

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

Inspection under SDF for star rating of mines REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/394/BNG

Mine code : 30KAR03136

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : R. Shivananda Reddy (Mines Manager)& Vinod Kumar Desh
Official with
Designation
- (iv) Date of Inspection : 25/06/2021
- (v) Prev.inspection date : 27/08/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **RAMGAD(ML 1715)**
- (b) **Registration NO.** : **IBM/372/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **DHARAMPUR**
- Taluka : **SANDUR**
- Post office :
- Pin Code :
- FAX No. : **08395260907/366, 944839550**
- E-mail : **vnk2543@gmail.com**
- Phone : **08395 - 260366**
- (f) **Police Station** : **Sandur**
- (g) **First opening date** :
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **SRI.V.N.K.MENON,**
correspondance **NO.6, KHB COLONY,**
SANDUR - 583 119.
3. (a) **Lease Number** : **KAR0255**
- (b) **Lease area** : **1.62**
- (c) **Period of lease** : **10**
- (d) **Date of Expiry** : **31/12/1991**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : V.N.K.MENON
 16,K.H.B.COLONY SANDUR
 BELLARY KARNATAKA
 Phone:
 FAX :

Owner : V.N.K.MENON
 CONTRACTOR, SANDUR,
 BELLARY, BELLARY KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : NISHANT BHANUDASAJI NATIYE,Full Time
 Qualification : B.E.MINING
 Appointment/ : 12/04/2018
 Termination date

Geologist

Name : VOLVOIKAR AMBRISH,Full Time
 Qualification :
 Appointment/ : 02/04/2018
 Termination date

Manager

Name : R SHIVANANDA REDDY
 Qualification :
 Appointment/ : 18/02/2010
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	28/02/1995
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	14/05/2013
		MS modif under MCR 1960	14/10/2014
		MP modif under 17(3) MCR 2016	08/11/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal.	Nil.	No backlogs.
1b	Exploration over lease area for geological axis 1 or 2	No proposal.	G1-4.8080 Ha, Non Mineralized area -5.02 Ha.	Total 35 core bore holes were drilled with total Meterage of 1597 meters at a grid interval of 50meters in the previous years.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal.	Nil.	Nil.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal.	Nil.	Nil.
1e	Balance reserve as on 01/04/20	Nil.	1600796 Tons with average grade of 62.8% Fe.	As per AR submitted for FY 2020-21.
1f	General remarks of inspecting officers on geology, exploration etc			Total 35 core bore holes were drilled covering an area of 4.8080 Ha under G-1 category. 5.05 Ha is non mineralized .

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed location of development: N1666280 to N1666485 & E662570 to E6622650	Actual location of development: N1666425 to N1666485 E662570 to E6622650	In between section line C-C' to E-E'.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No Separate benches in overburden and mineral proposed.	All the benches contain overburden and ore.	No top soil is generated as workings are within the broken-up area.
2c	Stripping ratio or ore to OB ratio	1:0.076	1: 0.080	Bulk density: ore-3t/CuM OB-2.2t/CuM

2d	Quantity of topsoil generation in m3	No Proposal	Nil .	No top soil generated.
2e	Quantity of overburden generation in m3	7645tonnes.	8012 Tonnes.	No significant change.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development was carried out within the proposed grids as per the approved document.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit proposed	Actual working carried out in one pit only.	Appx. dimension of the pit: (270 (L)X160(W)X78(D) Meters.
3b	Quantity of ROM mineral production proposed	100000 Tonnes	99996 Tonnes	No significant difference. 4 tonnes reduced by KSPCB.
3c	Recovery of sailable/usable mineral from ROM production	90%	90%	Nil.
3d	Quantity of mineral reject generation	No proposal.	Nil .	No mineral reject generated.
3e	Grade of mineral rejects generation and threshold value declared.	+35 to <45 Fe% (BHQ)	Nil	Nil
3f	Quantity of sub grade mineral generation.	No proposal.	Not applicable.	No proposal of sub grade mineral.
3g	Grade of sub grade mineral generation	No proposal.	Not applicable.	Nil.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method proposed for segregating from ROM	Mechanized method adopted for segregating from ROM	Dry crushing (80TPH) & screening (250TPH)

