

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

**MCDR inspection REPORT
Bangalore regional office**

Mine file No : KNT/BLR/FE/433/BNG

Mine code : 30KAR03154

- (i) Name of the Inspecting : **S19**) **SANDEEP KUMAR SINGH**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri K. Venkatasreedhar, Mine Manager, Shri M.V. Mahe
Official with
Designation
- (iv) Date of Inspection : 21-JAN-23
- (v) Prev.inspection date : 18-MAR-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **S.M.BLOCK**
- (b) **Registration NO.** : **IBM/211/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : KARNATAKA
District : BELLARY
Village : NARAYANPURA
Taluka : SANDUR
Post office : NARAYANPURA
Pin Code : 583119
FAX No. : 08392-260269 (F),
E-mail : mhraomines@gmail.com
Phone : 08392 - 260170, 260626, 93.
- (f) Police Station : Torangallu
- (g) First opening date : 15-MAY-06
- (h) Weekly day of rest : SUN
2. Address for : MR.ARUN CHIRANIA, NOM. OWNER,M/s M.Hanumantha Ra
correspondance H.NO 37, W.NO -17, PATEL NAGAR,Near Park
BELLARY - 583101.
3. (a) Lease Number : KAR1503
- (b) Lease area : 40.47
- (c) Period of lease : 20
- (d) Date of Expiry : 11-DEC-25
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : M. HANUMANTHA RAO
 H.No-37, W.No-17, Ground
 Floor Main Road, Near Park,
 Patel Nagar, Ballari
 BELLARY KARNATAKA
 Phone:08392-260170
 FAX :08392-260269

Owner : Arun Kumar Chirania, Partner M/s M.Hanumantha Rao
 H.No-37, W.No-17, Ground
 Floor Main Road, Near Park
 Patel Nagar, Ballari
 BELLARY KARNATAKA
 Phone: 08392-260170, 2
 FAX : 08392-260269

Mining Engineer

Name : M V Mahesh, Full Time
 Qualification : B. Tech. in Mining
 Appointment/ : 03-OCT-17
 Termination date

Geologist

Name : C. Nagabhushana, Full Time
 Qualification : M.Sc. Geology
 Appointment/ : 03-OCT-17
 Termination date

Manager

Name : K.V.Sreedhar
 Qualification : Dip. in Mining
 Appointment/ : 30-APR-18
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Modif.of approved Mining Plan	31-AUG-06
		Modif.of approved Mining Plan	10-JAN-08
		Mining Scheme rule 12 MCDR1988	05-MAR-13
		Modif.approved Mining Scheme	18-JUN-14
		Mining Scheme rule 12 MCDR1988	03-MAR-16
		MS modif under MCR 1960	07-SEP-16
		MP modif under 17(3) MCR 2016	16-FEB-18
		Modif.approved Mining Scheme	21-MAR-18
		Modif.approved Mining Scheme	13-AUG-19
		MP review under 17(1) MCR 2016	03-JUN-20
		MP modif under 17(3) MCR 2016	20-JAN-21
		MP review under 17(1) MCR 2016	03-FEB-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	No proposal	20 Exploratory boreholes drilled with total meterage of 1142.	As reported in AR 2021-22
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Sri Pruthvi electric & bore wells &2.63 lakh Rupees	As reported by the Lessee during inspection.
1d	Balance area to be explored to bring Geological axis in 1 or 2	G-1-38.67 ha G-2-1.80 ha	G-1-38.67 ha G-2-1.80 ha	As per the ongoing approved document dtd 01/06/2022. Exploration under progress to upgrade the G-2 area to G-1.
1e	Balance reserve as on 01/04/20	5,104,141 tons of iron ore with Fe grade +45 % Fe as on 1.04.2022 (As per the approved document dtd 01/06/2022)	5,104,141 tons of iron ore as on 1.04.2022	As reported in AR 2021-22.
1f	General remarks of inspecting officers on geology, exploration etc			i)The holder of a mining lease shall, on or before the 30th day of June every year submit a digital copy along with a print copy of the surface geological plans and sections maintained under rule 32 along with the annual return. The same has not been submitted. Violation issued under Rule 33 of MCDR 2017.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Eastern pit N- 1657970 - to 1658280, E- 680055 to 680450	Development carried out within the proposed extent as per the proposal	NIL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed in overburden and mineral. 10 meters bench height proposed for both OB & mineral,	The south western portion of the benches of eastern pit between section B-B' to C-C' (N- 1658143, E-680274) have not maintained systematic 10 m bench height & width between 775 mRL to 725 mRL as per proposal.	Violation issued under Rule 11(1) of MCDR 2017.
2c	Stripping ratio or ore to OB ratio	1:2.02(in tons) proposed	1:4.25(in tons) achieved	Ore-156150 tons Waste-664900 tons. More waste handling due to encountering interburden as reported by the Lessee during inspection.
2d	Quantity of topsoil generation in m3	No Proposal	NIL	NIL

