

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

FMCP Inspection REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/125/BNG

Mine code : 30KAR03013

- (i) Name of the Inspecting : 130) PRASHANT S HEGDE
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : S/Shri G. Harendra, QP and J. Srikhant, Sr. Mines Man
Official with
Designation
- (iv) Date of Inspection : 12/04/2018
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : ZEENATH M.L.2121
- (b) **Registration NO.** : IBM/1010/2011
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : KARNATAKA
- District : BELLARY
- Village : RAMGAD
- Taluka : SANDUR
- Post office : SUSHILANAGAR
- Pin Code : 583119
- FAX No. : 08392-240462 (F)
- E-mail : ca.padmaraj@gmail.com,ztco:
- Phone : 08392-240085 (O),984408500
- (f) **Police Station** : SANDUR
- (g) **First opening date** : 05/10/1996
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : SRI.SYED AHMAD, MANAGING PARTNER
24, Zeenath House, COWL BAZAR, BELLARY,
PIN - 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
 Zeenath Transport Company
 24, Zeenath House, Cowl
 Bazar Ballery BELLARY
 KARNATAKA
 Phone: 08392240085
 FAX : 08392240462

Agent : Syed Aslam
 Zeenath Transport Company
 Zeenath House, Cowl Bazar
 Bellary BELLARY KARNATAKA
 Phone: 08392240085
 FAX : 08392240462

Mining Engineer

Name : SALEEM SYED, Full Time
 Qualification : BE Mining
 Appointment/ : 24/07/2017
 Termination date

Geologist

Name : MOHAN KUMAR S, Full Time
 Qualification : MSc Geology
 Appointment/ : 16/11/2017
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	23/10/1989
Plan/Scheme of Mining	:	Renewal under rule 22 MCR1960	15/11/1996
	:	Mining Scheme rule 12 MCDR1988	27/11/2002
	:	Mining Scheme rule 12 MCDR1988	22/06/2006
	:	Modif.of approved Mining Plan	13/05/2016
	:	Modif.of approved Mining Plan	09/06/2016
	:	MP modif under 17(3) MCR 2016	08/11/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	9 nos of BHs with 450 total meterage	6 nos of BHs with 236 total meterage	Back-log of exploartion of 9 nos of BHs with 435 total meterage proposed in year 2018-19 in last approved modified MP dated 8/11/17.
1b	Exploration over lease area for geological axis 1 or 2	Entire mineralised area under G-1	G-1: 8 Ha G-2/G-3: 3.65 Ha	Minng plan modified on 8/11/2017.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	48.20 lakhs thourgh M/s MAPP Drilling & Exploration Pvt. Ltd.	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	Entire mineralised area under G-1 and G-2	G-1: 8 Ha so far. Remaining area exploration proposed during year 2018-19.	NIL
1e	Balance reserve as on 01/04/20	NIL	Total reserves as on 30/9/2017 in last approved modified MP dated 8/11/2017 with +45% Fe cut-off grade 5,047,024 tonnes As on date (i.e. as on 1/4/2018) : 4,961,123 tonnes	NIL
1f	General remarks of inspecting officers on geology, exploration etc	NIL	NIL	Party had submitted the FMCP on 2/4/2018 and is under process. The exploration has been sought as per amended Rule 12(4) of MCDR 2017.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Within the existing pit N 1674612-1674834 E 655223-655406	Within the existing pit N N 1674612-1674834 E 655223-655406	Carried out as per modified MP

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in overburden and ore	Separate benches in overburden and ore	No top soil
2c	Stripping ratio or ore to OB ratio	Year 2017-18: 1:1.1 Modified period: 1:0.77	Year 2017-18: 1:1 Modified period: 1:0.58	NIL
2d	Quantity of topsoil generation in m3	NIL	NIL	As proposals within the existing pit only.
2e	Quantity of overburden generation in m3	Year (2017-18): 65,894 Modified period: 22,159	Year (2017-18): 61,673 Modified period: 16,733	NIL
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NIL	NIL	Development are being carried out as per approved modified MP.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Dimension of exsting pit 630m X 250m X 78m
3b	Quantity of ROM mineral production proposed	180,000 tonnes	179,700 tonnes	NIL
3c	Recovery of sailable/usable mineral from ROM production	90 %	90 %	NIL
3d	Quantity of mineral reject generation	NIL	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	+ 45 % Fe Ore will be utilised	+45 % Fe ore are being utilised	NIL
3f	Quantity of sub grade mineral generation.	NIL	NIL	NIL
3g	Grade of sub grade mineral generation	NIL	NIL	NIL

