

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

Mining Plan Modification REPORT

Bangalore regional office

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

Mine code : 30KAR03065

- (i) Name of the Inspecting : 130) PRASHANT S HEGDE
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : S/Shri Gopal Joshi Mines Manager , N. Giridhar Rao, M
Official with
Designation
- (iv) Date of Inspection : 03/05/2017
- (v) Prev.inspection date : 16/10/2015

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 correspondance** : M/S.R.B.SETH SHREERAM NARSINGDAS
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 : BE-Mining
 Appointment/ Termination date : 15/08/2017

Geologist

Name : V ANANDA KUMAR, Full Time
 Qualification :
 Appointment/ Termination date : 01/02/2018

Manager

Name : GOPAL JOSHI
 Qualification : DIP IN MINING, FCC
 Appointment/ Termination date : 01/04/2006

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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	98 Core drilling for a metreaage of 548m	It was proposed to drill 16 Nos. of core drilling during year 2015-16 and 48 nos of trial pits. However, about 98 no.of core drill bore holes was carried out in the float ore area.
1b	Exploration over lease area for geological axis 1 or 2	Core drilling = 10.86 Ha & Trial Pit = 20.79Ha	As on 1/4/2017 G-1: 22.72 Ha G-2: 9.56 Ha G-3: 13.76 Ha	-----
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Lessee & Rs. 3,170,000 (during year 2015-16)	Lessee & Rs. 901,600.00	-----
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposals	G-2: 9.56 Ha G-3: 13.76 Ha	Proposals given in present modified MP.
1e	Balance reserve as on 01/04/20	2.015 million tonnes (as on 1/9/15)	2.447 million tonnes (as on 1/4/2017)	Cut-off grade of +45 % Fe
1f	General remarks of inspecting officers on geology, exploration etc	---	---	21 nos of BHs and 43 nos trial pits have been proposed in recently approved Modified MP dated 1/6/2017 and are sufficient for G-1 level of exploration in the Mine.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Pit -1 & Pit - 4	Pit -1 & Pit - 4	-----
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	None	None	-----

2c	Stripping ratio or ore to OB ratio	1:0.13 (T :T)	1: 0.08 (T :T)	_____
2d	Quantity of topsoil generation in m3	Nil	Nil	-----
2e	Quantity of overburden generation in m3	15307.35m3 (38,268 tonnes)	9000 m3 (22,500 tonnes)	B.D.---2.5
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-----	-----	As per this office letter No-KNT/BLR/Fe-311/BNG dated 27/1/2017, the lessee had submitted the modified MP due to change in site of working for year 2017-18 onwards and subsequently, the document was also approved on 1/6/2017.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Pit -1 & Pit - 4	Pit -1 & Pit - 4	Dimensions of existing pits in the mine as follows 1) Pit-1(reef)- 845mX195mx70m 2) Pit-2(Float)- 70mX15mx14m 3) Pit-3(Float)- 226mX115mx12m 4) Pit-4(reef)- 347mX95mx26m
3b	Quantity of ROM mineral production proposed	294,923 MT	295,000 MT	-----
3c	Recovery of sailable/usable mineral from ROM production	294,923 MT	295,000 MT	-----
3d	Quantity of mineral reject generation	NIL	NIL	-----

3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	-----
3f	Quantity of sub grade mineral generation.	Nil	Nil	-----
3g	Grade of sub grade mineral generation	NA	NA	-----
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised - Screening/Crushing	Mechanised - Screening/Crushing	-----
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Sub-grade Mineral from the mine procured through e-Auction below 45% Fe is utilized for Wet-Beneficiation Process	Iron ore procured through e-Auction inclusive of Sub-grade Mineral is utilized for Wet-Beneficiation Process	-----
3j	Provision of drilling and blasting in mineral benches	70 % total Handling requires controlled deep -hole drilling and blasting	The same method is being followed.	-----
3k	Provision of mining machineries in mineral benches	Open-cast mechanised mining method with heavy machineries Viz. excavators, Ripper Dozer, DTH drill, Dumpers/tippers	The machineries were deployed as proposed in Modified MP .	-----
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height 10 m for in-situ ore & 1.5 m height for float ore and width is more than height.	The same parameter of benches is being followed.	-----
3m	Total area covered under excavation/pits	21.7 ha	21.7 ha	-----