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No such beneficiation study proposed and carried out	No wet processing of mineral adopted
3j	Provision of drilling and blasting in mineral benches	Provision is made for Drilling & blasting	Drilling and blasting are carried out in the mine in combination with slurry explosive and Nonel	30% of the total material handling is drilled and blasted along with sub grade drilling.
3k	Provision of mining machineries in mineral benches	Provision of mining machineries is made	Excavators-02 no's Dumpers -02 no's & wheel loader 01 no along with 01 no of crushing and screening unit	Drilling and blasting is out sourced to authorized agencies.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposal Bench height-8Mtrs Bench Width-11 Mtrs	Bench height and width are suitable for mining Bench height-8Mtrs Bench Width-11 Mtrs	As per proposal the benches are formed.
3m	Total area covered under excavation/pits	4.29 Ha at the end of plan period.	4.0 Ha at the end of reporting year.	No change.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.076	1: 0.080	No significant change.
3o	Total area put in use under different heads at the end of year	Area under mining-4.2965 Ha, waste dump site-2.0956 Ha, infrastructure (work shop, administrative building etc.)-0.0097 Ha, roads-0.5594 Ha, green belt-0.3100 Ha, others-1.1396 Ha	Covered under current o/c workings-4.000 Ha, Used for waste disposal-1.477 Ha, Occupied by plant, buildings, residential, welfare buildings & roads-0.559 Ha, Others (plantation and safety zone)- 4.264 Ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	2016-17: 130000 2017-18:100000 2018-19:100000 2019-20: 100000 2020-21:100000	2016-17: 71000 2017-18: 99996 2018-19: 99996 2019-20:99996 2020-21:99996	All unit in tons. Actual production is within the proposed limits

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

Mining was carried out with the help of excavator tipper combination. Drilling & Blasting was carried out in conjunction with NONEL detonators.

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 overburden proposed.	Separate dumping carried out for over burden.	No top soil & mineral reject generated.
4b	Location of topsoil, OB and mineral reject dumps	Proposed location: N 1666570 to N 1666640 E 662685 to E 662760	Actual Location: N 1666580 to N 166640 E 662685 to E 662760	Waste dumping was carried out in advancing manner without forming the terraces as proposed. Violation issued.
4c	Number of dumps within lease area and outside of lease area	Within mining lease 02 dumps, outside mining lease- nil	Within mining lease 02 dumps, outside mining lease- nil	There is no dump outside the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	The dump is proposed outside the UPL.	Overburden dumping is carried as per proposal outside the UPL .	Active dump is on the North Eastern side of the lease area.
4e	Number of active and alive dumps.	01	01	
4f	Number of dead dumps.	01	01	Towards the Eastern side of the lease area. Stabilized by terracing & plantation.
4g	Number of dumps established.	One dead dump.	One dead dump stabilized by terracing & plantation.	150 no's saplings planted over an area of 0.036 Ha on the slope of the dump.

4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal.	Nil.	Constructed Retaining Wall & Garland Drain all along the dump in the previous year's & maintained.
4i	Length of Retaining wall or garland drain all along dumps	No Proposal .	Nil .	RW1- 188 Mtrs RW2- 260 Mtrs GD1- 225 Mtrs. GD2- 160 Mtrs. constructed in the previous years.
4j	Number of settling ponds	No Proposal.	Nil.	2 Nos.of settling tanks were constructed in the previous years and are maintained.
4k	Specific comments of inspecting officer on waste dump management			Waste dumping was carried out in advancing manner without forming the terraces as proposed. Violation issued.

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.	No area is matured for backfilling.	Nil.
5b	Area under backfilling of mined out area	No Proposal.	Not applicable .	Nil.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal.	Nil.	No generation of top soil.
5d	Total area fully reclaimed and rehabilitated	No Proposal.	No area fully is reclaimed & rehabilitated.	Nil.