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised method	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	Deep hole drilling and blasting proposed for 30 % of Total Handlings.	As per the proposals.	NIL
3k	Provision of mining machineries in mineral benches	Excavators and tippers combinations.	As per the proposals.	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height: 6 to 7.5 m Width: 8 to 10 m	Height: 6 to 7.5 m Width: 8 to 10 m	NIL
3m	Total area covered under excavation/pits	20.97 Ha	20.97 Ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1: 1.1 (Year) 1: 0.77 (Modified period)	1: 1 (Year) 1: 0.58 (Modified period)	NIL
3o	Total area put in use under different heads at the end of year	Pit: 20.97 Ha Dumps: 14 Ha. Road: 2.35 Ha St. Building: 1.33 Ha Green Belt: 0.641 Ha Sub-grade dump: 1.5 Ha	Pit: 20.97 Ha Dumps: 14 Ha. Road: 2.35 Ha St. Building: 1.33 Ha Green Belt: 0.641 Ha Sub-grade dump: 1.5 Ha	NIL
3p	Production of ROM mineral during the last five year period as applicable	2013-14: NIL 2014-15: NIL 2015-16: 120,000 tonnes 2016-17: 150,000 tonnes 2017-18: 180,000 tonnes	2013-14: NIL 2014-15: NIL 2015-16: 119,500 tonnes 2016-17: 149,820 tonnes 2017-18: 179,700 tonnes	NIL

3q	General remarks of inspecting officers on method of mining etc.	NIL	NIL	Mining operations are being carried out as per approved modified MP.
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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 dumping of OB proposed	Dumping carried out as per proposals.	No topsoil and mineral reject generation.
4b	Location of topsoil, OB and mineral reject dumps	AD-2 dump (N 1674859 to 1674947 E 655728 to 655857)	AD-2 dump (N 1674859 to 1674947 E 655728 to 655857)	NIL
4c	Number of dumps within lease area and outside of lease area	7 nos of Dumps within ML.	7 nos of Dumps within ML.	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Inactive Dump: ID-1-N 1674274 E 656198 ID-2 N 1674550 E 656036 ID-3 N 1674587 E 656633 ID-4 N 1675022 E 655943 ID-5 N 1674695 E 656662 Active dump: AD-1- N 1675042 E 656212 AD-2-N 1674645 E 655999	As per the proposals.	NIL
4e	Number of active and alive dumps.	2 Nos	2 Nos.	NIL
4f	Number of dead dumps.	5 Nos	5 Nos	NIL
4g	Number of dumps established.	5 nos	5 nos	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall & garland drain all along dumps proposed.	Retaining wall & garland drain were made all along dumps as per approved R & R Plan.	NIL

4i	Length of Retaining wall or garland drain all along dumps	1015 m Retaining Wall and 1160 m garland drain proposed sofar.	1015 m Retaining Wall and 1140 m garland drain made sofar.	Proposals of retaining wall & garland drain for year 2017-18 was under progress depending upon build-up of dump and actual requirement in the field. The Violation letter issued for clarification.
4j	Number of settling ponds	1	1	NIL
4k	Specific comments of inspecting officer on waste dump management	NIL	NIL	Waste dump management is being carried out as per the approved modified MP.

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 backfilling proposals as mineral not exhausted.	NIL	NIL
5b	Area under backfilling of mined out area	NIL	NIL	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposals.	NIL	NIL
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NIL	NIL	Existing pit was not matured for backfilling at present as ore not exhausted so far.

