#### INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### MCDR inspection REPORT

#### Bangalore regional office

Mine file No : KNT/BLR/FE/416/BNG Mine code: 30KAR03125

(i) Name of the Inspecting : **SQ11** ) K.SRINIVAS

Officer and ID No.

(ii) Designation : Junior Mining Geologist

(iii) Accompaning mine : Srikantha Reddy, Mine Manager and Santhosh Reddy, Geol

Official with

Designation

(iv) Date of Inspection : 17-JAN-23 Prev.inspection date : 22-JUN-21 (v)

PART-I : GENERAL INFORMATION

(a) Mine Name : NEB RANGE(ML 2150)54.63

(b) Registration NO. : IBM/13651/2012

(C) Category : A Manual (d) Type of Working Opencast

(e) Postal address

> State : KARNATAKA District BELLARY Village NEB RANGE Taluka SANDUR

Post office Pin Code :

FAX No. 08392-271156 (F) E-mail : hrgtiom@gmail.com

08392-279946, 8453630795, 9 Phone

(f) Police Station : SANDUR

First opening date (g)

Weekly day of rest (h) : SUN

Address for : SRI.H.G.RANGAN GOUD,

correspondance 15/142, NEHARU CO-OPERATIVE COLONY

HOSPET, BELLARY - 583201

3. (a) Lease Number : KAR0336 (b) Lease area : 46.2 Period of lease : 50 (C)

> (d) Date of Expiry : 04-AUG-42

Mineral worked 4. : IRON ORE Main 5. Name and Address of the

Lessee : H.G.RANGAN GOUD

#15/142, NEHRU CO-OP COLONY, HOSPET, BELLARY

KARNATAKA

Phone: 08394-429647, 428505

FAX :

Owner : H.G.RANGAN GOUD

#15/85, NEHRU CO-OP COLONY, HOSPET, BELLARY KARNATAKA Phone: 08394-54455,585

FAX :

Geologist

Name : SANTHOSH REDDY, Full Time

Qualification : M.Sc. Geology Appointment/ : 01-FEB-18

Termination date

Manager

Name : A.SHRIKANT REDDY
Qualification : DIP.IN MINING ENGIN

Appointment/ : 25-FEB-17

Termination date

6. Date of approval of Mining Plan/Scheme of Mining

: Fresh under rule 22 MCR1960 07-MAR-90 Renewal under rule 22 MCR1960 16-JAN-03 Modif.of approved Mining Plan 16-MAR-06 Mining Scheme rule 12 MCDR1988 12-NOV-08 Mining Scheme rule 12 MCDR1988 16-APR-14 MP review under 17(1) MCR 2016 31-MAR-17 Modif.of approved Mining Plan 17-MAY-19 Modif.approved Mining Scheme 23-JUL-21 MP review under 17(1) MCR 2016 25-FEB-22

PAGE : 3

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	12 RC boreholes(240 m) 10 Trial pits(3mx3mx3m x) for the year 2021-22	16RC boreholes (911m) carried out whereas No trial pits carried out.	Violation pointed out.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	Sri Balaji Borewells and SYS Earthmovers -	d Expenditure incurred Rs 6,50,000/
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not specified	G1- 11.57 Ha G2- NIL G3- Nil G4- 24.93 Ha	Only FC granted area has been considered.
1e	Balance reserve as on 01/04/20	-	-	Reserves of Iron ore as on 1.4.2022: 3250450 t
1f	General remarks of inspecting officers on geology, exploration etc	_		The exploratory trial pit proposals have not been carried out completely for the year 2021-22. The violation has been pointed out.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Section B-B' to D- D'	The development carried out as proposed.	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	-

2c	Stripping ratio or ore to OB ratio	1: 3.96 (in tonnes) (Reef)	1: 1.76 (in tonnes) (Reef)	Iron ore : Ore:111550t Waste: 197430t
2d	Quantity of topsoil generation in m3	No proposal	NIL	No top soil generated.
2e	Quantity of overburden generation in m3	71347m3	75934m3	Iron ore : Ore: 111550t Waste: 197430 t
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	_	_	There is no specific comment on development of pit with respect to the type of deposit. However, the benches have been developed irregularly. The violation has been pointed out.

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	-
3b	Quantity of ROM mineral production proposed	113770t	111550t	-
3с	Recovery of sailable/usable mineral from ROM production	95%	95%	-
3d	Quantity of mineral reject generation	144506t	143205t	-
3e	Grade of mineral rejects generation and threshold value declared.	35%Fe	34%Fe	-
3f	Quantity of sub grade mineral generation.	No proposal	Nil	No sub-grade mineral generated.

3g	Grade of sub grade mineral generation	No proposal	Nil	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method for segregation.	Mechanised method for segregation	Dry Crushing and Screening 200 TPH
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No such beneficiation study carried out	_
3j	Provision of drilling and blasting in mineral benches	Provision of Drilling and Blasting is proposed for mineral benches.	Drilling and Blasting has been carried out for production purpose.	-
3k	Provision of mining machineries in mineral benches	Mining Machineries proposed- Excavators- 2 Tippers- 7 Drill-2 Back hoe Loaders -1 Front end loader-1 Water tanker-2 Crusher-1(200 TH)	Machinery deployed: Excavators- 2 Tippers- 7 Drill-2 Back hoe Loaders -1 Front end loader-3 Water tanker-2(8000lts) Crusher-1(200 TH)	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height- 6m Bench Width- >6m	Bench Height- 6m Bench Width- >6m	_
3m	Total area covered under excavation/pits	6.30 Ha (At the end of the plan period)	6.30 На	-
3n	Ore to OB ratio for the pit/mine during the year.		1: 1.76 (in tonnes) (Reef)	Iron ore : Ore:111550t Waste: 197430t

