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

#### Review and updation of Mining Plan REPORT

#### Bangalore regional office

Mine file No : KNT/BLR/FE/414/BNG/VOL-I Mine code: 30KAR03138

Name of the Inspecting : A101 ) ARUN KUMAR

Officer and ID No.

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine : Shri. Nandakumar H.M -Mines Manager

Official with Designation

(iv) Date of Inspection : 20/11/2020

Prev.inspection date (v)

PART-I : GENERAL INFORMATION

(a) Mine Name : RAMANMALAI

(b) Registration NO. : IBM/178/2011

: A Other than Fully Mech. (C) Category

(d) Type of Working Opencast

(e) Postal address

> State : KARNATAKA District BELLARY Village RAMGAD Taluka SANDUR Post office SANDUR Pin Code : 583119 FAX No. NIL

E-mail : vescosdr@yahoo.com, Vescopd( 9611786655, 08395260183 Phone

(f) Police Station : SANDUR

First opening date : 19/08/2002 (g)

Weekly day of rest (h) : SUN

Address for : VESCO HOUSE 2/138 correspondance

BALLARI Rd SANDUR

583119

3. : KAR0344 (a) Lease Number (b) Lease area : 18.62

> Period of lease : 20 (C)

(d) Date of Expiry : 18/10/2012

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

Lessee : VEERABHADRAPPA SANGAPPA & COMPANY

# 2/138, BELLARY ROAD, HOSPET, BELLARY KARNATAKA

Phone: 08395-260120 FAX: 08395-260676

Owner : VEERABHADRAPPA SANGAPPA & COMPANY

NO.2/138, BELLARY ROAD, SANDUR, BELLARY KARNATAKA

Phone: FAX:

Agent : K S NAGARAJ

VESCO HOUSE 2/138 BALLARI

Rd SANDUR BELLARY

KARNATAKA

Phone: 08395260183

FAX :

Mining Engineer

Name : IMRAN SHAIK, Full Time

Qualification : BE MINING Appointment/ : 01/03/2013

Termination date

Geologist

Name : S.MANDAL, Full Time

Qualification : M.SC(MINERAL EXPLORATION)

Appointment/:
Termination date

Manager

Name : NANDAKUMAR H M

Qualification :

Appointment/ : 26/09/2013

Termination date

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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposals	Nil	84 core boreholes were drilled to a total meterage of 5906.5m from 2003-04 to 2014-15
1b	Exploration over lease area for geological axis 1 or 2		G1- 40.73 Ha, G2-1.86 Ha, G3-1.84 Ha.	Exploration conducted till 2014-15
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposals	Nil	1.47 Cr spent on exploration in the past.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	1.84 Ha needs to be explored to bring into G2 level	8.73Ha of non mineralized area used for dumping
1e	Balance reserve as on 01/04/20	Nil	35387866 MT of Reserves with average quality of 62.5 % Fe	As per AR submitted as per FY2019-20
1f	General remarks of inspecting officers on geology, exploration etc			No proposal of exploration in the reporting year. 84 core boreholes were drilled to a total meterage of 5906.5m from 2003-04 to 2014-15

# Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N-1668925- 1669350, E- 659460-659750	N-1669035-1669350, E- 659500-659750	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)		Separate benches maintained in overburden and mineral	OB: 2 benches MB: 12 benches
2c	Stripping ratio or ore to OB ratio	1:0.42	1:0.21	As on 31.10.2020
2d	Quantity of topsoil generation in m3	No proposal	NIL	There is no top soil generation as the mining work is carried out within the broken up area

2e	Quantity of overburden generation in m3	464350 tonnes	97513 tonnes	As on 31.10.2020: Bulk density: Ore- 2.5, Waste-1.8, BHQ-2.3
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development was carried out as per the proposals.

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 Pit proposed	Working carried out in 1 pit only	Approximate dimension of the pit L- 1380m, Width-190m, Depth-95 m
3b	Quantity of ROM mineral production proposed	Proposed 11.0 Lakh MT	6.20 Lakh MT	As on 31.10.2020
3с	Recovery of sailable/usable mineral from ROM production	95%	95%	Nil
3d	Quantity of mineral reject generation	No Proposal	NIL	16130 tonnes of BHQ ( Fe- 35 % to 45% ) is stored separately in the previous year
3e	Grade of mineral rejects generation and threshold value declared.	+35 to -45% Fe	+35 to -45% Fe	<35% Fe dumped in waste dump & +45% Fe blended with high grade
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	Mechanised method proposed for segregating from ROM	Mechanised method adopted for segregating from ROM	Dry Crushing (150 TPH) & Screening (250TPH)

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	No such study carried out	Nil
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting proposed in mineral benches	In the reporting year no drilling blasting carried out	10% of the total volume proposed for drilling & blasting
3k	Provision of mining machineries in mineral benches	Hydraulic excavator & tipper combination proposed	Mining operation carried out using excavator & tipper (10/20 tonnes)	Nil
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height- 7 to 7.5m, Width- 9m	Height- 7 to 9 m, Width- 9m.Rectification of bench height was in progress in section R0- R0' & R6-R6'.	Violation issued vide letter no.KNT /BLR/Fe-375/BNG dt.05.11.2020
3m	Total area covered under excavation/pits	28.16 ha at the end of plan period	28.16 ha at the end of reporting year (2019-20)	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.42	1:0.21	As on 31.10.2020
30	Total area put in use under different heads at the end of year	Pit- 28.16 Ha Dump- 7.61 Ha Buildings-0.74 ha Roads-0.53 ha Others-4.875	Pit- 28.16 Ha Dump- 5.66 Ha Buildings-1.27 ha Others-18.07 Ha As per AR submitted for 2019-20	Nil
3p	Production of ROM mineral during the last five year period as applicable	2015-16: 1.10MT 2016-17: 1.10MT 2017-18: 1.10MT 2018-19: 1.10MT 2019-20: 1.10MT 2020-21: 1.10MT	2015-16: 0.844MT 2016-17: 1.10 MT 2017-18: 1.10MT 2018-19: 1.10MT 2019-20: 1.10MT 2020-21: 0.62MT	As on 31.10.2020

3q General remarks
 of inspecting
 officers on
 method of mining
 etc.