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).	Before 1st July 2018	Not yet submitted	NIL
6b	Area available for rehabilitation (ha) .	9.77 Ha of exisitng dead dumps.	9.77 Ha of exisitng dead dumps.	NIL
6c	afforestation done (ha).	0.5 Ha	0.5 Ha	NIL
6d	No. of saplings planted during the year	500 nos	520 nos	Green Belt and inactive dump
6e	Cumulative no .of plants	3,600 nos within ML	3,669 nos withn ML and 115,976 nos outside ML.	For dumps stablization.
6f	Any other method of rehabilitation	NIL	NIL	NIL
6g	Cost incurred on watch and care during the year	Rs 25,000=00	More than proposed.	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL	Pit not matured for backfilling as ore not exhausted so far.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	NIL	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	NIL

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NIL	NIL	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NIL	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NIL	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Season-wise environmental monitoring of ambient air quality, water quality, soil sample analysis and noise level.	Season-wise environmental monitoring of ambient air quality, water quality, soil sample analysis and noise level are being carried out and all parameters are within limit.	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NIL	NIL	The lessee had carried out PMCP proposals as per the proposals except the construction of 17 m retaining wall, 68 m garland drain and 10 nos of gully plugs for waste dump management. Accordingly V/L letter was issued on 4/5/2018 .

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	180,000 tonnes	179,700 tonnes (Lumps: 53,300 t + Fines: 126,400 t)	NIL
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanically using 150 TPH capacity dry crushing and screening plant.	As per the proposals.	NIL
7c	Different grade of mineral sorted out at mines.	Sorting of different grade ore (Fe % range : <55 %, 55-58 %, 58-60 %, 60-62 %, 62-65 % & +65 %)	As per the proposals.	NIL
7d	Any beneficiation process at mines .	No mineral beneficiation except dry crushing & screening.	As per proposals.	NIL

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NIL	NIL	Mining within broken up area.
8b	Concurrent use or storage of topsoil	NIL	NIL	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposal made for separate OB/waste. No mineral rejects.	OB/waste generated is being dumped on existing active dump No-AD-2. No mineral rejects.	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	7.62 Ha of inactive dumps proposed to be stabilized by afforestation and other protective measures viz. toe wall & garland drains.	7.62 Ha of inactive dumps stabilized by afforestation and other protective measures viz. toe wall & garland drains.	NIL

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	7.62 Ha of dumps stabilized by afforestation.	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 nos plantation during year 2017-18	520 nos plantation during year 2017-18. Cum. Plantation within ML: 2,34,300 nos Cum. Plantation Outside ML:38,700 nos	NIL
8g	Survival rate	70%	70%	NIL
8h	Water sprinkling on roads to control airborne dust	Proposed to water sprinkling on roads to control airborne dust.	Water sprinkling is being carried out as per the proposals.	NIL

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR received upto March 2018 AR for year 2017-18 not yet received as due date 1st July 2018	AR/MRs submission were regular.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	AR-2016-17 Shri Nikhil Steevanson T, MM & ME Shri Harish Ninganhalli, Geologist	Shri Saleem Syed, MM & ME Shri Mohan Kumar S., Geologist	Form I/H received.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	AR 2016-17 Pit: 20.97 Ha Dump:14 Ha St. Buildings:3.68 Ha	Actual also same	NIL
9d	Scrutiny of Annual return on afforestation	560 nos (Year 2016-17)	Actual also same.	75 % survival

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL (2016-17)	NIL	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock 512 tonnes as per March AR 2018	Actual also same.	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex. Mine price: 62-65% Fe Lumps: Rs 2530 65% Fe & above Lumps: Rs 2500 60-62% Fe Fines : Rs 1740 62-65% Fe Fines: Rs2850 65 % & above Fe Fines: Rs1960 Cost of production per tonne: Rs 768.52	Appear to be correct.	AR: 2016-17
9h	Scrutiny of Annual return on fixed assets	Rs 51,92,812 (year 2016-17)	Appear to be correct.	NIL
9k	Scrutiny of Annual return on mining machineries	Year 2016-17 Excavator: 2 nos Wheel loader: 1 nos Tipper: 6 nos Water tanker: 1 nos Crusher: 1nos Air compressor: 1nos	Actual as same.	NIL

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 37(2)	04/05/2018		27/06/2018	

Date :

(PRASHANT S HEGDE)

Indian Bureau of Mines