3n	Ore to OB ratio for the pit/mine during the year.	1:0.13 (T :T)	1: 0.08 (T :T)	-----
3o	Total area put in use under different heads at the end of year	Pit/mining- 21.7 Ha Overburden/dump: 18.6 Green Belt- 13.12 Ha Infrastructure s- 4.26 Ha. Mineral storage-7.5Ha	Pit/mining- 21.7 Ha Overburden/dump: 18.2; Green Belt- 13.46 Ha; Infrastructures- 4.26 Ha. Mineral storage-6.99 Ha	-----
3p	Production of ROM mineral during the last five year period as applicable	2012-13 - 750000 MT 2013-14 - 295000 MT 2014-15 - 295000 MT 2015-16 - 295000 MT 2016-17 - 295000 MT	2012-13 - 0.00 MT 2013-14 - 295000 MT 2014-15 - 295000 MT 2015-16 - 295000 MT 2016-17 - 295000 MT	2012-13 - Stoppage of Mining Activity by the Hon'ble SC. 2013-14 to 2014-15 Onwards Production capacity capped at 295000 MT (Combined for both the amalgamated leases)
3q	General remarks of inspecting officers on method of mining etc.	-----	-----	Besides, the party had achieved 498,000 tonnes of sub-grade dump working /removal against the proposal of 500, 000 tonnes during year 2016-17.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Dumping separately proposed	Waste was Dumped separately	There is no generation of top soil as per proposals.
4b	Location of topsoil, OB and mineral reject dumps	O/B waste in SE side of the lease area (D-1 Dump)	SE side of the lease area (D-1 Dump).	-----
4c	Number of dumps within lease area and outside of lease area	4 waste dumps are within the lease and no waste dump proposed outside the lease area	4 waste dumps within the lease and no waste dumped outside the lease area	----- --

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste dump proposed outside of UPL.	Waste dumped outside of UPL.	-----
4e	Number of active and alive dumps.	One, Waste dump (D1)	One, Waste dump (D1)	-----
4f	Number of dead dumps.	Three Waste Dumps (D2,D3& D4)	Three Waste Dumps (D2,D3& D4)	-----
4g	Number of dumps established.	Three Waste Dumps (D2,D3& D4)	Three Waste Dump (D2,D3& D4)	-----
4h	Whether Retaining wall or garland drain all along dumps are there.	To be Constructed as per R & R	Yes, Constructed as per R & R	-----
4i	Length of Retaining wall or garland drain all along dumps	To be Constructed as per R & R	Constructed as per R & R	-----
4j	Number of settling ponds	2	2	-----
4k	Specific comments of inspecting officer on waste dump management	-----	-----	Total area covered by the dumps was about 18.2 Ha and the management as per the proposals and is satisfactory.

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 such proposals as mined out pits were not matured for back-filling	NIL	-----
5b	Area under backfilling of mined out area	Nil	Nil	-----
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposals	Nil	-----

5d	Total area fully reclaimed and rehabilitated	Nil	Nil	-----
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-----	-----	None of areas of mined out pits i.r.o. ML NO 2524 are not matured for back-filling. Similarly none of area of mined pit i.ro. MLNO-2576 is also not matured for back-filling due to recovery factor of float ore, depth of occurrence and presence of sub-grade ore stocks etc. Moreover, there is no proposal of back-filling in this mine(s). However, the present modified MP the party has proposed concurrent back-filling in float iron ores zone.

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 to be submitted within the stipulated time for FY 2016-17 within 1st July 2017	The Annual Report on PMCP has not been submitted on date of inspection of mine on 3/5/2017.	-----
6b	Area available for rehabilitation (ha) .	NIL	NIL	-----
6c	afforestation done (ha).	0.83 Ha	1.41 Ha (Inclusive of 0.58 Ha on Dump Slopes)	-----
6d	No. of saplings planted during the year	2100	Saplings - 5125 Inclusive of 1475 saplings on Dump Slopes	-----

6e	Cumulative no .of plants	NA	About 11,805 nos of saplings were planted during last 3 years in 4.7 Ha area	About 11,805 nos of saplings were planted during last 3 years in 4.7 Ha area (45,000 nos of cummulative plantation done)
6f	Any other method of rehabilitation	Not applicable as no backfilling proposed	NIL	-----
6g	Cost incurred on watch and care during the year	Not applicable as no backfilling proposed	NIL	-----
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not applicable as no backfilling proposed	NIL	-----
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable as no backfilling proposed	NIL	-----
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not applicable as no backfilling proposed	NIL	-----
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable as no backfilling proposed	NIL	-----
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not applicable as no backfilling proposed	NIL	-----

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposals	NIL	-----
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposals	NIL	-----
6p	Compliance of environmental monitoring (core zone and buffer zone)	Season-wise Environmental monitoring	Season-wise Environmental monitoring were carried out	-----
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-----	-----	None of areas of mined out pits i.r.o. ML NO 2524 are not matured for back-filling. Similarly none of area of mined pit i.ro.MLNO 2576 is also not matured back-filling due to recovery factor of float ore, depth of occurrence and presence of sub-grade ore stocks etc. Moreover, there is no proposal of back-filling in this mine(s). The lessee had carried out PMCP proposals as per the proposals. Area cover under green-belt and other environmental protective measures were 13.5 Ha. About 11,805 nos of

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM proposed to be crushed & Screened to Graded Lumps & Fines	ROM produced is directly crushed & Screened to Graded Lumps & Fines	-----
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised Screening/Crushing	Mechanised Screening/Crushing	-----
7c	Different grade of mineral sorted out at mines.	Crushing, screening and wet-beneficiation plant	Yes, at their crushing, screening and wet-beneficiation plant	-----
7d	Any beneficiation process at mines .	Yes. Sub-grade/low grade ore fines (-10mm) generated along with ROM is subjected to Beneficiation process.	The same is being followed. The process involved are Crushing, screening, Jigging, classifier and cyclon as per the requirement in their beneficiation plant of 1 MTPA capacity of (on finished product basis)	-----
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-----	-----	The lessee had utilizing entire iron ore above threshold value limit of +45 % Fe through wet beneficiation process.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil excavation is proposed	No top soil generated	-----
8b	Concurrent use or storage of topsoil	Not applicable as No top soil excavation is proposed	Not applicable as No top soil is generated	-----
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	O/B waste in SE side of the lease area (D-1 Dump)	Waste O/B dumped in SE side of the lease area (D-1 Dump).	-----

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not applicable as mined out pits were not matured for back-filling.	Not applicable as ore not exhausted	-----
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable as ore not exhausted and Waste Dump (D2,D3& D4) is already stabilised	Not applicable as ore not exhausted and Waste Dump (D2,D3& D4) is already stabilised	-----
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Entire ML area is non-forest. There is proposal of planation of 2,100 nos of saplings in 0.83 Ha area within ML during year 2016-17	5,125 nos saplings within ML in 2 Ha areas were planted during year 2016-17. Area cover under green-belt and other environmental protective measures were 13.5 Ha. About 11,805 nos of saplings were planted during last 3 years in 4.7 Ha area.	-----
8g	Survival rate	70%	Approximately 70%	-----
8h	Water sprinkling on roads to control airborne dust	Proposed	The regular dust suppression by sprinkling of water is being made in the mine	-----
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-----	-----	The aesthetic beauty in and around mine is good as lessee had carried out afforestation and other environmental protective measures as per approved Modified MP.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to March 2017 A.R. submitted upto - FY 2015-16	Annual Return for FY 2016-17 not submitted by the Lessee at the time of inspection on 3/5/2017	-----
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	ME & Manager: Shri N. Giridhar Rao Geologist: None	ME & Manager: Shri N. Giridhar Rao Geologist: None	V/L letter issued on 6/6/17 for non-appointment of Geologist.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit/Mining: 21.7 Ha; Dumps: 11 Ha Green Belt: 5 Ha	Actual also same at that time.	For amalgamated MLs
9d	Scrutiny of Annual return on afforestation	6,680 nos	Actual also same	For amalgamated MLs
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	-----	-----	41,000 tonnes of sub-grade ore (- 45% Fe generated from ML No-2576) reported to be added to sub-grade stock.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL	NIL	-----

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production per tonne for ML NO 2524: Rs 1020;	Appeared to be correct	-----
		Cost of Production per tonne for ML NO 2576: Rs 858; Ex-mine prices for major production of ML NO 2524: Lumps (60 to 62 % Fe)-Rs 2555; Lumps (62 to 65 % Fe)-Rs 2811; Fines (60 to 62 % Fe)-Rs 1910; Fines (62 to 65 % Fe)-Rs 1872. Ex-mine prices for major production of ML NO 2576: Lumps (58 to 60 % Fe): Rs 1807.		
9h	Scrutiny of Annual return on fixed assets	Rs 50,41,67,730=0	Appeared to be correct including plant.	-----
9k	Scrutiny of Annual return on mining machineries	Excavator: 4 ; Dumpers (25T): 10 Tipper-1 Front-end Loader-7; Dozser-1 & Wagon Drill-2	Appeared to be correct.	For amalgamated MLs

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 55(1)(3)	06/06/2017	29/01/2018	MCDR17 Rule 55(1)	06/06/2017	29/01/2018

Date :

(PRASHANT S HEGDE)

Indian Bureau of Mines