

**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/455/BNG

**Mine code :** 30KAR03160

- (i) Name of the Inspecting : **A101** ) **ARUN KUMAR**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : **SRIKANT- MINES MANAGER**  
Official with  
Designation
- (iv) Date of Inspection : 07/12/2020
- (v) Prev.inspection date : 04/09/2018

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **RAMGAD ML 2547**
- (b) **Registration NO.** : **IBM/1010/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State** : **KARNATAKA**
- District** : **BELLARY**
- Village** : **RAMGHAD POST**
- Taluka** : **SANDUR**
- Post office** : **RAMGHAD**
- Pin Code** :
- FAX No.** : **08392-240462 (F),**
- E-mail** : **ztco2000@yahoo.com**
- Phone** : **08392-240085 (O),984408500**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **01/01/2008**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **M/S.ZEENATH TRANSPORT COMPANY,**  
**24, ZEENATH HOUSE,COWL BAZAR,**  
**BELLARY - 583102**
3. (a) **Lease Number** : **KAR0262**
- (b) **Lease area** : **36.42**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **03/06/2021**
4. **Mineral worked** : **IRON ORE** **Main**

## 5. Name and Address of the

Lessee : ZEENATH TRANSPORT COMPANY  
 ZEENATH HOUSE, COWL BAZAAR,  
 BELLARY, BELLARY KARNATAKA  
 Phone:40462,40085  
 FAX :

Owner : SYED AHMED  
 BELLARY KARNATAKA  
 Phone: 08392 - 260225  
 FAX : 08392- 240462

## Mining Engineer

Name : GOVIND RAO,Full Time  
 Qualification : B E MINING  
 Appointment/ : 09/07/2018  
 Termination date

## Geologist

Name : T S CHALUVAMURTHY,Full Time  
 Qualification : MSc GEOLOGY  
 Appointment/ :  
 Termination date

## Manager

Name : J.SHRIKANT  
 Qualification : FCC  
 Appointment/ : 11/05/2009  
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	02/04/2008
Plan/Scheme of Mining		Modif.approved Mining Scheme	12/08/2010
		Mining Scheme rule 12 MCDR1988	06/12/2012
		MS modif under MCR 1960	21/08/2014
		Modif.of approved Mining Plan	09/06/2016
		MP review under 17(1) MCR 2016	08/11/2016

## 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. 12 nos. of core bore holes drilled during FY 2017-18
1b	Exploration over lease area for geological axis 1 or 2	G1 & G2	G1: 7.47 Ha. G2: 6.29 Ha	19.86 Ha ia mineralized area
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Not applicable	Exploratory drilling carried out by M/s MAPP drilling & Exploration Pvt Ltd in the past. Approximate 13.72 Lakhs spent on exploration
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Nil
1e	Balance reserve as on 01/04/20	Nil	7.69 MT with average of 57.46 % Fe	As per Annual Returns 2019-20
1f	General remarks of inspecting officers on geology, exploration etc			So far 55 Core drill holes had been drilled in the ML area ,total meterage of 2459.3 mtrs

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Development Proposed : N1668296 TO N1668359, E660388 TO E660535 and N1667620 TO 1667795, E660965 TO 661218	Actual location of development: N1668298 TO N1668356, E660392 TO E660534 and N1667624 TO 1667793, E660969 TO 661213	Work carried out in D section and K, K1, L, L1 & M sections
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches for OB and mineral proposed	Separate benches for OB and mineral maintained	Ore: 7 benches OB : 2 Benches

2c	Stripping ratio or ore to OB ratio	1 : 0.09	1 : 0.09	Nil
2d	Quantity of topsoil generation in m3	No proposal	NIL	No generation of top soil, as mining carried out in already broken up area.
2e	Quantity of overburden generation in m3	43,348 Tonnes	43,234 Tonnes	Bulk density (tons/Cu.mtr) : Iron ore - 2.7 ,Lateritic Lumpy - 2.7 , Waste - 2.0
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development of the pit was carried out as per the proposal

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit proposed	Working carried out in Single pit	1079 m (L) X 153 m (W) X 65 m (D)
3b	Quantity of ROM mineral production proposed	4,80,000 TONS	4,80,000 TONS	Nil
3c	Recovery of sailable/usable mineral from ROM production	95% recovery proposed	95 % recovery achieved	Nil
3d	Quantity of mineral reject generation	No proposal	Nil	No generation of mineral reject
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	NA	Nil
3f	Quantity of sub grade mineral generation.	No proposal	Nil	Nil
3g	Grade of sub grade mineral generation	No proposal	Nil	Nil

