

**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 : **S47**) **DR. Sudhakara T.L**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Mr. G. Lakshminarayana, Senior General Manager (Opera
Official with
Designation
- (iv) Date of Inspection : 15/12/2022
- (v) Prev.inspection date : 29/09/2021

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	NIL	No Exploration proposal for the period 2020-21 to 2024-25 in the Modification to the Review and Updation of Mining Plan
1b	Exploration over lease area for geological axis 1 or 2	NA	NA	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	
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 - 2.273 Million MT Remaining Resources - 3.843 Million MT	-	-
1f	General remarks of inspecting officers on geology, exploration etc			There are no exploration proposals in the plan period. In the approved Mining Plan, lessee stated that the geometry of the ore body has been completely delineated and established the non-ore zone also.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed Working Area (2021-22): Reef ore : N-N' to Q-Q' sections (Pit P4) Float: F2 and F3 Areas (Pit P3 and P5)	Proposed Working Area: Reef: N-N' to Q-Q' sections (Pit 4) Float: F2 and F3 Areas (Pit P3 and P5)	The location of development are within proposed limits.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal	Nil	There is no Top Soil handling in the proposed development area
2c	Stripping ratio or ore to OB ratio	Reef - Ore: 162996 tons Waste: 28764 tons Float ore Ore: 80002 Waste: 16779 Total ore 242998 tons Ore to OB ratio 1:0.187	Waste from reef 28000 (which is disposed on external dumps) Waste from float ore 16600 (backfilled) Total ROM production 237780 Ore to OB ratio 1:0.187	Ore to OB ratio is as per the proposal. Waste generated from float ore has been backfilled.
2d	Quantity of topsoil generation in m3	No proposal	NIL	
2e	Quantity of overburden generation in m3	18217 CuM (For FY 2021-22)	17840 CuM (For FY 2021-22)	Waste from reef 28000 (which is disposed on external dumps) Waste from float ore 16600 (backfilled)
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Lessee has carried out Production and development as per the proposal. Development works within the proposed grid limits.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Reef ore pit : 01 Float ore pit : 02	Reef ore pit : 01 Float ore pit : 02	Reef ore : N-N' to Q-Q' sections (Pit P4) Float: F2 and F3 Areas (Pit P3 and P5)
3b	Quantity of ROM mineral production proposed	2,42,998 MT	2,37,780 MT	
3c	Recovery of sailable/usable mineral from ROM production	No proposal	NIL	
3d	Quantity of mineral reject generation	No proposal	NIL	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	NIL	
3f	Quantity of sub grade mineral generation.	No proposal	NIL	No sub-grade generated.
3g	Grade of sub grade mineral generation	No proposal	NIL	There was proposal for utilization of old sub-grade ore of 5,00,000 MT, out of which lessee has sold 1,00,000 sub-grade ore sold through e-auction.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	The segregating Of ROM Ore is by mechanized method. Dry Crushing & Screening.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	There is Beneficiation plant of lessee within the lease.
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 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	
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	Height of the benches maintained as proposed.
3m	Total area covered under excavation/pits	48.093 Ha (till plan period 2024-25)	48.093 Ha (as on end of FY 2021-22)	
3n	Ore to OB ratio for the pit/mine during the year.	Reef - Ore: 162996 tons Waste: 28764 tons Float ore - Ore: 80002 Waste: 16779 Total ore - 242998 tons Ore to OB ratio 1:0.187	Waste from reef 28000 (which is disposed on external dumps) Waste from float ore 16600 (backfilled) Total ROM production 237780 Ore to OB ratio 1:0.187	Ore to OB ratio is as per the proposal. Waste generated from float ore has been backfilled.
3o	Total area put in use under different heads at the end of year	Under Mining: 48.093Ha Waste dump : 6.59Ha Infrastructure (Roads, plant, buildings etc): 15.372 Other (Green belt, safety zone, etc): 10.565 (as on end of FY 2024-25)	Under Mining: 48.093Ha Waste dump : 6.59Ha Infrastructure (Roads, plant, buildings etc): 15.372	

3p	Production of ROM mineral during the last five year period as applicable	2017-18: 294684 MT 2018-19: 294965 MT 2019-20: 294779 MT 2020-21: 2,42,999 MT 2021-22: 2,42,998 MT	2017-18: 40000 MT 2018-19: 193000 MT 2019-20: 2,43,000 MT 2020-21: 2,43,000 MT 2021-22: 2,37,780 MT	Lessee has restricted the production to CEC approved limit and also capping fixed by State Govt.
3q	General remarks of inspecting officers on method of mining etc.			The Mine is a fully mechanized mine and machineries(drilling, Loading, Hauling, segregation of ore etc.) as proposed are engaged for development, Production and segregation of ore.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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 generated from the float ore has been concurrently back filled in the Float ore pit area as proposed.	
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 generated from the float ore has been concurrently back filled in the Float ore pit area as proposed.

