

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

Check up inspection REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/455/BNG

Mine code : 30KAR03160

- (i) Name of the Inspecting : **J103**) **V. JAYAKRISHNA BABU**
Officer and ID No.
- (ii) Designation : Controller of Mines
- (iii) Accompanying mine : J.Srikant - Manager, D.Srinivas - Asst Mines Manger
Official with
Designation
- (iv) Date of Inspection : 10/05/2022
- (v) Prev.inspection date : 20/01/2018

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 : M/S.ZEENATH TRANSPORT COMPANY,
correspondance : 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

Geologist

Name : N. Shiva Prasad., Full Time
 Qualification : M.sc Geology
 Appointment/ : 10/05/2022
 Termination date

Manager

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

Manager

Name : J.Srikanth
 Qualification : B.E.MINING
 Appointment/ : 01/10/2018
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Fresh under rule 22 MCR1960	06/04/2004
		Modif.of approved Mining Plan	02/04/2008
		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
		MP review under 17(1) MCR 2016	03/01/2021

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	NIL	So far 55 Coredrillholes & 8 DTH holes are drilled in the ML area, total meterage 2830.3 mtrs.
1b	Exploration over lease area for geological axis 1 or 2		G1: 13.75 Ha. G2: 33.42 Ha. G3: 2.56 Ha.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Not applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	G2 Level exploration is done.
1e	Balance reserve as on 01/04/20		12.71 MMT	Satisfactory.
1f	General remarks of inspecting officers on geology, exploration etc			

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N1667619 TO N1667892 E660908 TO E661164. N1667619 TO 1667892 E660908 TO 661164	N1667619 TO N1667892 E660908 TO E661164, N1667619 TO 1667892 E660908 TO 661164	Work carried out in F, G, 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.	All 5benches contain OB & ore.
2c	Stripping ratio or ore to OB ratio	1: 0.10	1: 0.10	Ratio is in Tons

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	50108Tonnes	50100Tonnes	Bulk density: Iron ore - 2.7 tons/Cu.mtr Lateritic Lumpy - 2.7 tons/ Cu.mtr Waste - 2.0 tons/Cu.mtr
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Satisfactory.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit N 1668404 - 1667668 E 660340 - 661221	Working carried out in Single pit	1000 L X 175W X 79 D
3b	Quantity of ROM mineral production proposed	4,80,000 TONS	4,69,700 TONS	As per CEC Cap the restriction in production is reported.
3c	Recovery of sailable/usable mineral from ROM production	95 %from Iron Ore zone 90 % from lateritic lumpy ore recovery proposed	95 % from Iron Ore zone 90 % from lateritic lumpy ore	Measures taken for recovery to be improved.
3d	Quantity of mineral reject generation	No proposal	NIL	During the plan period, there is no mineral rejects generation from this Mine.
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	NIL	

3f	Quantity of sub grade mineral generation.	No proposal	NIL	There is no Sub-grade generation from this Mine.
3g	Grade of sub grade mineral generation	No proposal	Not applicable	
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	Not applicable	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. (31)

3k	Provision of mining machineries in mineral benches	Proposed mining machineries in mineral benches Volvo Excavator 247 Hp -2. Volvo Excavator 205 Hp -1. Rock Breaker - 1 Volvo Front Loader, 243 HP - 2. Tractor Mounted Compressor 47 HP - 1 Portable Compressor, 180 HP - 1. Jack hammer - 1. Wagon Drill BVB 25 - 1 Leyland Tippers 2516 - 15. Tippers 1612 - 1. Bolero, Camper & Jeep - 3. HSD Tanker - 1. Water Tanker 1613 - 4. Workshop Air Compressor - 1. 1109 Staff Bus - 1. 709 Staff bus - 1.	1. Back Hoe 2.20 cum - 2 2. Wheel Loader 3.00 cum - 2 3. Tipper 8.cum - 15 N0.s 4. Water Tanker 12000.00 Ltr - 4 5. Generator (Diesel) 50KWH - 1 6. Generator (Diesel) 30KWH - 1 7. Generator (Diesel) 6KWH - 1 8. Air Compressor 250cum/MN - 1 9. Jeep/Tractor 47.00 HP - 2 10. Crusher 100.00 T/H - 2 11. Conveyer (Elect) 150T/H - 2 12. Back Hoe 1.600 cum - 1	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed bench Height= 7.5 mt (Avg.) Height- 7.5 m Width=8.0 mt Width-8.0 - 10mt	--	
3m	Total area covered under excavation/pits	16.0Ha at the end of plan period 2021-22. Actual 16.00 Ha (by the end of 2021-22).	--	

3n	Ore to OB ratio for the pit/mine during the year.	1: 0.10	1: 0.10	Ratio is 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 -16.00Ha, Used for waste Disposal - 7.00 Ha. Occupied by plant,buildings,resident ial,welfare buildings &Roads - 2.65 Other purpose (Stock yard, green belt, environment production work - 24.08	--
3p	Production of ROM mineral during the last five year period as applicable	2016-17: 4,60,000 2017-18: 4,80,000 2018-19: 4,80,000 2019-20: 4,80,000 2020-21: 4,80,000 2021-22: 4,80,000	2016-17: 4,59,700 2017-18: 4,79,700 2018-19: 4,79,820 2019-20: 4,80,000 2020-21: 4,80,000 2021-22: 4,69,700	All units in tons. Actual production is within in the proposed limits.
3q	General remarks of inspecting officers on method of mining etc.			Satisfactory.