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method proposed for segregation of ROM	Mechanized method adopted for segregation of ROM	Dry crushing & screening.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposals	No such study carried out	No wet beneficiation carried except crushing & screening of ROM.
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting proposed	Drilling & blasting carried out for hard strata.	60 % of the total material handled is drilled & blasted using Slurry & Decord .
3k	Provision of mining machineries in mineral benches	Excavator tipper combination proposed	Excavator tipper combination used to mine the ore	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed bench Height - 7.5 m, Width - 8.0 - 10mt	Height= 7.5 mt (Avg.), Width=8.0 mt	Bench height & width maintained
3m	Total area covered under excavation/pits	16.0 Ha. at the end of plan period	Actual 15.04 Ha (by the end of 2019-20)	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.09	1 : 0.09	Ratio in tons
3o	Total area put in use under different heads at the end of year	Area under Mining - 16.0 Ha ,Dumping- 7.0 Ha Sub grade Mineral/ore dump - 7.35 Ha Infrastructure - 2.65 Ha Green Belt - 3.55 Ha Protective measures - 1.607 Ha Others - 11.573 Ha	Covered under current (O/C) workings - 15.04 Ha ,Used for waste Disposal - 6.4 Ha.Occupied by plant, buildings, residential, welfare buildings & Roads - 2.65 Other purpose (Stock yard, green belt, environment production work - 25.64	Nil

3p	Production of ROM mineral during the last five year period as applicable	2014-15: 4,40,000 2015-16: 4,40,000 2016-17: 4,60,000 2017-18: 4,80,000 2018-19: 4,80,000 2019-20: 4,80,000	2014-15: 4,39,500 2015-16: 4,39,500 2016-17: 4,59,700 2017-18: 4,79,700 2018-19: 4,79,820 2019-20: 4,80,000	All units in tons. Actual production is within in the proposed limits.
3q	General remarks of inspecting officers on method of mining etc.			Working was carried out in single pit with stripping ratio of 1: 0.09 with drilling & blasting & use of excavator tipper combination.

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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)	Separate waste dump proposed	Separate waste dump maintained	No separate OB Dump observed in the Mine.
4b	Location of topsoil, OB and mineral reject dumps	Proposed location of OB dump: N 1667316 - 667457, E 661326 - 661447	Actual location of development: N 1667327-1667622, E 661326 - 661429	Nil
4c	Number of dumps within lease area and outside of lease area	WML -2 Dumps OML - NIL	WML -2 Dumps OML - NIL	One active dump and one inactive dump within ML.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste dump proposed outside the UPL	Waste dump was located at about 50 mts away from the UPL	Both dumps are located outside the UPL .
4e	Number of active and alive dumps.	One active dump proposed	One active dump located at North Eastern side of the ML	Nil
4f	Number of dead dumps.	One dead dump	One dead dump located at South western side of the ML	Nil

4g	Number of dumps established.	1 dead dump	One dead dump stabilized	Dead dump stabilized by plantation & coir matting.
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall & garland drain proposed all along the dump in the past.	Retaining wall & garland drain maintained.	Retaining wall & Garland Drain are constructed all along the Dump.
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Retaining wall & garland drain were constructed previously	RW-2679 mtrs, GW - 2626 mtrs ,constructed in the past
4j	Number of settling ponds	No proposals	6 No. of Settling tanks constructed in the past & maintained.	Maintained in good condition
4k	Specific comments of inspecting officer on waste dump management			Waste dump management was satisfactory. One active dump and one inactive dump within ML. Retaining wall & Garland Drain are constructed all along the Dump.

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Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	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.	No backfilling proposed in the plan period & mineral persist at depth
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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).	Annual report on PMCP to be submitted on 1st July every year.	PMCP Report Submitted.	Submitted on 02.06.2020
6b	Area available for rehabilitation (ha) .	No proposal	Nil	Nil
6c	afforestation done (ha).	0.5 Ha proposed	2.2 Ha gap plantation done on the slope of the inactive dump	3.55 ha covered under safety zone.
6d	No. of saplings planted during the year	Safety zone= 250 saplings Inactive dump= 250 saplings	Safety zone= 300 saplings Inactive dump= 300 saplings	Avenue (Out side ML area) =110 saplings, Total = 710
6e	Cumulative no .of plants	Not specified	WML : Agave -131000, Saplins - 88430 Nos. Seeds - 330 Kg OML : Agave -25000 Nos. Saplins - 23140 Nos.	5.55 Ha covered within ML area.
6f	Any other method of rehabilitation	No proposal	0.3 Ha of dump slope covered with Coir matting in the past.	Nil
6g	Cost incurred on watch and care during the year	Rs. 12500.00	Rs. 199,500	Includes desilting & maintaince cost of RW & SST's
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 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	No proposal	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposal	Nil	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 proposed in core zone & buffer zone	Environmental monitoring carried out in core zone & buffer zone on monthly basis & is within the limits	Environmental monitoring is carried out by Casmo Conscious Research Laboratory, Bellary