2e	Quantity of overburden generation in m3	456824 tons~240398 Cu.m.	664900 tons~332450 Cu.m.	<p>i)Part-IV: The Overburden removed (in tonnes) in Part-IV (3) have not been reported correctly in AR 2021-22.</p> <p>ii) Part-V: i) The total quantity of Overburden/Waste removed during the year(tonnes) in Sec 4.2(C) & Quantity disposed in external dumps in Sec 4.2(C) (ii) have not been reported correctly in AR 2021-22. Violation issued under Rule 45(7)</p>
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	<p>i) The south western portion of the benches of eastern pit between section B-B' to C-C' (N-1658143, E-680274) have not maintained systematic 10 m bench height & width between 775 mRL to 725 mRL as per proposal. Violation issued under Rule 11(1) of MCDR 2017.</p>	<p>ii) i)Part-IV: The Overburden removed (in tonnes) in Part-IV (3) have not been reported correctly in AR 2021-22.</p> <p>Part-V: i) The total quantity of Overburden/Waste removed during the year(tonnes) in Sec 4.2(C) & Quantity disposed in external dumps in Sec 4.2(C) (ii) have not been reported correctly in AR 2021-22. Violation issued under Rule 45(7) of MCDR 2017.</p>	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	1 pit proposed for production (Eastern pit)	1 pit (Eastern pit)	Eastern pit (Sec A-A' to E-E)
3b	Quantity of ROM mineral production proposed	2,26,000 tonnes proposed	1,56,150 tonnes achieved	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	There are no Mineral rejects for iron ore generation proposal as per the approved document whereas 65000 tonnes of mineral reject have been reported in Part-V-Sec-4.2(B) of AR 2021-22. Violation issued under Rule 45(7) of MCDR 2017.
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	Nil	There are no Mineral rejects for iron ore generation proposal as per the approved document whereas 65000 tonnes of mineral reject have been reported in Part-V-Sec-4.2(B) of AR 2021-22. Violation issued under Rule 45(7) of MCDR 2017.
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	Crusher-140 TPH-1No. Screen=150 TPH-1 No.	NIL
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 is proposed.	Drilling & Blasting carried out with slurry explosives in conjunction with detonators	Drill-100 mm-1 no.
3k	Provision of mining machineries in mineral benches	Mining Machineries proposed:	1.Excavator- 9 nos.-(0.9 Cum, 1.2 Cum, 1.4 Cum 1.6 Cum& 1.9 Cum). 2.Wheel loader-3 nos. (2.5 Cum) 3.Tipper-16 nos.- (14 & 16 Cum) 4.Drill-1 no. (100 mm) 5.Water tanker- 2 nos.- (8 KL)	The drill, Crusher details have not been furnished in Part V-Sec 5. Violation issued under Rule 45(7) of MCDR 2017.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10 m bench height proposed for both OB & mineral.	The south western portion of the benches of eastern pit between section B-B' to C-C' (N-1658143, E-680274) have not maintained systematic 10 m bench height & width between 775 mRL to 725 mRL as per proposal.	Violation issued under Rule 11(1) of MCDR 2017.
3m	Total area covered under excavation/pits	9.50 Ha as per the approved document dtd 01/06/2022	9.50 Ha as on 1.04.2022	As reported in AR 2021-22.

3n	Ore to OB ratio for the pit/mine during the year.	1:2.02 (in tons) proposed	1:4.25 (in tons) achieved.	Ore-156150 tons Waste-664900 tons. More waste handling due to encountering interburden as reported by the Lessee during inspection.
3o	Total area put in use under different heads at the end of year	Area under Mining - 9.50 Ha, Waste Dump- 9.51 Ha Infrastructure & roads - 2.34 Ha as per the approved document dtd 01/06/2022	Covered under current (O/C) workings - 9.50 Ha, Used for waste Disposal - 9.51 Ha. Occupied by plant, buildings, residential, welfare buildings & Roads - 2.34 Ha	Land use as reported in AR 2021-22.
3p	Production of ROM mineral during the last five year period as applicable	2017-18:144000 2018-19: 144000 2019-20: 144000 2020-21: 144000 2021-22: 226000 (In tonnes)	2017-18: 99990 2018-19: 143990 2019-20: 143990 2020-21: 143990 2021-22: 156150 (In tonnes)	NIL

