

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

Mining Plan Modification REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/384/BNG

Mine code : 30KAR03055

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Pompapati G (Mines manager)
Official with
Designation
- (iv) Date of Inspection : 02/09/2020
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ZEENATH ML NO. 2120**
- (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 :
- FAX No. : **08392-240462 (F), ca.padmara**
- E-mail : **ztco2000@yahoo.com**
- Phone : **08392-240085 (O), 98440850**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **04/10/1990**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **M/s ZEENATH TRANSPORT COMPANY,
24, ZEENATH HOUSE, COWL BAZAR,
Mangalore - 575001**
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 : ZEENATH TRANSPORT COMPANY
 ZEENATH HOUSE, COWL BAZAAR,
 BELLARY, BELLARY KARNATAKA
 Phone: 40462, 40085
 FAX :

Mining Engineer

Name : G.VENKATESH RAJU, Full Time
 Qualification : B.E
 Appointment/ : 11/10/2004
 Termination date

Manager

Name : A. GURURAJ
 Qualification : B.E(MINING)
 Appointment/ : 01/01/1998
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	23/10/1989
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	19/12/1996
		Renewal under rule 22 MCR1960	27/11/2000
		Mining Scheme rule 12 MCDR1988	14/09/2005
		Mining Scheme rule 12 MCDR1988	22/12/2014
		Modif.approved Mining Scheme	03/10/2019
		MP review under 17(1) MCR 2016	21/05/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Ground preparatory work in progress for drilling 4 core bore holes proposed in FY 2020-21	Core drilling has not yet started as mine was started on 22.05.2020
1b	Exploration over lease area for geological axis 1 or 2	G1 & G2	Exploration was carried out by 30 trial pits in the lease area, G1-13.54Ha & G2-2.48 Ha	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Exploration carried out Inhouse	The expenditure incurred for putting trail pits and sampling analysis around 4.23 lakhs.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	20.40 Ha. Needs to be explored	4 Core & 4 DTH Boreholes proposed in FY 2020-21 & 2021 -22.
1e	Balance reserve as on 01/04/20	Nil	18,47,156 MT as on 1.4.2020	As per AR submitted for the year 2019-20.
1f	General remarks of inspecting officers on geology, exploration etc			Exploration was carried out by 30 trial pits in the lease area covering 13.54Ha under G1. In addition to the above 17 trail pits were carried out. 8Core & 4 DTH Boreholes proposed in FY 2020-21 & 2021 -22.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed Float ore working : N 1674870-1674931, E 656302- 656479	Actual working in Float: N 1674890 -1674912, E 656326- 656425	The actual development was carried out within the proposed grids.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal of separate benches in topsoil, and overburden mineral	No separate benches maintained in topsoil, and overburden mineral	Mining is done in float ore Zone.
2c	Stripping ratio or ore to OB ratio	1:0.07	1:0.074	As on date of inspection: 2072 MT OB & 28002 MT Ore
2d	Quantity of topsoil generation in m3	No Proposal	Nil	Float ore working
2e	Quantity of overburden generation in m3	2668 MT	2072 Mt (31.08.2020)	As on 31.08.2020 as per Production and development register maintained at mine Office.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Float ore mining was carried out within the proposed grids as per the approved document.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 pit proposed for production	Working carried out in 1 pit only.	1.332 Ha. (74 mX 60m X 3m)
3b	Quantity of ROM mineral production proposed	36000 MT	28002 (31.08.2020)	Actual Production as on 31.08.2020
3c	Recovery of sailable/usable mineral from ROM production	90 %	Nil,ROM Stacked separetly	No change
3d	Quantity of mineral reject generation	No Proposal	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	+45 % For Hematitic ore +35 % For Hematitic siliceous ore	Nil	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 segregating from ROM	Segregation of ROM was not done. 28002 MT of ROM stacked separately	Voilation issued for stocking of ROM which was not there in the proposal.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	No such beneficiation study proposed and carried out.	Nil
3j	Provision of drilling and blasting in mineral benches	No Provision of drilling & blasting in mineral benches	No drilling and blasting was carried out in the mineral benches	Excavator & two tipper deployed in the float ore.
3k	Provision of mining machineries in mineral benches	Excavator Volvo - 1 no., Volvo Wheel Loader - 1 no., Mobile Crushing 100 TPH - 1, Mobile Screening 250 TPH - 1, Ashok Leyland Dumpers - 2 nos. water tanker 12000 ltr - 1 Wagon drill - 1 Tractor Mounted compressor 175 cfm - 1	Excavator - 1 No. Wheel Loader - No. Dumpers - 2 No. (16 Ton) Water tanker - 1 No.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Suitable bench height and width proposed in mineral benches	Suitable bench height and width maintained in mineral benches	Float Ore working : Height 3 mtrs & Width 5 mtrs