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	PMCP activities as proposed were being carried out. Monitoring of environmental parameters were done regularly.
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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting proposed within the lease area.	ROM dispatched after crushing and screening as per proposal	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical method proposed for mineral sorting	Mechanical method adopted by dry crushing & screening.	2 units of dry crushing & screening plants
7c	Different grade of mineral sorted out at mines.	Fe%: 0-55%, +55-58%, 58-60%, 60-62%, 62-65%, +65%	below 55%, +55-58%, 58-60%, 60-62%, 62-65%Fe are graded and dispatched.	Nil
7d	Any beneficiation process at mines	No proposal	NIL	Only Dry process by mobile crusher & screening
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation is taken care. All the low grade minerals are blended with high grade to meet the market requirement.

#### 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 FY 2019-20.
8b	Concurrent use or storage of topsoil	No proposal	Nil	Nil

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed separate dump for waste /OB.	Separate dump for waste /OB maintained	6 No. of terraces with 10 mtrs height in the active dump.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	2.2 Ha of inactive dump (ID-1) is stabilized by afforestation with protective measures Viz., toe wall, Garland drains and silt settling tanks.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 No. of saplings proposed	710 saplings planted inside and outside ML area	So far 41660 saplings planted on old dumps and 23740 saplings planted in safety zone area.
8g	Survival rate	80%	80%	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on roads to control airborne dust	Water sprinkling done regularly on roads to control airborne dust	4 Water tankers each of 12 KL deployed.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mine was good as lessee has carried out afforestation, water sprinkling and other environmental protective measures as per RMP

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Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly Returns submitted up to October 2020 Annual Returns submitted up to 2019-20	Annual Returns submitted on 30.6.2020	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri. J Srikanth - Mining Engineer cum Manager Sri. S. Srinivas - Geologist	Mining Engineer cum Manager- Sri. J Srikanth & Geologist- Veeresh kumar K.J	Violation issued for non submission of notice of appointment of Geologist
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) workings - 15.04 Ha , Used for waste Disposal - 6.4 Ha. Occupied by land,buildings ,residential,welfare buildings & Roads - 2.65 ha, Other purpose (Stock yard, green belt, environment production work - 25.64 Ha	Appears to be correct.	
9d	Scrutiny of Annual return on afforestation	Within lease area= 600 saplings Outside lease area = 110 saplings @ 80% survival rate	Appears to be correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	

- 9f Scrutiny of ROM : OS - Appears to be correct  
Annual return on 300.00Tons,  
ROM stock and/or production  
graded ore 4,80,000 tons,  
CS-300 tons  
Dump working:  
OS & CS=300  
tons
- 9g Scrutiny of Cost of Violation issued for  
Annual return on Production improper computation of  
sale value, Ex. =Rs.713.44/ton cost of production  
Mine price and ,  
production cost Ex-mine price  
Rs/Ton  
(Lumps)= below  
55%-1590, +55-  
58%-2709, 58-  
60%-2779, 60-  
62%-3183  
Ex-mine price  
Rs/Ton  
(Fines)= below  
55%-758, +55-  
58%-1246, 58-  
60%-1765, 60-  
62%-2106  
Sale value=  
Rs.2046.79  
/ton
- 9h Scrutiny of Rs.2,48,62,394 Appears to be correct.  
Annual return on including  
fixed assets plant  
machinery and  
transport  
equipment
- 9k Scrutiny of Back Hoe- 3 Appears to be correct.  
Annual return on nos., Wheel  
mining Loader- 2nos,.  
machineries Tipper- 15  
nos, Water  
Tanker- 4nos,  
Crusher - 2ns.
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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
Rule 45(7)(i)	02/02/2021				
MCDR17 Rule 46(a)	02/02/2021				

**Date :**

**(ARUN KUMAR)**

Indian Bureau of Mines