

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

Mining Plan Modification REPORT

Bangalore regional office

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

Mine code : 30KAR03160

- (i) Name of the Inspecting : **S21**) **H M Shivakumar**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : J.Srikanth -Manager & Mining Engineer, D.Srinivas -
Official with
Designation
- (iv) Date of Inspection : 05/07/2023
- (v) Prev.inspection date : 24/05/2016

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** : **50**
- (d) **Date of Expiry** : **18/04/2029**
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

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

Geologist

Name : RASHMI RANJAN SAHU, Full Time
 Qualification : MSC Geology
 Appointment/ : 21/11/2022
 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	6 Core drills (300mtrs)	16 DTH (502Mtrs)	So far 55 Coredrillholes & 18 DTH holes are drilled in the ML area, total meterage 3021.3mtrs
1b	Exploration over lease area for geological axis 1 or 2		G1: 34.63 Ha. G2: 12.54 Ha. G3: 2.56 Ha.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Sri. Balaji Borewells, Total - 2,09,238.00	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserve as on 01/04/20	5.058Million Tonnes Reserves as on 01/04/2021 as per the Approved Mining Plan.	4.392 MT	As per AR-22-23 submitted.
1f	General remarks of inspecting officers on geology, exploration etc			Iron ore deposit of the area is of regular habit and contains HIO, HSIO & Float Ore with narrow cross cutting weathered dykes. At some places shale occurs as intercalated waste. As per information provided in draft Mining Plan Out of 49.73 Ha, 34.63 Ha is covered under G1 level of exploration, 12.54 Ha under G2 and 2.56 Ha under G3.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	N1668377 to N1668450 &E660385 to E660396. N1668375 to N1668198 & E660442 to E660680, N1667709 to N1667417 & E661232 to E661504, N1667865 toN1667725 &E661036 to E661195, N1668172 to N1668037 & E660673 to E660810, N1668139 to N1668039 & E660666 to E660813, N1667822 to N1667700 & E661014 to E661161, N1667799 to N1667747 & E661019 to E661085,	N1668378 to N1668449 & E660386 to E660395. N1668374 to N1668199 & E660442to E660679, N1667708 to N1667418 & E661233 to E661503, N1667864 to N1667726 &E661037 to E661194, N1668172 to N1668036 & E660673 to E660809 N1668138 to N1668040 & E660667 to E660812, N1667821 to N1667701 & E661015 to E661162, N1667798 to N1667748 & E661020 to E661084,	Work carried out in C,D,E,F,G,H & K1,L,L1,M,M1,N,O,P , Q, Rsections. Workings are extended over 0.24between sections P-P' & R-R Ha beyond the proposed grid intervals. Violation issued.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches for OB and mineral proposed	All the five benches worked contain OB and mineral.	All 5 benches contain OB & ore.
2c	Stripping ratio or ore to OB ratio	1: 0.11	1: 0.11	ROM-4,80,000tons Waste-56,200tons
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	28128.5 m3	28,100m3	As on 31.03.2023

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	The entire deposit is worked with one single pit and systematically developed suitable to the type of deposit with varying grades of Iron ore which helps in proper blending of the produce to marketable grade.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit N 1667380 - 1668450 E 660357 - 661496	Working carried out in Single pit	1514 L X 92W X76 D
3b	Quantity of ROM mineral production proposed	4,80,000 TONS	4,80,000 TONS	Target as per Monitoring committee guideline (4,80,000MT for F.Y. 2022-23)
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
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	Only dry crushing & screening	Crusher 100 TPH-2Nos. Screening 150TPH-2Nos.	Crusher 100 TPH- 2Nos. (1-Metco, 1-Extec) Screening 150TPH- 2Nos. (2-Extec)
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	NIL	No beneficiation study proposed or carried out. Only crushing & screening of ROM is done.
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting proposed in mineral benches	60% of the total material handled is drilled & blasted using Slurry explosive with D/cord& cord delay /Nonels.	Drilling & blasting carried out for hard strata.

