

**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 : **278** ) **KRISHNENDU CHATTERJEE**  
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : S/Shri J. Srikanth.- Mines Manager, T.S. Chaluva Murt  
Official with  
Designation
- (iv) Date of Inspection : 04/09/2018
- (v) Prev.inspection date :

**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	10 core boreholes proposed in F.Y. 2017-18	12 nos. of core boreholes actually drilled.	
1b	Exploration over lease area for geological axis 1 or 2	G1 & G2	G1 over the mineralized area of 19.86 Ha.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	By M/s MAPP Drilling and Exploration Pvt. Ltd. Total expenditure was Rs. 1372,558/-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1	G1 over the mineralized area	
1e	Balance reserve as on 01/04/20	No proposal	Total reserve 8841,000 tonnes	
1f	General remarks of inspecting officers on geology, exploration etc		So far 55 nos. of core boreholes has been drilled in the ML area, total meterage 2459.30m	

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	E-E' & F-F' sections and from K-K' to L-L' Sections.	Actually worked in E-E' & F-F' sections and from K-K' to L-L' 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	
2c	Stripping ratio or ore to OB ratio	1: 0.08	1: 0.076	
2d	Quantity of topsoil generation in m3	No proposal	Nil	Mining area was already broken up.
2e	Quantity of overburden generation in m3	19021 m3	18280 m3	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No deviation w.r.t. development was observed during the course of inspection.
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**Exploitation:**

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	single pit	Single pit working with diamention of 980m (L) X 150m (W) X 60m (D).	
3b	Quantity of ROM mineral production proposed	480,000 tonnes	479,700 tonnes	
3c	Recovery of sailable/usable mineral from ROM production	95% recovery proposed	100% recovery of salable mineral from ROM.	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Nil	
3f	Quantity of sub grade mineral generation.	No proposal	Nil	
3g	Grade of sub grade mineral generation	No proposal	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	mechanized method	mechanized method adopted	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	crushing and dry screening.	No wet beneficiation carried out except ROM crushing and dry screening.	
3j	Provision of drilling and blasting in mineral benches	proposed	Drilling and blasting carried out for top hard strata.	

3k	Provision of mining machineries in mineral benches	yes proposed.	No change.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8m bench height 8-10m of bench width proposed	maintained at most places, except bottom most workings of the central pit where bench height maintained from 8 to 10m.	Violation of rule 11(1) was issued to the lessee dated 28.09.2018
3m	Total area covered under excavation/pits	16 ha. at the end of F.Y. 2021-22	14.7 Ha.	
3n	Ore to OB ratio for the pit/mine during the year.	1: 0.08	1:0.076	
3o	Total area put in use under different heads at the end of year	49.73 Ha. proposed	49.73 ha. under use	
3p	Production of ROM mineral during the last five year period as applicable	2013-14-440,000tons 2014-15-440,000tons 2015-16-440,000tons 2016-17-460,000tons 2017-18-480,000tons	2013-14-439,510tons 2014-15-439,500tons 2015-16-439,500tons 2016-17-459,700tons 2017-18-479,700tons	
3q	General remarks of inspecting officers on method of mining etc.		Violation of Rule 11(1) was issued to the lessee on 28.09.2018 for non-maintenance of bench height at bottom most workings of the central working pit.	

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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	Active waste dump located at N 1667386 to 1667640 E 661109 to 661340	
4b	Location of topsoil, OB and mineral reject dumps	N 1667386 to 1667640 E 661109 to 661340	Active waste dump located at: N 1667386 to 1667640 E 661109 to 661340	No top soil and mineral reject generated in the ML area.

4c	Number of dumps within lease area and outside of lease area	1 active dump and 1 inactive dump	1 active dump and 1 inactive dump within ML
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL proposed	Both dumps located outside UPL.
4e	Number of active and alive dumps.	01 active dump	01 active dump located at north eastern side of the ML.
4f	Number of dead dumps.	01 dead dump	01 dead dump located at south western side of the ML.
4g	Number of dumps established.	01 dead dump	01 dead dump stabilized
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed as per the approved R & R plan.	Maintained as per the approved R & R plan.
4i	Length of Retaining wall or garland drain all along dumps	120m of retaining wall and 28 m garland drain proposed during F.Y. 2017-18.	120m of retaining wall and 22m of garland drain constructed during F.Y. 2017-18, so far 2657m of retaining wall and 2619m of garland drain constructed by the lessee.
4j	Number of settling ponds	06 nos. of settling tank proposed	06 nos. of settling tank constructed.
4k	Specific comments of inspecting officer on waste dump management		No deviation in respect of waste dump management was observed during the course of inspection.