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	N 1667353-1667456 E 661321-661415	N 1667353-1667456 E 661321-661415	No separate OB Dump observed in the Mine.

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)	Active Dump:N 1667353- 1667456 E 661321- 661415 Inactive Dump:N 1668557- 1668288 E 659825 - 660008	Active Dump:N 1667353- 1667456 E 661321- 661415 Inactive Dump: N 1668557-1668288 E 659825 - 660008	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.	
4f	Number of dead dumps.	One dead dump.	One dead dump located at South western side of the ML.	
4g	Number of dumps established.	1 dead dump.	One dead dump stabilized & Some portion of Active Dump.	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	NIL	Completed as per proposal previously at toe of Dump RW-2679 mtrs GW - 2626mtrs (PMCP)
4j	Number of settling ponds	No proposals	NIL	6 No. of Settling tanks constructed in the past & maintained. (PMCP)
4k	Specific comments of inspecting officer on waste dump management			Satisfactory.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	Not applicable	--
5b	Area under backfilling of mined out area	No proposal	Not applicable	--
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Not applicable	--
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	--
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No remarks.

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.	17.06.2021(PMCP)
6b	Area available for rehabilitation (ha) .	No proposal	NIL	
6c	afforestation done (ha).	Gap filling Area	Gap filling done in safety zone& inactive dump.	3.45 ha covered under safety zone& inactive dump
6d	No. of saplings planted during the year	Safety zone= 250 saplings Dump= 250 Saplings	Safety zone= 450 saplings Inactive dump= 2150 saplings Total =2600 saplings	Avenue (Out side ML area) =400 saplings

6e	Cumulative no .of plants	Not specified	WML:Agave -135000 Saplings - 68800 Nos. Seeds - 480 Kg OML: Agave -25000 Nos. Saplings - 23790 Nos.	6.65 Ha covered within ML area.
6f	Any other method of rehabilitation	No proposal	0.3 Ha of dump slope covered with Coir matting done during 2013.	
6g	Cost incurred on watch and care during the year	No proposal	NIL	
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	Gap filling done in Safety Zone.

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	NIL	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	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.	Environmental monitoring is carried out by Cosmo Conscious Research Laboratory, Bellary.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Satisfactory.

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.	2 units of dry crushing & screening plants.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Grade wise sorting proposed Mechanically with help of Crusher & Screening plant.	Crushing & Screening process are in under process.	Screening plant - 150TPH. Crusher - 100 TPH.

7c	Different grade of mineral sorted out at mines.	0-55% 55-58% 58-60% 60-62% 62-65% +65%	0 -55 % 55-58% 58-60% 60-62% 62-65% Are graded and dispatched.	
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			Satisfactory.

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 2021-22.
8b	Concurrent use or storage of topsoil	No proposal	Not applicable.	--
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed separate dump for waste /OB.	Separate dump for waste /OB maintained.	--
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not applicable.	--

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not applicable.	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.	2600 saplings planted inside and 400 saplings outside ML area.	So far 44310 saplings planted on old dumps and 24490 saplings planted in safety zone area.
8g	Survival rate	80%	80%	
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.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Returns submitted up to April2022 Annual Returns submitted up to 2020-21	Annual Returns submitted on 30.6.2021	Verified.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri. J Srikanth - Mining Engineer cum Manager Sri. N Siva Prasad - Geologist	Verified both were present on the day of inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) workings - 16.00 Ha, Used for waste Disposal -7.00 Ha. Occupied by plant, buildings, residential, welfare buildings & Roads - 2.65 Other purpose (Stock yard, green belt, environment production work - 24.080	Appears to be correct.
9d	Scrutiny of Annual return on afforestation	Within lease area= 2600 saplings Outside lease Area = 400 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 Annual return on ROM stock and/or graded ore	ROM: O/s - 300.00Tons, production 4,8,000 tons, C/s -300 tons Dump working O/s = C/s =300 tons	Appears to be correct.

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production =Rs.534 /ton, Sale value: Lumps -3429 Rs/ton, Fines-1720 Rs/ton, Ex- mine price: Lumps: Below 55 % - 2450 Rs. 55 to 58% - 2835 Rs/ton. 58 to 60 % - 3695 Rs/ton. 60 % to below 62 % Fe: 3656 Rs/ton, 62 % to below 65 % Fe: 4996 Rs/ton. Ex -mine price: Fines: Below 55 % - 740 Rs/ton. 55 to 58% - 1755 Rs/ton., 58 to 60 % - 2671 Rs/ton. 60 % to below 62 % Fe: 3045Rs/ton,	Appears to be correct.
9h	Scrutiny of Annual return on fixed assets	Rs.21546120inc luding plant machinery and transport equipment	Appears to be correct.

9k Scrutiny of 1. Back Hoe
Annual return on 2.20 cum - 2 Appears to be correct.
mining 2. Wheel
machineries Loader 3.00
 cum - 2
 3. Tipper 8.00
 cum - 15
 4. Water
 Tanker
 12000.00 Ltr -
 4
 5. Generator
 (Diesel)
 50.000 KWH - 1
 6. Generator
 (Diesel)
 30.000 KWH - 1
 7. Generator
 (Diesel) 6.000
 KWH - 1
 8. Air
 Compressor
 250.00 cum/MN
 - 1
 9.
 Jeep/Tractor
 47.00 HP - 2
 10. Crusher
 100.00 T/H - 2
 11. Conveyer
 (Elect) 150.00
 T/H - 2
 12. Back Hoe
 1.600 cum - 1

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

Date :

(V. JAYAKRISHNA BABU)

Indian Bureau of Mines