3m	Total area covered under excavation/pits	8.570 Ha. At the end of plan Period	7.730 Ha.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.07	1:0.074	Nil
3o	Total area put in use under different heads at the end of year	Area under Mining - 8.570Ha Waste dumps - 10.72 Ha. Mineral Storage - 1.90 Ha. Infrastructure - 0.43 Ha Roads - 0.130 Ha. Safety Zone/Green belt - 1.164 Ha. Unused area - 13.56 Ha. At the end of plan period	Area under Mining - 7.730 Ha Waste dumps - 10.72 Ha. Infrastructure - 0.5 Ha Other purposes (Stockyard, Safetyzone and others) - 17.47 Ha. At the end of FY 2019-20.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2015-16 : 36000 2016-17: 36000 2017-18: 36000 2018-19: 36000 2019-20:36000 (in tonnes)	2015-16: Nil 2016-17: Nil 2017-18: Nil 2018-19: Nil 2019-20: Nil(in tonnes)	The mining operation started on 22.05.2020 (for the want of statutory clearances)
3q	General remarks of inspecting officers on method of mining etc.			Opencast method of mining in float ore with Excavator & tipper combination were deployed

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No Separate Dumping proposal of Top soil,OB and mineral reject.	No generation of Top soil and mineral reject due to float ore working.	Simultaneous backfilling is carried out.

4b	Location of topsoil, OB and mineral reject dumps	No Proposal	Nil	Backfilling proposed and is being carried out in case of OB.
4c	Number of dumps within lease area and outside of lease area	WML: 5 Dumps OML : NIL	WML: 5 Dumps OML : NIL	Active and Inactive dumps are within the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Old Dumps were proposed outside the UPL.	It was observed that all the 5 OB dumps (Active and Inactive) were situated outside the UPL.	Location of Old OB dumps carried out in past : AD: N 1675387-1675128 ,E 656195 - 655776, ID1- N1674224 to 1674169, E 656175 to 656178, ID2- N1674496 to 1675036, E-655636 to 656051, ID3- N1674499 to 1674488, E-656573 to 656588 ,ID4- N1675069 to 1675153 E-655703 to 655864
4e	Number of active and alive dumps.	1 Dump(AD)	1 Dump(AD)	No dumping proposal in the reporting year
4f	Number of dead dumps.	4 Dumps	4 Dumps	Stabilized with plantation.
4g	Number of dumps established.	4 Dumps	4 Dumps	Stabilized by plantation and partially by coir mating.
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil	GD and RW's were constructed as per the R & R Plan in the past.
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	Completed as per proposal. TW1 - 61 m, TW2 - 606 m, TW4 - 190 m, TW6 - 137 m, GWCW - 235 m, Total 1229 m, GD1 - 63 m, GD2 - 621 m, GD4 - 660 m, GD6 - 140 m, GD8 - 310 m
4j	Number of settling ponds	No proposal	Nil	3 No. of settling pond constructed in the previous plan period.

4k	Specific comments of inspecting officer on waste dump management	There was no proposal of waste dumping in the reporting year, however it was observed that 4 old dumps were stabilized by plantation & partillay by coir matting
----	--	--

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.	Backfilling is proposed after full extraction of the mineral.	Back filling is in progress as per approved RMP	Nil
5b	Area under backfilling of mined out area	0.04 Ha.	0.014 Ha.	Backfilling in progress
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	No generation of Top soil
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The mining operation started on 22.05.2020 & backfilling as proposed was in progress

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 before 1st July of every year.	PMCP report submitted	Submitted on 02.06.2020