3q	General remarks of inspecting officers on method of mining etc.	i)The south western portion of the benches of eastern pit between section B-B' to C-C' (N-1658143, E-680274) have not maintained systematic 10 m bench height & width between 775 mRL to 725 mRL as per proposal. Violation issued under Rule 11(1) of MCDR 2017.	ii)There are no Mineral rejects for iron ore generation proposal as per the approved document whereas 65000 tonnes of mineral reject have been reported in Part-V-Sec-4.2(B) of AR 2021-22.The drill, Crusher details have also not been furnished in Part V-Sec 5. Violation issued under Rule 45(7) of MCDR 2017.
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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 at Dump-4	Separate dumping of OB carried out at Dump -4.	Temporary dumping at western pit (Dump-4)
4b	Location of topsoil, OB and mineral reject dumps	Location of OB Dump-4 N1657750 to1657920, E680220 to 680375.	OB dumping carried out at Dump-4 within the proposed extent as per the proposal.	NIL
4c	Number of dumps within lease area and outside of lease area	4 dumps within the lease area (Dump-1,2,3 &4)	4 dumps within the lease area (Dump-1,2,3 &4)	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	All four dumps proposed within the UPL	All 4 dumps are within the UPL.	Temporary dumps. As per the current exploration data.

4e	Number of active and alive dumps.	On active dump-Dump-4.	On active dump-Dump-4. It is observed during course of inspection from Surface Plan that the waste dumping proposals for the year 2022-23 to 2025-26 in the modification of Mining Plan approved dated 01/06/2022 is proposed at the location, having course of Seasonal Nallah at South Eastern part of the lease between Sec E-E' to G-G'.	Advise letter sent to lessee dated 08/03/2023 directing to take necessary actions for compliance of the statutory norms and obtain statutory permissions from all related Statutory authorities before commencement of the Waste dumping at the proposed location
4f	Number of dead dumps.	3 dead dumps (Dump-1,2 &3)	3 dead dumps (Dump-1,2 &3)	NIL
4g	Number of dumps established.	No proposal	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	270 meter Retaining wall and 241-meter garland drain proposed along the dump-4.	Retaining wall and garland drain constructed along Dump-4 as per the proposal.	Retaining wall & garland drain construction at Dump no-4
4i	Length of Retaining wall or garland drain all along dumps	270 meter Retaining wall and 241-meter garland drain proposed along the dump-4.	Retaining wall and garland drain constructed along Dump-4 as per the proposal.	Retaining wall & garland drain construction at Dump no-4
4j	Number of settling ponds	No Proposal	NIL	NIL

4k	Specific comments of inspecting officer on waste dump management	It is observed during course of inspection from Surface Plan that the waste dumping proposals for the year 2022-23 to 2025-26 in the modification of Mining Plan approved dated 01/06/2022 is proposed at the location, having course of Seasonal Nallah at South Eastern part of the lease between Sec E-E' to G-G'.	Advise letter sent to lessee dated 08/03/2023 directing to take necessary actions for compliance of the statutory norms and obtain statutory permissions from all related Statutory authorities before commencement of the Waste dumping at the proposed location.
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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	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.	The processed output [digital elevation model (DEM) and Orthomosaic] have 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. Violation issued under Rule 34A. of MCDR 2017.
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Progressive Mine Closure 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 of July every year.	Annual PMCP Report is Submitted on 29.06.2022 through Email.	NIL
6b	Area available for rehabilitation (ha) .	0.50 ha proposed on waste dump	0.5 ha on waste dump	As reported in Annual PMCP report 2021-22
6c	afforestation done (ha).	0.50 ha proposed on waste dump	0.5 ha on waste dump	As reported in Annual PMCP report 2021-22
6d	No. of saplings planted during the year	800 saplings plantation proposed	2356 nos. of saplings planted	As reported in AR 2021-22. Plantation carried on waste dump & green belt.
6e	Cumulative no .of plants	Not mentioned.	Total 29,861 Nos of plants cumulative as on 1.04.2022	As reported in Annual PMCP report 2021-22
6f	Any other method of rehabilitation	No Proposal	NIL	NIL

6g	Cost incurred on watch and care during the year	Rs. 5,35,300 proposed for dump management and watch & care	Rs. 9,03,038 incurred for dump management and watch & care	As reported by the Lessee during inspection.
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) Afforestation 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	No Proposal	NIL	NIL

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No Proposal	NIL	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposal	NIL	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 & buffer zone for Air, water, noise & soil as per the proposal. -22 report available during inspection. Parameters within limit	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations 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.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Only dry crushing & screening proposed	Crusher-140 TPH-1No. Screen=150 TPH-1 No.	NIL
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Dry crushing & screening proposed with grade wise sorting.	Lumps (Fe-grade) : Below 55% 55-58% 58-60% 60-62 % Fines (Fe-grade) : Below 55% 55-58% 58-60 % 60-62 %	Grade as reported in AR 2021-22
7c	Different grade of mineral sorted out at mines.	Dry crushing & screening proposed with grade wise sorting.	Lumps : Below 55% 55-58% 58-60% 60-62 % Fines : Below 55% 55-58% 58-60 % 60-62 %	Grade 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			Mineral conservation activities implemented inside the mine.