30	Total area put in use under different heads at the end of year		Mine Working- 6.30 Ha Dumping -1.72ha Roads -0.26ha Infrastructure-0.17ha Mineral storage- 0.41 Ha Others-2.16Ha	
3p	Production of ROM mineral during the last five year period as applicable	2017-18: 114000t 2018-19: 114000t 2019-20: 114000t 2020-21: 114000t 2021-22: 113770t	2017-18 : 114000t 2018-19 : 114000t 2019-20 : 114000t 2020-21: 114000t 2021-22 : 111550t	
3q	General remarks of inspecting officers on method of mining etc.	-	_	There is no change in method of mining.

### 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 Overburden is proposed.		_
4b	Location of topsoil, OB and mineral reject dumps	OB dump proposed in western and Northwestern side of mining lease area.	Overburden Dumping carried out in western and Northwestern side of mining lease area.	-
4c	Number of dumps within lease area and outside of lease area	Within Lease Area- 1 Outside lease- NIL	Within Lease Area- 1 Outside lease- NIL	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	-

4e	Number of active and alive dumps.	one	one	-
4f	Number of dead dumps.	nil	nil	-
<b>4</b> g	Number of dumps established.	Nil	Nil	-
4h	Whether Retaining wall or garland drain all along dumps are there.	& Garland	Retaining wall & Garland drain constructed.	-
4i	Length of Retaining wall or garland drain all along dumps	90mRetaining wall &100m Garland drain proposed.	90mRetaining wall &100m Garland drain have been constructed.	_
4 j	Number of settling ponds	No proposal	nil	-
4k	Specific comments of inspecting officer on waste dump management	-		There are no specific comments on waste dump management.

## 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 backfilling proposals for the year 2021-22.

#### 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).	To be submitted under rule 26(2) of MCDR, 2017 before 1st July of every year.	Submitted on 13.04.2022.	-
6b	Area available for rehabilitation (ha) .	Nil	Nil	-
6c	afforestation done (ha).	0.16На	0.16ha	Plantation carried out in the dump area.
6d	No. of saplings planted during the year	1050 saplings within the lease area.	2534 saplings within the lease area.	Plantation carried out in the dump area and gap filling &safety zone areas.
6e	Cumulative no .of plants	22000saplings	59915 saplings within the lease area	-
6f	Any other method of rehabilitation	No proposal	nil	-
6g	Cost incurred on watch and care during the year	Rs 2,00,000/-	Rs. 3,00,000/-	Towards watch and ward, watering & purchase of saplings.
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)Afforestati on on backfilled area	No proposal	nil	-

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	nil	_
61	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	No proposal	nil	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	nil	-
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	nil	_
бр	Compliance of environmental monitoring (core zone and buffer zone)	Environment monitoring is proposed for Core and Buffer Zone.	Environment monitoring is being carried out monthly in Core and Buffer Zone.	All the environmental parameters observed to be within the permissible limits.
6q 	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	_	There are no specific proposals for the year 2021-22 in PMCP.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks

7a	ROM Mineral dispatch or grade-wise sorting within lease area	size wise sorting is proposed within lease area.	size wise sorting is done within lease area.	-
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Mechanical Sorting	Mechanical Sorting	Dry Crushing & Screening
7c	Different grade of mineral sorted out at mines.	Grade wise sorting is proposed	Grade wise sorting is done in lease area.	0-10mm fines and lumps, 10mm to 40mm.
7d	Any beneficiation process at mines .	No proposal	nil	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	_	There are no specific comments on Mineral Conservation and beneficiation issues.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	NIL	No top soil generated. Most of the area is broken up.
8b	Concurrent use or storage of topsoil	No proposal	nil	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping for Overburden proposed.	Separate dumping of Overburden carried out.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	nil	_

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1050 saplings within the lease area	2534 saplings within the lease area. 1500saplings in OML	Plantation carried out in the dump area and gap filling & safety zone areas
8g	Survival rate	70%	70%	-
8h	Water sprinkling on roads to control airborne dust	sprinkling on	airborne dust on haul roads and screening plant.	2 nos. of water tanker each of 8000 liters capacity.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	_	There is no change in aesthetic beauty in and around mines.

## 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 December, 2022 on 04.01.2023	A.R for the year 2021-22 submitted on 29.6.2022.	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		-	Appears to be correct.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	-1.72ha Roads -0.26ha Infrastructure	Appears to be correct	_
9d	Scrutiny of Annual return on afforestation	2534saplings within the ML with 70% survival rate.	Appears to be correct	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)		Appears to be correct	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore		Appears to be correct	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production-Rs 1774.45/tonne. Av. Ex- mine price - Rs 2770.36/tonne	Appears to be correct	-
9h	Scrutiny of Annual return on fixed assets	Fixed Assets- Rs12039696/-	Appears to be correct	-
9k	Scrutiny of Annual return on mining machineries	Machinery deployed: Excavators- 2 Tippers- 7 Drill-2 Back hoe Loaders -1 Front end loader-3 Water tanker- 2(8000lts) Crusher-1(200 TH)	Appears to be correct	_

# 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	
MCDR17 Rule 31(4)	13-FEB-23	
Rule 34	13-FEB-23	

Date : (K.SRINIVAS)

Indian Bureau of Mines