# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### MCDR inspection REPORT

#### Bangalore regional office

Mine file No : KNT/BLR/FE/384/BNG Mine code : 30KAR03055

(i) Name of the Inspecting : S19 ) SANDEEP KUMAR SINGH

Officer and ID No.

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine : Sri.Pompapathi G (Mine manager), Sri.M. Peddanna (Geo

Official with Designation

(iv) Date of Inspection : 18/08/2022
(v) Prev.inspection date : 19/04/2010

PART-I : GENERAL INFORMATION

L. (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.padmar:

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

Address for : M/s ZEENATH TRANSPORT COMPANY,

correspondance 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 :

Agent : Syed Aslam

Zeenath Transport Company Zeenath House, Cowl Bazar Bellary BELLARY KARNATAKA

Phone: 08392240085 FAX : 08392240462

Mining Engineer

Name : Imthiyaz.V,Full Time

Qualification : BE MINING WITH SECOND CLASS MINING CERTI

Appointment/ : 09/11/2021

Termination date

Geologist

Name : MEKALA PEDDANNA, Full Time

Qualification : Msc GEOLOGY Appointment/ : 20/09/2021

Termination date

Manager

Name : G. Pompapathai

Qualification : FCC

Appointment/ : 23/05/2020

Termination date

6. Date of approval of Mining
Plan/Scheme of Mining
Mining Scheme rule 22 MCR1960
Renewal under rule 22 MCR1960
Mining Scheme rule 12 MCDR1988

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
MP modif under 17(3) MCR 2016 22/09/2020
Modif.approved Mining Scheme 23/07/2021

23/10/1989

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

# Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	No Proposals. (2021-22)	06 DTH bore holes were drilled in the year 2021-22 amounting to 220 M & 02 Trial pits,	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposals	Exploration carried out By Sri Balaji (DTH Boreholes) Borewells, SMIORE Colony, Sandur. The expenditure incurred for putting Borehole Drilling and sampling analysis around 1.25 lakhs	As reported by the Lessee during inspection.
1d	Balance area to be explored to bring Geological axis in 1 or 2	G-1-25.70 ha G-3-10.72 Ha	G-1-25.70 ha G-3-10.72 Ha	Exploration proposals incorporated in the modified mining plan to upgrade G-3 area to G-1 in accordance with M(EMC) Rules 2015 & rule 12(4) of MCDR 2017.
1e	Balance reserve as on 01/04/20	74,73,961 MT as on 01.07.2021 with avg grade 52.53% Fe for float ore, 60.34% Fe for Reef ore & 44.4% Fe for HSIO.	74,39,781 MT as on 01.04.2022	As per AR submitted for the year 2021-22.

1f General remarks of inspecting officers on geology, exploration etc

i)There is no HSIO intersection in any of the borehole/trial pit logs and the lithology as shown in the Geological section. The Complete Reserve/Resource estimation to be re-estimated considering horizontal & vertical influence as per M(EMC) Rules 2015. The same was incorporated in the modified mining plan. ii) Exploration proposals incorporated in the modified mining plan to cover entire area to G-1 both lateral & vertical in accordance with rule 12(4), MCDR 2017 & M(EMC) Rules 2015.

### Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area		Actual work carried out within the proposed extent as per the proposal.	NIL

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	<del>-</del>	Separate benches maintained in OB.	NIL
2c	Stripping ratio or ore to OB ratio	1:0.07	1:0.07	ROM- 80230 Tonnes WASTE - 5404 Tonnes. As reported in AR 2021-22
2d	Quantity of topsoil generation in m3	No Proposal	NIL	NIL
2e	Quantity of overburden generation in m3	5012 tonnes (2574 +2438) ~2506 Cu.m for the year 2021- 22	5404 tonnes~2702 Cum	As reported in AR 2021-22.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The plans and sections required under these rules shall be maintained up to date showing also the respective proposal of approved mining plan for various activities pertaining to that year, within three months in case of category 'A' mines as referred to in clause (a) of sub-rule (2) of rule 55. It was observed during inspection that the plans maintained have not shown the respective proposal of approved mining plan as per the provision of this rule.	Violation issued under Rule 31(4) of MCDR 2017.

# Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 pits proposed for production One in float ore & one in Reef zone.	Working carried out in 2 pits. float & Reef ore as per the proposal	NIL

3b	Quantity of ROM mineral production proposed	82000 tons proposed	80230 tons achieved	As per Monitoring Committee guidelines 80240 tons (CEC Limit). Actual figures as reported in AR 2021-22.
3c	Recovery of sailable/usable mineral from ROM production	100 % proposed	100 % achieved	NIL
3d	Quantity of mineral reject generation	No Proposal	NIL	As reported in AR 2021-22.
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	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	Only dry crushing & screening proposed	Dry crushing & screening carried out as per the proposal.	Capacity of crushing plant installed 100 TPH, Screening 150 TPH
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting required in portion of reef zone only.	No drilling and blasting were carried out in the mineral benches during the year 2021-22.	Excavator deployed to in the float ore & Reef Zone.

3k	Provision of mining machineries in mineral benches	Excavator-1.6 Cum- 1no. Wheel loader-2 Cum-1 no. Tippers-16 tons-4 nos. Water tanker- 12 KL-1 no. Drill-115 mm- 1no. Crusher-100 TPH	Excavator-1.6 Cum- 1no. Wheel loader-3 Cum-1 no. Tippers-8 Cum-2 nos. Water tanker-12 KL-1 no. Crusher100 TPH	As reported in AR 2021-22.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	7.5 m bench height proposed in Reef & 3 m height in float	Bench height maintained in Float & reef as per proposal.	NIL
3m	Total area covered under excavation/pits	11.98 Ha till end of the plan period	10.27 Ha. As on 1.04.2022	As reported in AR 2021-22.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.07	1:0.07	ROM- 80230 Tonnes WASTE - 5404 Tonnes. As reported in AR 2021-22
30	Total area put in use under different heads at the end of year	Area under Mining - 11.98 Ha Waste dumps - 10.72 Ha. Infra & roads- 0.95 ha At the end of the plan period 31.03.2025.	Area under Mining - 10.27 Ha Waste dumps - 10.72 Ha. Infrastructure & Roads - 0.99 Ha (As on 31.03.2022)	As reported in AR 2021-22.

3p Production of ROM mineral during the last as applicable

2016-17: 36000 2016-17: Nil 2017-18:36000 2017-18: Nil 2018-19: 36000 2018-19: Nil five year period 2019-20:36000 2019-20: Nil 2020-21:69500 2020-21:36000 2021-22:82000 2021-22:80230

> (In tons) (In tons)

The mining operation was started on 22.05.2020 (For the want of statutory clearances & permission from the Monitoring Committee). As per Monitoring Committee guidelines 80240 tons (CEC Limit).

3q General remarks of inspecting officers on method of mining etc.

The satellite image has not been submitted in accordance with the Standard Operating Procedures under sub rule (5) of rule 34A of MCDR, 2017 for carrying out drone survey and submission of Digital Aerial Images of Mining areas. The submitted image resolution is 1.6 m which is not as per the SOP. Also, the establishment of Ground Control points, Data output and format, Output data submission form for satellite image for the year, have not been done in accordance

Violation issued under Rule 34A(2) of MCDR 2017.

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 proposed for OB. Temporary Dump proposed for OB (Section D-D').	The waste dumping for the year 2021-22 was proposed at temporary dump location N-1674862 to 1674890, E-656307 to 656341. It was observed during inspection that temporary dumping was not carried out at the earmarked location as per the proposal.	Violation issued under Rule 11(1) of MCDR 2017.

with the SOP.

4b	Location of topsoil, OB and mineral reject dumps	Temporary dump for OB (Section D-D'). N-1674862 to 1674890, E-656307 to 656341.	The waste dumping for the year 2021-22 was proposed at temporary dump location N-1674862 to 1674890, E-656307 to 656341. It was observed during inspection that temporary dumping was not carried out at the earmarked location as per the proposal.	Violation issued under Rule 11(1) of MCDR 2017.
4c	Number of dumps within lease area and outside of lease area	WML: 6 Dumps ID-1, ID-2, ID-3,1D-4 One Temporary dump & One Active dump. OML: NIL	WML: 6 Dumps ID-1, ID-2, ID-3,1D-4 One Temporary dump & One Active dump. OML: NIL	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Temporary dump within UPL. All other 5 dumps (ID- 1,2,3,4 & AD) outside UPL	Temporary dump within UPL. All other 5 dumps (ID-1,2,3,4 & AD) outside UPL	As per the current exploration data.
4e	Number of active and alive dumps.		1.Temporary dump, 1 Dump (AD)	NIL
4f	Number of dead dumps.	4 Dead Dumps (ID-1, ID-2, ID-3, ID-4.	4 Dead Dumps (ID-1, ID-2, ID-3, ID-4.	NIL
<b>4</b> g	Number of dumps established.	No Proposal	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	NIL	NIL
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	NIL	NIL
4j	Number of settling ponds	No Proposal	NIL	NIL

4k Specific comments of inspecting officer on waste dump management

The waste dumping for the year 2021-22 was proposed at temporary dump location N-1674862 to 1674890, E-656307 to 656341. It was observed during inspection that temporary dumping was not carried out at the earmarked location as per the proposal. Violation issued under Rule 11(1) of MCDR 2017.

### 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	NIL
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 specific comments.