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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	
5b	Area under backfilling of mined out area	No proposal for backfilling	Nil	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Mined out pit is not matured for back-filling and water reservoir.

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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).	The Annual Report on PMCP to be submitted within the stipulated time for FY 2017-18 within 1st July 2018	Submitted on 09.06.2018	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	0.40 Ha.	2.2 Ha. along the dump slope.	
6d	No. of saplings planted during the year	500 nos.	800 nos.	
6e	Cumulative no .of plants	No proposal	125,000 nos. along the inactive dump and safety zone	
6f	Any other method of rehabilitation	Geo coir mat along the dump slope proposed.	0.3 ha. of dump slope covered with geo coir mat.	
6g	Cost incurred on watch and care during the year	Rs. 12,500/-	Rs. 20,000/-	

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 within ML
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Not applicable.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Not applicable.



6p	Compliance of environmental monitoring (core zone and buffer zone)	Season-wise Environmental monitoring	Season-wise Environmental monitoring were carried out and parameters are within the permissible limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Mined out pit is not matured for back-filling and water reservoir.

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch after crushing and dry screening	No change.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	+45% Fe	55% to 58%, 58% to 60%, 60% to 62% and 62% to 65% Fe	
7d	Any beneficiation process at mines		No mineral reject generation during F.Y. 2017-18, direct ROM despatch.	
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 MCDR inspection.	

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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 2017-18.	

8b	Concurrent use or storage of topsoil	No proposal	Not Applicable.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate dump for OB/ waste proposed.	Seperate dump for OB/ waste maintained.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not applicable as ore not exhausted.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Mined out pit was not matured for backfilling and water reservoir.	2.2 Ha. area of inactive dump(ID-1) was stabilized by afforestation with environment protective measures viz. toe wall, garland drains and with silt settling tanks.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Entire ML located in the Ramgad reserve forest, 500 plantation proposed during F.Y. 2017-18.	So far 40960 saplings planted on the old dump area, safety zone and along the dump slopes, covered an area of 2.2 Ha.	
8g	Survival rate	80%	70 to 80% within ML.	
8h	Water sprinkling on roads to control airborne dust	Proposed	On average daily 50 cu. m water sprayed on working benches, mine haul road and crushing plant area.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aesthetic beauty in and around mine was good as lessee had carried out afforestation and other environmental protective measures as per approved RMP.	

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Compliance of Rule 45:

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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 Sep. 2018 A.R. submitted upto FY 2017- 18.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: PRASHANT GALI Geologist: CHELUVA MURTHY Manager: J. SRIKANTH	Mining Engineer: GOVIND RAO Geologist: CHELUVA MURTHY Manager: J. SRIKANTH	Mining engineer with minimum five years of professional experience of working in a supervisory capacity in the field of mining has not been appointed, violation issued to the lessee on 28.09.2018.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under O/C mining: 14.08 Ha. Waste dump: 5.8 Ha. Infrastructure and road: 2.65 Ha. ROM Stock & Green belt: 27.2 Ha.	Actual also same at that time.	
9d	Scrutiny of Annual return on afforestation	800 nos. within ML	No change.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil mineral reject generation during 2017-18.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock 300 tonnes. Dump working: 300 tonnes.	No change.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	58% to 60% Fe(Lumps): Rs.2860/ tonne, 60% to 62% Fe(Lumps): Rs.3840/ tonne 62% to 65% Fe (Lumps) Rs. 4100/ tonne 55% to 58% Fe(Fines): Rs. 2190/tonne 58% to 60% Fe(Fines): Rs. 2500/tonne 60% to 62% Fe(Fines): Rs. 3000/tonne Cost of production: Rs. 654/tonne	Appear to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 32500,000/-	Fixed assets includes temporary office building, Plant and Machinery including transport equipment located within ML.
9k	Scrutiny of Annual return on mining machineries	Hydraulic Shovel: 3 nos., Tippers: 15 nos., Wheel loaders: 2 nos. Water tanker: 4 nos. Mobile crushers: 2 nos. Diesel generators: 4 nos.	No change.

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**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 35(2)	01/10/2018			
MCDR17	Rule 55(1)(3)	01/10/2018			
MCDR17	Rule 11(1)	01/10/2018			

**Date :**

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines