

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/200/BNG

Mine code : 30KAR03065

- (i) Name of the Inspecting : **J103**) **V. JAYAKRISHNA BABU**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Mr. G. Lakshminarayana, SGM, Mr. Gopal Joshi DGM, Prady
Official with
Designation
- (iv) Date of Inspection : 29/09/2021
- (v) Prev.inspection date : 27/06/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SANKALAPURAM 188 AC**
- (b) **Registration NO.** : **IBM/154/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : KARNATAKA
- District : BELLARY
- Village : KARIGANUR
- Taluka : HOSPET
- Post office : KARIGANUR
- Pin Code : 583201
- FAX No. : 08394-265424 (F),
- E-mail : office@rbssn.com
- Phone : 08394-265011/265825/265424
- (f) Police Station : RURAL POLICE STATION
- (g) First opening date : 23/06/1986
- (h) Weekly day of rest : SUN
2. Address for : M/S.R.B.SETH SHREERAM NARSINGDAS
correspondance : D.No 1499/1, P.B.NO.38, HOSPET,
BELLARY-583201.
3. (a) Lease Number : KAR0219
- (b) Lease area : 111.09
- (c) Period of lease : 20
- (d) Date of Expiry : 22/06/2026
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : R.B.SETH SHREERAM NARSINGDAS
 D.No-1499/1, P.B.NO.38,
 Post-Kariganur HOSPET-583
 201 BELLARY KARNATAKA
 Phone:08394-266011
 FAX :08394-265424

Owner : AJAY SARAF
 D.NO 1499/1, P.O BOX NO 38
 KARIGANUR HOSPET BELLARY
 KARNATAKA
 Phone:
 FAX :

Agent : KANDA SWAMY
 RBSSN PVT LTD BELLARY
 KARNATAKA
 Phone: 990055004
 FAX :

Mining Engineer

Name : Pradyumna R. Urs., Full Time
 Qualification : B.Tech (Mining Engineering) Holder of Sec
 Appointment/ : 15/08/2017
 Termination date

Geologist

Name : Palle Ganesh Kumar, Full Time
 Qualification : M.Sc GEOLOGY
 Appointment/ : 03/12/2020
 Termination date

Manager

Name : GOPAL JOSHI
 Qualification : DIP IN MINING, FCC
 Appointment/ : 15/08/2017
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Existing rule 11 MCDR1988	15/10/1993
		Mining Scheme rule 12 MCDR1988	31/01/2002
		Mining Scheme rule 12 MCDR1988	10/05/2002
		Modif.approved Mining Scheme	08/03/2004
		Renewal under rule 24 MCR1960	22/07/2005
		Mining Scheme rule 12 MCDR1988	13/05/2010
		Mining Scheme rule 12 MCDR1988	12/05/2015
		Modif.of approved Mining Plan	04/01/2016
		Modif.of approved Mining Plan	01/06/2017
		MP review under 17(1) MCR 2016	13/12/2019
		MP modif under 17(3) MCR 2016	11/12/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposals for the FY 2020-21	NIL	No proposal in the Modification to the Review and Updation of Mining Plan 2020-21 to 2024-25
1b	Exploration over lease area for geological axis 1 or 2	NA	NA	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	NIL	The geometry of the ore body has been completely delineated and the non-ore zone has also been established. Hence no exploration proposal is there in the scheme period
1e	Balance reserve as on 01/04/20			Reserves - 2.511 Million MT Remaining Resources - 3.843 Million MT
1f	General remarks of inspecting officers on geology, exploration etc			The ore body has been completely delineated fully in the past and no further exploration has been proposed during the current plan period.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	FY 2020-21 Pit 5: F2 Area (D-D' to H-H') Pit 3: F3 Area (K-K' to M-M') Pit 5: F2 Area (H-H') Pit 3: F3 Area (M-M') Pit 1: F1 Area (B-B' to C-C') AD1	FY 2020-21 Pit 5: F2 Area (D-D' to H-H') Pit 3: F3 Area (K-K' to M-M') Pit 5: F2 Area (H-H') Pit 3: F3 Area (M-M') Pit 1: F1 Area (B-B' to C-C') AD1	At some places in pit 4 between sections N-N' & M-M' the width of the benches were observed to be less than the proposals and excavations were extending beyond the approved proposals for the year 2021-22. Violation issued.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Working in Float Ore Benches and Reef Ore. No Top Soil	Working in Float Ore Benches and Reef Ore. No Top Soil	There is no Top Soil handling
2c	Stripping ratio or ore to OB ratio	1:0.270 (T:T) (FY 2020-21)	1:0.270 (T:T) (FY 2020-21)	The Stripping Ratio is for the total quantity of production of 2,43,000 MT for the FY 2020-21 as per proposals in the RUMP and Modification to RUMP
2d	Quantity of topsoil generation in m3	Nil	Nil	Nil
2e	Quantity of overburden generation in m3	26628CuM (For FY 2020-21)	26000CuM (For FY 2020-21)	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The workings are in line with approved proposals except for bench width one section for which violation is issued.

Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
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3a	Number of pit proposed for production	FY 2020-21 Pit 5: F2 Area (D-D' to H-H') Pit 3: F3 Area (K-K' to M-M') Pit 5: F2 Area (H-H') Pit 3: F3 Area (M-M') Pit 1: F1 Area (B-B' to C-C') AD1	FY 2020-21 Pit 5: F2 Area (D-D' to H-H') Pit 3: F3 Area (K-K' to M-M') Pit 5: F2 Area (H-H') Pit 3: F3 Area (M-M') Pit 1: F1 Area (B-B' to C-C') AD1	
3b	Quantity of ROM mineral production proposed	2,42,999 MT	2,43,000 MT	
3c	Recovery of saleable/usable mineral from ROM production	2,42,999 MT	2,43,000 MT	Out of 2,43,000 MT of ROM produced FY 2020-21, 1,72,000 MT was processed as saleable product till 31.03.2021. Balance 71,000 MT of ROM was processed into saleable product in FY 2021-22.
3d	Quantity of mineral reject generation	NIL	NIL	No mineral Rejects as all the ROM produced is + 45% Fe.
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable	Not applicable	NIL
3f	Quantity of sub grade mineral generation.	NIL	NIL	No subgrade generation produced during the reporting year.
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Dry crushing and screening method is adopted for segregating the ROM.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Utilization of 500000 MT of subgrade ore from existing Sub grade stock at ML No. 2682	No Subgrade Mineral was utilized in FY 2019-20	Sub grade Ore can be utilized subject to its being put up and being procured in eAuction. In FY 2020-21the Subgrade Ore was not put up for eAuction and hence Subgrade Ore from ML No. 2682 was not utilized.
3j	Provision of drilling and blasting in mineral benches	DTH Drill, 115 mm diameter - 2 No.'s	The drilling and blasting was carried out for Reef Ore Mining.	Explosive License under renewal process. Blasting is carried out through licensed Blasting Contractor when working in Reef area.
3k	Provision of mining machineries in mineral benches	Excavators, Dumpers, Ripper Dozer, DTH Drills, Water Sprinklers	Excavators, Dumpers, Ripper Dozer, Water Sprinklers	No change.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed In reef Ore Bench Height - 7 Mts In Float Ore Height - 4.20 Mts& 1.30 Mts	In reef Ore Bench Height - 7 Mts In Float Ore Height - 4.20 Mts& 1.30 Mts	NIL
3m	Total area covered under excavation/pits	48.093 Ha (as on end of FY 2020-21)	48.093 Ha (as on end of FY 2020-21)	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1:0.270 (T:T) (FY 2020-21)	1:0.270 (T:T) (FY 2020-21)	The Stripping Ratio is for the total quantity of production of 2,43,000 MT for the FY 2020-21as per proposals in the RUMP and Modification to RUMP

3o	Total area put in use under different heads at the end of year	105.687 Ha (as on end of FY 2019-20)	105.687 Ha (as on end of FY 2019-20)	The Unused Area of 5.403 Ha is included in the 'Lease Area Utilization' details in the category 'Other Purposes',
3p	Production of ROM mineral during the last five year period as applicable	2016-17: 295000 MT 2017-18: 294684 MT 2018-19: 294965 MT 2019-20: 294779 MT 2020-21: 2,42,999 MT	2016-17: 295000 MT 2017-18: 40000 MT 2018-19: 193000 MT 2019-20: 2,43,000 MT 2020-21: 2,43,000 MT	Amalgamated Sankalapuram Iron Ore Mine (ML No. 2682) The Annual Production for amalgamated Mining Lease 2682 was approved by CEC at 2,43,000 MT and was reduced on pro-rata basis to 40,000 MT for FY 2017-18 by the Hon'ble Monitoring Committee. The A Production for Amalgamated Sankalapuram Iron Ore Mine (ML No. 2682) was curtailed by DMG at 1,93,000 MT for FY 2018-19 under directions from the Hon'ble CEC. The A Production for amalgamated M Lease 2682 was approved by CEC at 2,43,000 for the year 2021
3q	General remarks of inspecting officers on method of mining etc.			Mining operations are in line with the approved proposals except for bench width in one section for which violations are issued.

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top soil - Nil Mineral Reject - Nil OB dumped in Waste Dump (AD1) located in SE of the Lease area. Waste from Float Ore Mining to be concurrently back filled in the Float area	Top soil - Nil Mineral Reject - Nil OB dumped in Waste Dump (AD1) located in SE of the Lease area. Waste from Float Ore Mining to be concurrently back filled in the Float area	Nil
4b	Location of topsoil, OB and mineral reject dumps	Top soil - NA Mineral Reject - NA OB - Dump (AD1) located in SE of the Lease area	Top soil - NA Mineral Reject - NA OB dumped in Waste Dump (AD1) located in SE of the Lease area. Waste from Float Ore Mining to be concurrently back filled in the Float area	Nil
4c	Number of dumps within lease area and outside of lease area	Within Lease are - 04 Outside Lease are - Nil	Within Lease are - 04 Outside Lease are - Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)			All the dumps are located outside the UPL.
4e	Number of active and alive dumps.	Active Dumps - 01	Active Dumps -01	
4f	Number of dead dumps.	Dead Dumps-02	Dead Dumps-02	
4g	Number of dumps established.	2	2	
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES	Retaining wall and garland drains are present and are satisfactorily maintained.

4i	Length of Retaining wall or garland drain all along dumps	FY 2020-21 Nil	Total length of all retaining walls - 1645 Mts. Maintenance of Retaining Walls and Gulley Plugs taken up in FY 2020-21 (324 SqMts)	The Retaining Walls (Total 9 No.'s) prescribed as per Fresh R & R Plan for ML No. 2682 were completed in FY 2017-18 & 2018-19 and the total Length is 1675 Mts. Maintenance work on retaining walls totaling to 324 Sq Mts was taken up in FY 2020-21.
4j	Number of settling ponds	FY 2020-21 Nil	Nil	Water Pond (1 No.) prescribed as per Fresh R & R Plan for ML No. 2682 was completed in FY 2019-20. Settling Pond (1 No.) as per Fresh R & R Plan for ML No. 2682 was completed in FY 2017-18. Totally 2 Ponds (Settling & Water Ponds are there in ML No. 2682)
4k	Specific comments of inspecting officer on waste dump management			Dump management is done satisfactorily as per the proposals.

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.	--	--	--
5b	Area under backfilling of mined out area	FY 2020-21 Total of 0.84 Ha in F2 & F3 Areas in Float Ore Zone	FY 2020-21 Total of 0.84 Ha in F2 & F3 Areas in Float Ore Zone	NIL

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NIL	Nil
5d	Total area fully reclaimed and rehabilitated	End of FY 2020-21 Total - 12.86 Ha	End of FY 2020-21 Total - 12.86 Ha (Green Belt 2.90 Ha, Dump Afforestation 6.73 Ha & Afforestation 3.23 Ha)	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Waste management by concurrent backfilling in the float ore zone is satisfactory and reclamation work is carried out as per the proposals.

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).	The Annual Report on PMCP will be submitted within the stipulated time for FY 2020-21 within 1st July 2019	The Annual Report on PMCP as per new IBM prescribed format submitted for FY 2020-21 on 07.08.2021.	Not submitted in the prescribed format. Violation issued.
6b	Area available for rehabilitation (ha) .	End of FY 2019-20 Total - 12.86 Ha	End of FY 2019-20 Total - 12.86 Ha (Green Belt 2.90 Ha, Dump Afforestation 6.73 Ha & Afforestation 3.23 Ha)	As per the proposals.