Progressive Mine Clousre Plan:

Sl.No. Item	Propasals Actual work	
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ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Annual report on PMCP to be submitted before 1st of July every year.	Submitted on 30.05.2022	NIL
6b	Area available for rehabilitation (ha) .	0.23 Ha. safety zone & 4.36 Ha. Inactive dumps	-	As reported in Annual PMCP report 2021-22
6c	afforestation done (ha).	0.23 Ha. safety zone & 4.36 Ha. Inactive dumps		As reported in Annual PMCP report 2021-22
6d	No. of saplings planted during the year	230 saplings proposed - Green Belt, 1000 saplings -Inactive Dumps in gap area.	1650 saplings planted including safety zone & inactive dumps.	Safety Zone: 400 saplings. Inactive dump: 1250 saplings.
6e	Cumulative no .of plants	15,112 nos. till 2021-22.	26,351 nos. of Cumulative plants	As reported by Lessee during inspection.
6f	Any other method of rehabilitation	No proposal	NIL	NIL
6g	Cost incurred on watch and care during the year	61,500 INR. Proposed for the year 2021-22	As per proposal.	NIL
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)Afforestati 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
61	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	0.23Ha, 230 nos. of saplings (Gap Plantation) proposed	1.164 ha with 400 nos. of saplings (Gap Plantation	Gap plantation done in Safety zone.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.23Ha, 230 nos. of saplings (Gap Plantation) proposed	1.164 ha with 400 nos. of saplings (Gap Plantation	Gap plantation done in Safety zone.
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	0.23Ha, 230 nos. of saplings (Gap Plantation) proposed	1.164 ha with 400 nos. of saplings (Gap Plantation	Gap plantation done in Safety zone.
бр	Compliance of environmental monitoring (core zone and buffer zone)	Environment monitoring proposed in buffer zone and core Zone.	Environmental monitoring for Air & water carried out. Monitoring report of Jan-22 checked during inspection. Parameters within limit.	It was observed during inspection that noise monitoring in core and buffer zone are not carried out as per the proposal and mine plan conditions. Violation issued under Rule 11(1) of MCDR 2017.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			It was observed during inspection that noise monitoring in core and buffer zone are not carried out as per the proposal and mine plan conditions. Violation issued under Rule 11(1) of MCDR 2017.

## Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks	
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Only dry crushing & Screening Proposed	Crushing Plant -100TPH, Screening Plant 150TPH	NIL	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	No grade wise sorting proposed	NIL	Dry Crushing and Screening Method Product Size: 0-10mm 10-40mm.	
7c	Different grade of mineral sorted out at mines.	No sorting proposed	Lumps 60-62% Fe, 62-65% Fe. Fines Below 55% Fe. 55-58% Fe 58-60% Fe 60-62% Fe	As reported in AR 2021-22.	
7d	Any beneficiation process at mines	No proposal	NIL	NIL	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The mineral conservation activities are carried out inside mine as per the proposal.	

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	NIL	NIL
d8	Concurrent use or storage of topsoil	No proposal	NIL	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB generated is proposed to be dumped in temporary dump.	The waste dumping for the year 2021-22 was proposed at temporary dump location N-1674862 to 1674890, E-656307 to 656341. It was observed during inspection that temporary dumping was not carried out at the earmarked location as per the proposal.	Violation issued under Rule 11(1) of MCDR 2017.

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	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	15,112 nos. till 2021-22.	26,351 nos. of Cumulative plants	As reported by Lessee during inspection.
8g	Survival rate	70% proposed	75% achieved	As reported in AR 2021-22 by the Lessee.
8h	Water sprinkling on roads to control airborne dust	sprinkling on	airborne dust with 12 KL, lno of water sprinkler.	NIL
8i 	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mines looks good.

# Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	up to July		NIL

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager - Shri. Pompapathi G Mining Engineer Shri Imthiyaz. V Geologist-Shri M. Peddanna	Appears	to be	correct.	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	workings (O/C) - 10.27 Ha., Used for	Appears	to be	correct.	NIL
9d	Scrutiny of Annual return on afforestation	1650 nos. of saplings within ML area with 75% survival rate	Appears	to be	correct.	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	Appears	to be	correct.	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore			to be	correct.	NIL

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production-1068.87 Rs/ton  Ex- mine price (Rs/ton): Lumps 60-62%- Rs. 8280. 62-65%- Rs.4941. Fines: Below 55%- Rs. 2551. 55-58% - Rs. 2645. 58-60%- Rs. 3388. 60-62%- Rs. 4370.	Appears	to be	correct.	NIL
9h	Scrutiny of Annual return on fixed assets	Rs. 17,69,471 including plants & machineries	Appears	to be	correct.	NIL
9k	Scrutiny of Annual return on mining machineries	Excavator-1.6 Cum- 1no. Wheel loader-3 Cum-1 no. Tippers-8 Cum-2 nos. Water tanker- 12 KL-1 no. Crusher100 TPH	Appears	to be	correct.	NIL

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

Violation observed			Show couse position		
Rule 1	NO.	Issued on	Compliance on	Rule NO.	Issued on Compliance on
MCDR17	Rule 11(1)	01/09/2022	06/12/2022		
MCDR17	Rule 34(1)	01/09/2022	06/12/2022		
MCDR17	Rule 31(1)	01/09/2022	06/12/2022		

Date :

(SANDEEP KUMAR SINGH)

Indian Bureau of Mines