Opencast method of mining using excavator tipper combination carried out as per proposal. Violation issued on 05.11.2020 for excess of bench height at some places

#### 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 for OB proposed	Separate dumping for OB carried out	Nil
4b	Location of topsoil, OB and mineral reject dumps	N-1668650- 1669050, E- 659550-659905	N-1668680-1668910, E- 659600-659810	Nil
4c	Number of dumps within lease area and outside of lease area	WML: 1 dump OML: NIL	WML: 1 dump OML: NIL	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	OB Dump proposed outside the UPL	OB dumped outside the UPL on the south-western side of the ML area	Southwestern side 100 m away from UPL
4e	Number of active and alive dumps.	1	1	Nil
4f	Number of dead dumps.	No proposal	Nil	Nil
4g	Number of dumps established.	No proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	&garland drain	Retaining wall & garland drain constructed all along dumps.	Nil
4i	Length of Retaining wall or garland drain all along dumps	RW-75 mtrs GD- 75 mtrs	RW-75 mtrs GD- 75 mtrs	Nil
4j	Number of settling ponds	No proposal	NIL	3 SST constructed in the past & is maintained.

4k Specific comments of inspecting officer on waste dump management

Waste dump management was carried out as per the proposal

### 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	Mineral is not exhausted for backfilling
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	NII	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No backfilling & reclamation of dug out pit carried out as there was no proposal & moreover Mineral is not exhausted for backfilling.

### 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).	PMCP report to be submitted by 1st July every year	PMCP report is submitted	Submitted on 07.07.2020
6b	Area available for rehabilitation (ha) .	No proposal	0.50 ha, Part of Active Dump	Nil

6c	afforestation done (ha).	No proposal	0.50 ha	Nil
6d	No. of saplings planted during the year	500 Seedlings	1086 seedlings 14100 Agave suckers	Nil
бе	Cumulative no .of plants	Not specified	7896 seedlings 47100 Agave suckers	Nil
6f	Any other method of rehabilitation	No proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	No proposal	Nil	Nil
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	NII	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on 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
61	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

бn	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	Nil
60	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 & Buffer zone	Environmental monitoring carried out in Core & Buffer zone	Monitoring carried out by Cosmo Laboratory Bellari. All the parameters were observed to be within the permissible limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP implementation was being carried out as per the proposal

### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting proposed in the lease area	Grade wise sorting done in the lease area	Fines & Lumps are dispatched after dry screening
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	sorting	Mechanical method adopted for gradewise sorting	Dry Crushing (150 TPH) & Screening (250TPH)
7c	Different grade of mineral sorted out at mines.		Lumps: +10mm to -40mm Fe-60-64.5% & Fines: -10mm Fe-58-63.5%	Gradewise sorting done as per buyers requirement
7d	Any beneficiation process at mines .	No proposal	Nil	Dry crushing & screening

7e General remarks of inspecting officer on Mineral conservation and beneficiation issues

There was no mineral conservation issue as ore above the threshold value was utilized & stacked for future use.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	No Generation of top soil
8b	Concurrent use or storage of topsoil	No proposal	Nil	No genreration of top soil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for overburden proposed	Separate dump of overburden maintained	Nil
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)	500 seedlings	WML: 140 saplings OML: 1055 saplings (For FY-2019-20)	1086 seedlings, 14100 Agave suckers
8g	Survival rate	85 %	80 %	Nil

8h	Water sprinkling on roads to control airborne dust	sprinklings on	Regular water sprinkling is carried out to control the air borne dust on haul roads & screening plant	5 no' of water tanker(6000 to 12000 litres) capacity along with water mist arrangement
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in & around the mine area was good as the lessee had carried out afforestation & environmental protection measures as per the proposal.

## 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 Oct 2020 A.R. Submitted up to 2019-20	AR submitted on 22.06.2020	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		Same officers were present during the course of inspection	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Dump- 5.66 Ha Buildings-1.27 ha Others-18.07	Appears to be correct	Nil
9d	Scrutiny of Annual return on afforestation	WML: 140 saplings OML: 1055 saplings	Appears to be correct	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore		Appears to be co	orrect	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	<del>-</del>	Appears to be co	orrect	
9h	Scrutiny of Annual return on fixed assets		Appears to be co	orrect	Nil
9k	Scrutiny of Annual return on mining machineries	Excavator- 5 No' Wheel loader - 3 No' Tipper - 14 No' Rock Drill- 1 No' Crusher- 1 No' Back Hoe- 2 No'			Appears to be correct

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Issued on Compliance on

Details of violations observed during current inspection and compliance position of violation pointed out

| Violation observed | Show couse position |

Rule NO.

Date: (ARUN KUMAR)

Issued on Compliance on

Rule NO.

Indian Bureau of Mines