3k	Provision of mining machineries in mineral benches	<p>Proposed mining machineries in mineral benches</p> <p>Volvo Excavator 247 Hp -2.</p> <p>Volvo Excavator 205 Hp -1.</p> <p>Rock Breaker - 1</p> <p>Volvo Front Loader,243 HP - 2.</p> <p>Tractor Mounted Compressor 47 HP - 1</p> <p>Portable Compressor,180 HP - 1.</p> <p>Jack hammer - 1.</p> <p>Wagon Drill BVB 25 - 1</p> <p>Leyland Tippers 2516 - 15.</p> <p>Tippers 1612 - 1.</p> <p>Bolero, Camper & Jeep - 3.</p> <p>HSD Tanker - 1.</p> <p>Water Tanker 1613 - 4.</p> <p>Workshop Air Compressor - 1.</p>	<p>1. Back Hoe 2.20 cum - 2</p> <p>2. Back Hoe 1.60 cum - 1</p> <p>3.Wheel Loader 3.00 cum - 2</p> <p>4. Tipper 16.000 cum - 8</p> <p>5. Water Tanker 10000.00 Ltr - 4</p> <p>6.Generator (Diesel) 50.000 KVH - 1</p> <p>7.Generator (Diesel) 30.000 KVH - 1</p> <p>8. Air Compressor 250.00 cum/MN - 1</p> <p>9. Jeep/Tractor 47.00 HP - 2</p> <p>10. Crusher 100.00 T/H - 2</p> <p>11. Conveyor (Non-Elect) 150.00 T/H - 2</p> <p>12.Drill Machine (BVB25)-115mm dia-1</p>	<p>The machineries reported are found engaged in the Mine Site on the day of inspection.</p>
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	<p>Proposed bench Height- 7.5 m</p> <p>Width-8.0 - 10mt</p>	<p>Height= 7.5 mt (Avg.)</p> <p>Width=8.0 mt</p>	
3m	Total area covered under excavation/pits	<p>16.03Ha. at the end of plan period 2022-23</p>	<p>16.27 Ha</p>	<p>Workings are extended over 0.24 Ha beyond the proposed grid intervals for the year 2022-2023. Violation issued.</p>

3n	Ore to OB ratio for the pit/mine during the year.	1: 0.11	1: 0.11	ROM-4,80,000tons Waste-56,200tons
3o	Total area put in use under different heads at the end of year	Area under Mining - 16.03Ha, Dumping- 7.88 Ha Mineral Storage - 5.02 Ha Infrastructure & Roads - 3.60 Ha Green Belt - 3.32 Ha Protective measures - 1.61 Ha Others - 12.27 Ha	Covered under current (O/C) workings - 16.27 Ha, Used for waste Disposal - 8.37 Ha. Occupied by plant, buildings, residential, welfare buildings & Roads - 3.60 Ha Other purpose-9.95Ha. (Stock yard-5.02Ha, green belt-3.32Ha, Environment protective measures-1.61Ha) Overlapping area-0.55Ha, Area for Future mining- 11.72Ha.	Excavation and dump are found extended over 0.24 Ha & 0.49 Ha respectively beyond the proposed grid intervals for the year 2022-2023. Violation issued.
3p	Production of ROM mineral during the last five year period as applicable	2018-19: 4,80,000 2019-20: 4,80,000 2020-21: 4,80,000 2021-22: 4,80,000 2022-23: 4,80,000	2018-19: 4,79,820 2019-20: 4,80,000 2020-21: 4,80,000 2021-22: 4,69,700 2022-23: 4,80,000	All units are in tons. Actual production is within in the proposed limits.
3q	General remarks of inspecting officers on method of mining etc.			Mining is by Open Cast Mechanized Mining with excavator tipper combination suitable for the type of deposit.