5e	General remarks of inspecting officers on backfilling and reclamation etc.	No area is devoid of mineral & no proposal of backfilling. Mineral exist at depth.
----	--	--

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 by 1st July every year.	Annual report on PMCP submitted.	Annual report on PMCP submitted on 23/06/2021.
6b	Area available for rehabilitation (ha) .	0.074 Ha	0.074 Ha	Nil.
6c	afforestation done (ha).	0.074 Ha.	Part of the dump stabilized by plantation	--
6d	No. of saplings planted during the year	300	180 No's of plants planted on WML 140 No's of plants planted OML.	Nil.
6e	Cumulative no .of plants	3470	3470 saplings	Dump stabilization.
6f	Any other method of rehabilitation	No proposal.	Nil.	Not applicable.
6g	Cost incurred on watch and care during the year	Rs.17500/-	Rs. 251630/-	This cost includes for fire line grass cutting and watch and ward.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal.	Nil.	Not applicable.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal.	Nil	Not applicable

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal.	Nil.	Not applicable.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal.	Nil.	Not applicable.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal.	Nil.	Not applicable.
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No proposal.	Nil.	No waste land available.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposal.	Nil.	Not applicable.
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposal.	Nil.	Not applicable.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring in core zone & buffer zone proposed.	Environmental monitoring carried out on quarterly basis for air, water & noise.	Environmental monitoring was carried out by Mineral Engineering Services, Ballari. All the environmental parameters were within the permissible limits.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	PMCP activities were carried out as per the approved document.
----	---	--

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Size wise/grade wise sorting & dispatch proposed within the lease area.	Size wise/ Grade wise sorting & dispatch done within the lease area.	Sizing with the help of crushing and screening unit.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical method proposed.	Mechanical method adopted.	Mobile crushing & screening plant is being used for sorting of produced R.O.M.
7c	Different grade of mineral sorted out at mines.	+45 -60 % Fe (+10 mm to -40 mm) and Fe +45 % (-5mm)	Lumps & Fines- 62 to <65 % Fe Dispatched.	Nil.
7d	Any beneficiation process at mines	No Proposal.	Nil.	Not applicable.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation is taken care off. Low grade ore is blended with high grade to meet the market requirement.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal.	Nil .	No top soil generated during the year since workings are being carried out in broken up area.

8b	Concurrent use or storage of topsoil	No Proposal.	Nil.	No top soil generated during the year.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for overburden proposed.	Separate dump for overburden maintained.	Apart from overburden dump, there is a BHQ dump located at N1666437 to N1666475 & E662651 to E662746, stacked in the previous years.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal.	Nil.	Not applicable.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	Nil.	Not applicable.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information on existence of plantation available.	WML-180 Saplings, OML-140 Saplings.	Survival rate:WML-90%, OML-80%
8g	Survival rate	Not specified.	85%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads proposed to control airborne dust.	Water sprinkling on roads is done regularly to control airborne dust.	Water tanker of 8000 liter capacity is being used for water sprinkling on roads to prevent generation of borne dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mine is maintained as the lessee had carried out plantation within & outside 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 May-2021 A.R. Submitted for FY 2020-21.	Annual return submitted on 23/06/2021.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mine manager- Sri.R. Shivananda Reddy, Mining Engineer - Sri.vinod Kumar Deshmukh.	Only Mines Manager accompanied during the course of inspection.	No Ming Engineer & Geologist appointed. Violation issued.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current o/c workings-4.000 Ha, used for waste disposal-1.477 Ha, occupied by plant, buildings, residential, welfare buildings & roads-0.559 Ha, others (plantation and safety zone)-4.264 Ha.	Appears to be correct.	
9d	Scrutiny of Annual return on afforestation	WML:180@ 90% survival and OML-140@80% survival	Appears to be correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil.	No mineral reject generated.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Opening stock-Nil, Production-99996 tonnes Closing stock-Nil.	Appears to be correct.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value: Fines- Rs.3815.63/Ton ,Lumps- Rs.5418.95/Ton Ex mine price: Fines- Rs.3816/ton, Lumps- Rs.5419/Ton Cost of production: 1099.21Rs/ton.	Sale value & EX Mine price appears to be correct.	NMET & DMF has not been considered in the cost of production. Violation issued.
9h	Scrutiny of Annual return on fixed assets	Rs 4989919 including plant, machinery and transport equipment.	Appears to be correct.	
9k	Scrutiny of Annual return on mining machineries	Excavators- 02no's dumpers-02 no's Water tanker- 01 no.	Appears to be correct.	

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)	22/07/2021				
Rule 45(7)(i)	22/07/2021				
MCDR17 Rule 55(1)(3)	22/07/2021				

Date :

(ARUN KUMAR)

Indian Bureau of Mines