6b	Area available for rehabilitation (ha) .	No proposal	Nil	Backfilling in process
6c	afforestation done (ha).	0.23 Ha.	Nil	Proposed to carryout Afforestation in coming months.
6d	No. of saplings planted during the year	230 saplings proposed	1350 saplings planted in the past yaer	Safety Zone: 250 no., Inactive dump: 1100 nos.
6e	Cumulative no .of plants	Not Specified	213171 saplings in all.	Safety Zone : 2775no., Inactive dump: 210396 as per PMCP submitted.
6f	Any other method of rehabilitation	No proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	15000 Rs. Per year	2,00,000 Rs. Per year	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	0.04 Ha.	0.014 Ha.	Backfilling in progress
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	2668 MT	2078 MT	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on 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	230 saplings	250 sapling	Gap filling done in Safety zone.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.23 Ha.	0.23 Ha.	Gap filling done in Safety zone.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Rehabilitation by way of Afforestation	Plantation done in the boundary	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environment monitoring proposed in buffer zone and core Zone.	Environmental monitoring is yet to be carried out.Mine was started recently	Cosmo conscious Research laboratory,Bellary in the past .
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities were carried out as per the proposal

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 was Stocked 28002 MT	Violation issued
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Grade wise sorting proposed Mechanically with help of Crusher and screening plant.	ROM stocked due to non availability of Crusher and screen plant	1 no. of Crusher and screen plant is yet to be installed in the mine

7c	Different grade of mineral sorted out at mines.	Size wise sorting proposed: Below -6 mm, -6 mm to -20 mm, +20 mm to -40 mm	ROM Stacked separately.	Nil
7d	Any beneficiation process at mines .	No proposal, only Only dry screening and crushing plant	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Size wise, grade wise sorting proposed, but due to non availability of screening & crushing plant, ROM is stacked separately.

Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	Nil
8b	Concurrent use or storage of topsoil	No proposal	Nil	No generation of top soil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	Nil	Backfilling proposed and is in progress
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB generated is proposed to be backfilled to restore the land.	Backfilling by OB is in progress	Backfilling Started about 2 months ago

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling and plantation proposed to restore and reclaim the land degraded.	Backfilling and plantation is carried out to restore and reclaim the degraded land	Plantation 4.36 Ha. on Inactive dumps & 0.014 Ha. Backfilling
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Base line information available	213171 saplings in all.	Gap filling, Inactive dump
8g	Survival rate	75%	75%	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul road proposed to control airborne dust.	Water sprinkling was carried out regularly to control air pollution	12,000 ltr capacity water tanker was engaged.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Thick forest surrounding the mine lease. Aesthetic beauty in and around the mine maintained

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 2020 A.R. Submitted up to 2019-20	A.R Submitted on 30.06.2020	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager - T. Shri.Pompapathi G Mining Engineer Shri.Manjunath a. Geologist - Shri.S.Srinivas	Same Mines Manager and Mining Engineer were present during the course of inspection along with Shri. Jitta Shrikanta Geologist.	Notice of appointment of Geologist submitted.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current workings (O/C) - 7.73 Ha., Used for waste disposal - 10.72 Ha., Occupied by plant, buildings, residential, welfare buildings & roads - 0.50 Ha., Other purposes (Stockyard , safety zone and others) - 17.47	Appears to be correct	
9d	Scrutiny of Annual return on afforestation	1350 WML @ 75% survival rate	Appears to be correct	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No generation of mineral reject	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock : OB ,Production and CB - Nil Dump working : OB and CB - 27009.06 MT	Appears to be correct	The mine was started on 20.05.2020.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Nil	No production in FY 2019-20 for the want of statutory clearances.	The mine was started on 20.05.2020
9h	Scrutiny of Annual return on fixed assets	24,49,095 Rs including plants, machineries and transport equipments	Appears to be correct	

9k	Scrutiny of Annual return on mining machineries	Excavator - 1 No. Wheel Loader -1 No.	Appears to be correct,Old crusher which is non operational
		Dumpers - 2 No. (16 Ton) Water tanker - 1 No. Crusher 100 TPH - 1 NO.	

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)	24/09/2020			
MCDR17	Rule 11(1)	24/09/2020		08/10/2020	

Date :

(ARUN KUMAR)

Indian Bureau of Mines