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	0.03Ha N 1667560-1667610 E 661013 - 661074
4b	Location of topsoil, OB and mineral reject dumps	N 1667560-1667610 E 661013 - 661074	N 1667560-1667610 E 661013 - 661074	

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 1667327- 1667626 E 661012- 661442 Inactive Dump:N 1668557- 1668288 E 659825 - 660008	Active Dump:N 1667328- 1667625 E 661013- 661441 Inactive Dump: N 1668557 -1668288 E 659825 - 660008	Part of the Active Dump (AD) is located within the UPL as per the Approved RUMP.
4e	Number of active and alive dumps.	One active dump(AD1) proposed	One active dump located at South Eastern side of the ML.	Part of this Active Dump (AD) is located within the UPL as per the Approved RUMP.
4f	Number of dead dumps.	One dead dump (ID1)	One dead dump located at North western side of the ML	Stabilized with Plantation and coir matting.
4g	Number of dumps established.	1 dead dump	One dead dump stabilized & Some portion of Active Dump(1.28Ha area)	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 as per the R&R plan in the past.
4i	Length of Retaining wall or garland drain all along dumps	No proposal	NIL	Retaining wall & Garland Drain constructed as per proposal in (2014-15). RW-1=1326 mtrs RW-2= 934mtrs RW-3=419 mtrs Total= 2679mtrs GD1=1340 mtrs GD2=951 mtrs GD3=182mtrs GD4=153 mtrs Total= 2626 mtrs (PMCP)
4j	Number of settling ponds	No proposals	Nil	6 No. of Settling tanks constructed in 2013-14 & maintained as per proposed. (PMCP)

4k	Specific comments of inspecting officer on waste dump management			Waste Dump management is satisfactorily done with all the required engineering measures. However, during the year 2022-2023 the active dump is observed to have been extended over 0.49 Ha beyond the proposed grid intervals for which violation is issued. Also, Part of the Active Dump (AD) is located within the UPL as per the Approved RUMP.
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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	-
5b	Area under backfilling of mined out area	No proposal	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.			No part of the mine pit is fully exhausted for carrying out backfilling.

Progressive Mine Clousre Plan:

Sl.No.	Item	Proposals	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 every year.	PMCP Report is Submitted on 19.06.2023.	19.06.2023 (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 & inactive portion of active dump (1.28Ha).	Total area covered under safety zone- 3.55Ha, Active dump-3.48Ha & inactive dump- 2.2Ha.
6d	No. of saplings planted during the year	Safety zone= 350 saplings Dump= 1325 Saplings	Safety zone= 550 saplings Dump=2950 saplings Total =3500 saplings	Avenue (Outside ML area) =300 saplings
6e	Cumulative no .of plants	Not specified	WML: Agave -137985 Saplings - 72300 Nos. Seeds - 680 Kg OML: Agave -25000 Nos. Saplings - 24090 Nos.	Total area covered under safety zone- 3.55Ha, Active dump-3.48Ha & inactive dump- 2.2Ha.
6f	Any other method of rehabilitation	No proposal	NIL	0.3 Ha proposed Coir matting on dump done during 2013.
6g	Cost incurred on watch and care during the year	No Proposal	Rs. 12,48,692/-	Appears to be in order.
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	350 saplings	550 saplings	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.			All the proposed PMCP activities are being carried out satisfactorily.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Dry crushing & Screening plant.	Screening plant - 150TPH- 2Nos. Crusher - 100 TPH-2Nos. Products are Fines(-10mm), Lumps (5-20mm, 10-40mm).	Grade wise and size wise sorting of ROM is done within the lease area by engaging 2 units of dry crushing & screening plants and dispatched.
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.	Screening plant - 150 TPH, Crushing - 100 TPH
7c	Different grade of mineral sorted out at mines.	51-55% Fe 55-58%Fe 58-60%Fe 60-62%Fe 62-65%Fe +65%Fe	Lumps : 51-55%Fe 55-58%Fe 58-60%Fe 60-62%Fe Fines : Below 55%Fe 55-58%Fe 58-60%Fe 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			Mineral produced is suitably blended to bring it to marketable grade thereby taking care of Mineral Conservation aspect satisfactorily. No mineral beneficiation is being done.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	NIL	No top soil generated during FY 2022-23.
8b	Concurrent use or storage of topsoil	No proposal	No top soil generated during FY 2022-23.	
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	2.2 Ha of inactive dump (ID-1)& 1.28Ha of Inactive portion of Active dump are 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)	Previous Plantation 68800 Proposal for(2022-23)-1675 Cumulative-70475	Previous Plantation 68800 Actual (2022-23) -3500 Cumulative -72300	Gap filling, Inactive dump
8g	Survival rate	70%	80%	As per AR-2022-23.
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 10 KL deployed. Rain guns fitted to water tanker using for dust suppression.