Environment:

Sl.No.	Item	Propasals	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	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of OB proposed at Dump-4	Separate dumping of OB carried out at Dump -4.	Temporary dumping at western pit (Dump-4)
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)	Not mentioned.	Total 29,861 Nos of plants cumulative as on 1.04.2022	As reported in Annual PMCP report 2021-22
8g	Survival rate	60 % proposed	80% % achieved	As reported in AR 2021-22.
8h	Water sprinkling on roads to control airborne dust	Water Sprinkling on haul roads proposed to control the air borne dust	Water sprinkling inside the mine carried out by 8 KL water sprinkler- 2 nos.	2 Tankers with capacity of 8 KL utilized for sprinkling of water for dust suppression.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mine is good.

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to Dec-22 on 09-01-2023 A.R. Submitted up to 2021-22 on 28-06-2022	M.R. Submitted up to Dec-22 on 09-01-2023 A.R. Submitted up to 2021-22 on 28-06-2022 The monthly return for the month of Oct-21 has been submitted on 10th November, 2021 which is after the due date. Also, the monthly return for the month of Nov-21 has been submitted on 10th December, 2021	In the instant case the monthly return for both the month of Oct-21 & Nov-21 are submitted 01 day late from the due date of submission. Violation issued under Rule 45(7) of MCDR 2017 for payment of late fine.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer - M.V.Mahesh Geologist - C.Nagabushana Manager - K.V.Sreedhar	Appears to be correct	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered current workings - 9.50Ha. Used for waste disposal - 9.51Ha. Occupied by plant, buildings, residential, welfare buildings & roads - 2.34Ha.	Appears to be correct	NIL
9d	Scrutiny of Annual return on afforestation	2356 nos. of saplings with 80 % survival rate	Appears to be correct	NIL

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	65000 tons with 15 to 44 % Fe	There are no Mineral rejects for iron ore generation proposal as per the approved document whereas 65000 tonnes of mineral reject have been reported in Part-V-Sec-4.2(B) which is not correct.	Violation issued under Rule 45(7) of MCDR 2017.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: O/s -27,990 tons, Production - 1,56,150 tons, C/s - 35,650 tons Graded Ore O/s- 80,601.41 tons Production- 1,48,490 tons Despatch- 1,68,000 tons C/s- 61,091.43 tons. (Includes both lumps & fines)	Part-VI: The Reasons for increase/decrease in production have not been furnished correctly under Part-VI (6).	Violation issued under Rule 45(7) of MCDR 2017.

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production- Rs.2847.83 per ton	Appears to be correct	NIL
		Lumps: Ex-mine Price- Rs. 1078/ton - Below 55% Fe Rs.3546/ton- 55-58% Fe Rs.3351/ton- 58-60% Fe Rs. 4924/ton- 60-62 % Fe Rs. 5026/ton- 62-65 %		
		Fines Rs. 809/ton- Below 55 % Fe Rs.2736/ton- 55-58% Fe Rs.3374/ton- 58-60% Fe Rs.5726/ton- 60-62% Fe Rs.5145/ton - 62-65% Fe		
9h	Scrutiny of Annual return on fixed assets	Rs.5,81,44.235	Appears to be correct	NIL
9k	Scrutiny of Annual return on mining machineries	1.Excavator- 9 nos.- (0.9 Cum, 1.2 Cum, 1.4 Cum & 1.9 Cum). 2.Wheel loader-3 nos. (2.5 Cum) 3.Tipper-16 nos.- (14 & 16 Cum) 4.Water tanker- 2 nos.- (8 KL)	The drill, Crusher details have not been furnished in Part-V-Sec 5.	Violation issued under Rule 45(7) of MCDR 2017.

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)	13-FEB-23	Rule 45(7) (i)	13-FEB-23	16-MAR-23
MCDR17	Rule 31(4)	13-FEB-23			
MCDR17	Rule 33	13-FEB-23			
MCDR17	Rule 34(1)	13-FEB-23			
	Rule 45(7) (i)	13-FEB-23			16-MAR-23

Date :

(SANDEEP KUMAR SINGH)

Indian Bureau of Mines