4c	Number of dumps within lease area and outside of lease area	Within Lease are - 03 Outside Lease are - Nil	Within Lease are - 03 Outside Lease are - Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	-	All the waste dumps 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.	02	02	
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES	
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Total length of all retaining walls completed by lessee previously as per R & R Plan - 1645 Mts Maintenance of Gulley Plugs taken up in FY 2021-22 (252CuM)	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 Gulley Plugs totaling to 252CuM was taken up in FY 2021-22.
4j	Number of settling ponds	FY 2021-22 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	In the float ore mining area, lessee has concurrently backfilled the waste as proposed. The waste generated from the reef ore mining has been disposed in the active waste dump. Two in-active dumps are stabilized by plantation.
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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.	Float ore mining pits (P3 and P5) concurrently proposed for backfilling.	After full extraction of mineral lessee has backfilled the area.	Weathered phyllite/ metabasalt observed below the float ore zone.
5b	Area under backfilling of mined out area	FY 2021-22 Total of 1.42 Ha in F2 & F3 Areas in Float Ore Zone	FY 2021-22 Total of 1.42 Ha in F2 & F3 Areas in Float Ore Zone	
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	End of FY 2021-22 Total - 13.56 Ha	End of FY 2021-22 Total -13.56 Ha Green Belt 2.90 Ha, Dump Afforestation 6.73 Ha & Afforestation 3.23 Ha (Total 12.86 Ha) already fully Reclaimed & Rehabilitated and add the area of 0.70 Ha of Back filled area on which afforestation done in FY 2021-22	

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Lessee has concurrently backfilled the float ore mining area after full extraction of the mineral. Also carried out plantation on the backfilled area.
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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 2021-22 within 1st July 2022	The Annual Report on PMCP was submitted vide Letter dated 23.06.2022 for FY 2021-22	Submitted within stipulated time.
6b	Area available for rehabilitation (ha) .	-	Total - 13.56 Ha	Out of 13.56Ha area, 2.90Ha is Green Belt, 6.73Ha is Dump Afforestation and 3.23Ha is Afforestation and 0.70Ha afforestation done on backfilled area during 2021-22.
6c	afforestation done (ha).	0.70 Ha on Backfilled area.	FY 2021-22 Total 0.70 Ha on Backfilled area.	
6d	No. of saplings planted during the year	Total 1750 Saplings on backfilled area	Total 1800	Plantation done on backfilled area

6e	Cumulative no .of plants	Scheme Period 2021 to 2024-25	Total saplings planted during the year FY 2021-22-18,500Saplings	Lessee stated that, total 18,500 Saplings were planted in the Mine Lease area during FY 2021-22. This includes 1800 Saplings on Backfilled area and Gap Plantation of 8300 saplings done in various areas and Gap Plantation of 8400 saplings done in Green Belt.
6f	Any other method of rehabilitation	NIL	NIL	
6g	Cost incurred on watch and care during the year	FY 2021-22	Rs. 6,13,000/-	Lessee stated that the Actual expenditure refers to Plantation of Saplings
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	1.42 Ha (FY 2021-22)	1.42 Ha (FY 2021-22)	The backfilling was done concurrently with waste handled in Float Ore in FY 2021-22
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Waste	Waste	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	0.70 Ha back filled area to be planted with 1750 Saplings during FY 2021-22.	Plantation of 1800 saplings on area of 0.70 Ha backfilled area completed in FY 2021-22	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NA	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NA	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NIL	NA	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NA	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NA	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air, water & Noise within Core Zone & Buffer Zone	Air Monitoring, Water and Noise Monitoring carried out in Core and Buffer Zones. by MoEF recognized Lab.	Results are within permissible limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			As proposed plantation done in the concurrent backfilled area. Lessee has constructed Toe wall all along the dump as per the R & R plan. There are no proposals for construction o of Toe wall and garland drain during the plan period.