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around the mine is good as with natural vegetation of in the surrounding forest area and plantation carried out by the lessee.
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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 May 2023, On 09/06/2023. Annual Returns submitted up to 2022-23, On 30/06/2023.		Annual Returns submitted on 30.6.2023
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri. J Srikanth - Mining Engineer cum Manager Sri. Rashmi Ranjan Sahu - Geologist.	The reported statutory officials 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 - 16.03 Ha, Used for waste Disposal - 7.88 Ha. Occupied by plant, buildings, residential, welfare buildings & Roads - 3.60 Ha Other purpose- 9.95Ha. (Stock yard-5.02Ha, green belt- 3.32Ha, Environment protective measures- 1.61Ha) Overlapping area-0.55Ha, Area for Future mining- 11.72Ha.	Excavation and dump are found extended over 0.24 Ha & 0.49 Ha respectively beyond the proposed grid intervals for the year 2022-2023. Violation issued. Covered under current (O/C) workings - 16.27 Ha, Used for waste Disposal - 8.37 Ha. Occupied by plant, buildings, residential, welfare buildings & Roads - 3.60 Ha	
9d	Scrutiny of Annual return on afforestation	Within lease area = 3500 saplings @ 80% survival rate Outside lease Area = 300 saplings @ 76% survival rate	Appears to be in order and as per the AR-2022-2023.	Appears to be in order.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	-	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: O/s - 22,000.00Tons, production - 4,80,000 .00 tons, C/s -300.00 tons Dump working: O/s = C/s =300 tons	NIL	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production =Rs.777.52 /ton, Ex- mine price: Lumps: 51 to 55% Fe- 3616.00 Rs/ton. 55 to 58% Fe- 3813.00 Rs/ton. 58 to 60% Fe- 3729.00 Rs/ton. 60 to 62% Fe: 5409.00 Rs/ton, Fines: Below 55% Fe - 1053.00 Rs/ton. 55 to 58% Fe - 1815.00 Rs/ton.,	NIL
9h	Scrutiny of Annual return on fixed assets	Rs.1,60,06,090 Appears to be in order. /-including plant machinery and transport equipment	

9k	Scrutiny of Annual return on mining machineries	1. Back Hoe 2.20 cum - 2 2. Back Hoe 1.60 cum - 1 3.Wheel Loader 3.00 cum - 2 4. Tipper 16.000 cum - 8 5. Water Tanker 10000.00 Ltr - 4 6.Generator (Diesel) 50.000 KVH - 1 7.Generator (Diesel) 30.000 KVH - 1 8. Air Compressor 250.00 cum/MN - 1 9. Jeep/Tractor 47.00 HP - 2 10. Crusher 100.00 T/H - 2 11. Conveyor (Non-Elect) 150.00 T/H - 2 12.Drill Machine (BVB25)-115mm dia-1	The reported machineries are found deployed in the mine on the day of inspection.
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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)	24/07/2023			

Date :

(H M Shivakumar)

Indian Bureau of Mines