6c	afforestation done (ha).	FY 2020-21 NIL	FY 2020-21 Total 1.478 Ha	The 1.478 Ha 'Achieved Area of Plantation' in which 3695 Plantations were Planted in FY 2020-21, is already Afforested area in which Plantation was done to increase the density of Plantation. This area also includes 0.396 Ha of Backfilled area (in FY 2019-20) on which Plantation was completed in FY 2020-21.
6d	No. of saplings planted during the year	FY 2020-21 Total 2000 Saplings	FY 2020-21 Total 3965 Saplings	Nil
6e	Cumulative no .of plants	Scheme Period 2021 to 2024-25	For FY 2020-21 total 3965 Saplings	Nil
6f	Any other method of rehabilitation	NIL	NIL	Nil
6g	Cost incurred on watch and care during the year	FY 2020-21	Rs. 1,27,520/-	The Actual expenditure refers to Plantation of Saplings
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	0.84 Ha (FY 2020-21)	0.84 Ha (FY 2020-21)	The backfilling was done concurrently with waste handled in Float Ore in FY 2020-21
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Waste	Waste	Nil

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	0.396 Ha back filled in FY 2019-20. Plantation to be completed on backfilled area in FY 2020-21	Plantation on area of 0.396 Ha completed in FY 2020-21	Note:-Plantation could not be taken up in FY 2019-20, as the approach road was getting blocked. Hence Plantation in this area completed in FY 2020-21
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	NA	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	NA	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	NA	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	NA	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	NA	No waste land in the ML area.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air, water & Noise within Core Zone & Buffer Zone	PM 2.50 & PM 10 Air Monitoring, Water and Noise Monitoring carried out in Core and Buffer Zones. by MoEF recognized Lab.	

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Progressive Mine Closure activities are carried out satisfactorily and environmental parameters are monitored regularly and the readings are within the permissible limits.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting	Grade wise sorting is done and sold in grade wise Lots in the eAuctions	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	The grade wise ROM is fed to the Crushing, Screening and Conveying system thus ensuring grade wise Lot formation of Lumps & Fines	
7c	Different grade of mineral sorted out at mines.	+ 45% Fe	FY 2020-21 Lumps: Below 55% 55% to 58% 60% to below 62% 62% to below 65% Fines: Below 55% 55% to below 58% 58% to below 60% 62% to 65%	
7d	Any beneficiation process at mines .	YES	The Iron Ore Beneficiation Plant operating within the Lease area procures feed iron ore through eAuction, inclusive of Old Sub grade iron Ore stock in the Lease area	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral Conservation aspect is taken care. Any subgrade ore is suitably blended with highgrade ores and sold through e-auction as per the market requirement.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	Nil
8b	Concurrent use or storage of topsoil	Nil	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate Dumps for OB: Waste Dump (AD1) Waste Dump (ID1) Waste Dump (ID2)	During FY 2020-21, Waste from Float Ore Mining was concurrently backfilled. Waste from Reef Ore dumped in Waste Dump AD1	As per the approved proposals.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	Simultaneous / concurrent backfilling in the floatore mining pits is done and subsequently reclaimed.

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	NIL	NIL	
8g	Survival rate	70%	70%	Nil
8h	Water sprinkling on roads to control airborne dust	Water Tankers	Water Tankers on roads and Atomized Mist sprayer in Ore stacking areas	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation is carried out as per the proposals and good greenary and aesthetic beauty is maintained within the ML area.

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 March 2021. A.R. Submitted up to 2020-21		Submitted within the prescribed time.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mr. Gopal Joshi - Mines Manager. Mr.Pradyumna.R Urs - Mining Engineer Geologist - Palle Ganesh Kumar Reddy.		All the persons were available during the mine inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Furnished in A.R		
9d	Scrutiny of Annual return on afforestation	Furnished in A.R		

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No mineral Reject generation and same has been furnished in the A.R	No mineral Rejects in the mine.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Furnished in A.R	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Furnished in A.R	Part VII of AR for the year details 2020-21, DMF, NMET & Royalty paid details are not furnished and accounted for arriving at the cost of production.
9h	Scrutiny of Annual return on fixed assets	Furnished in A.R	
9k	Scrutiny of Annual return on mining machineries	Furnished in A.R	

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
MCDR17	Rule 11(1)	12/10/2021			
MCDR17	Rule 26(2)	12/10/2021			
MCDR17	Rule 45(7)(a)	12/10/2021			

Date :

(V. JAYAKRISHNA BABU)

Indian Bureau of Mines