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 dispatched in grade wise Lots.	

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 2021-22	Lumps: Below 55% 55% to below 58% 58% to below 60% 60% to below 62% Fines: Below 55% 55% to below 58%	
7d	Any beneficiation process at mines .	YES	The Iron Ore Beneficiation Plant operating within the Lease area has produced upgraded iron ore during FY 2021-22 through feed iron ore procured from Auction, which is inclusive of Old Sub grade iron Ore stock in the Lease area	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Sorting of ore done by crushing and screening method and the same has been reported in the Annual returns. Through Domestic sale lessee is also buying some ore from this lease and doing beneficiation of the ore in his wet beneficiation plant which is located within the lease area.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	Lessee is working in the brokjen up area, no top soil generated.

8b	Concurrent use or storage of topsoil	No proposal	NIL	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate Dumps for OB: Waste Dump (AD1)	As proposed in the mining plan, Waste from Float Ore Mining was concurrently backfilled. Waste from Reef Ore dumped in Waste Dump AD1. There is no mineral reject.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent back filling proposed in the float ore mining area	Concurrent backfilling carried out in the area as proposed.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Concurrent back filling proposed in the float ore mining area	Concurrent backfilling carried out in the area as proposed.	Concurrent backfilling in the float ore mining area.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposal	18500 additional plantation done during the year	
8g	Survival rate	No proposal	70%	As per Annual return
8h	Water sprinkling on roads to control airborne dust	Water Tankers	Water Tankers on roads and Atomized Mist sprayer in Ore stacking areas observed	Water Tankers on roads and Atomized Mist sprayer in Ore stacking areas observed during inspection.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mine looks good.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Annual Return submitted on 23.06.2022		Submitted within stipulated 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 said officers were present during the day of inspection	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Under Mining: 48.093Ha Waste dump : 6.59Ha Infrastructure (Roads, plant, buildings etc): 15.372	Appears to be correct	NIL
9d	Scrutiny of Annual return on afforestation	18500 sapplings	Appears to be correct	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	-	Lessee has sold and used processed ore (lumps & fines) in his own beneficiation plant with the ore procured from other mines. Hence, reject generated in the plant not taken into account in AR

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Opening Stock: 71000 ROM Production : 237780 ROM Closing : 1 Dump Opening & Closing stock: 2301226 Graded ore (Lumps & Fines with different grade range) Opening Stock: 183921.31 Production: 308779 Dispatch: 270335.96 Closing Stock: 222364.35 (Values in tons)	Appears to be correct	Dispatched grade range of Lumps & fines (a) Below 55% (b) 55% to below 58% (c) 58% to below 60% (d) 60% to below 62% (e) 62% to below 65%
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production: Rs. 697.38 per ton Lumps (a) Below 55% - Rs. 1667.98 (b) 55% to below 58% - Rs 4028.28 (c) 58% to below 60% - Rs 4552.4 (d) 60% to below 62% - Rs 7815.75 (e) 62% to below 65% - Rs 9012.24 Fines (a) Below 55% - Rs 831.91 (b) 55% to below 58% - Rs 2541.09 (c) 62% to below 65% - Rs 6559.05	Appears to be correct	In Part-III (4) Depreciation on fixed assets given was not tallying with the Deprecation amount given at Part-IIA Capital Structure, hence, violation pointed out. In reply lessee has clarified the point.
9h	Scrutiny of Annual return on fixed assets	Rs. 347758500	Appears to be correct	NIL

9k	Scrutiny of Annual return on mining machineries	BACK HOE 1.600 Appears to be correct CUM 1 Non Electrical Opencast Back Hoe : 03 nos, Dumper: 06 nos., Truck : 11 nos., Loader : 4, DOZER : 1 ; ROCK DRILL -2, AIR COMPRESSOR 9.910 CUM/MN - 2 , CRANE 15.000 TONNE -1 FRONT END LOADER 0.600 CUM - 1, CRUSHER - 2nos., GENERATOR - 01 no., WATER TANKER - 02 nos.	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 NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17 Rule 45(7)(a)	31/01/2023		MCDR17 Rule 45(7)	31/01/2023	10/04/2023

Date :

(DR. Sudhakara T.L)

Indian Bureau of Mines