kms haulage road in mine head, In addition to this spraying of water from water tanker.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mine is good as licensee carried out afforestation and other environment protection measures

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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 July 2017 A.R. Submitted up to 2016-17	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- ImranShaik, Geologist- Shanmukhappa Mandal, Manager- Nandhakumar HM,	Notice of appointment of Mining Engineer not received. Violation pointed out.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 26.470 Ha R&R- 0.392 Ha Dump- 4.350 Ha Buildings- 1.270 Ha Others- 20.678 Ha	Appeared to be correct	
9d	Scrutiny of Annual return on afforestation	350 saplings plated with survival rate of 85% outside the Mining Lease area.	Appeared to be correct	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	5000 tones of 32 to 35% Fe	Appeared to be correct
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock- 56000Tons & Dump working - 1575 Tons	Appeared to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex, mine price- lumps -2140.6 Rs/ ton, Fines -1792 Rs/ ton Production cost- 591.21 Rs/ ton	Appeared to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 31893893	Appeared to be correct
9k	Scrutiny of Annual return on mining machineries	Hyd.Excavators -5 Wheel Loaders-3 Tippers-14 Water Tanker-5 Rock Drill-1	Appeared to be correct

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**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)	10/11/2017	22/12/2017				
Rule 46		10/11/2017	22/12/2017				

**Date :**

**(ARUN KUMAR)**

Indian Bureau of Mines