

**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 : 27/08/2019
- (v) Prev.inspection date :

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- 5.502Ha	Total 35 core bore holes were drilled with total Meterage of 1597 meters at a grind interval of 50meters in the previous years
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	4 core bore holes were drilled at 50meters grid interval, amounting to 202 meters	Cost incurred for drilling 4 holes -Rs 6.61lakhs (as advised by NIRM for assessing slope stability)
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Nil	4.8080 Ha covered under G1 and rest of the area is non mineralized.
1e	Balance reserve as on 01/04/20		1800788 tonnes	As per AR submitted for FY:2018-19
1f	General remarks of inspecting officers on geology, exploration etc			4 core bore holes were drilled at 50 Mts grid interval, amounting to 202 meters as advised by NIRM for assessing slope stability

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed location of development :N1666280 To N1666515 and E662450 to E662580	Actual location of development : N1666280 to N1666513, E662453 to E662588	In between section line D-D' to G-G'
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	1:0.04	1:0.034	Bulk density : ore-3,OB-2.2
2d	Quantity of topsoil generation in m3	No Proposal	Nil	No top soil generated
2e	Quantity of overburden generation in m3	4072 tonnes	3840 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 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 in one pit only	Appx. dimension of the pit: M(240*200*68)(L*W*D)
3b	Quantity of ROM mineral production proposed	100000 Tonnes	99996 Tonnes	No significant difference.
3c	Recovery of sailable/usable mineral from ROM production	90%	90%	No difference
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)	+35 to <45 Fe% (BHQ)	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)and 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 is 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	Proposed 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 in the plan period	4.0 Ha	No change
3n	Ore to OB ratio for the pit/mine during the year.	1:0.04	1:0.034	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	-

3p	Production of ROM mineral during the last five year period as applicable	2014-15: 130000 2015-16: 130000 2016-17: 130000 2017-18: 100000 2018-19: 100000 (in tonnes)	2014-15: 43000 2015-16: 43000 2016-17: 71000 2017-18: 99996 2018-19: 99996 (in tonnes)	Actual production is within the proposed limits
----	--	--	--	---

3q	General remarks of inspecting officers on method of mining etc.	Mining was done with the help of HEMM,Drilling & Blasting 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	N 1666570 to N 1666635, E 662700 to E 662780	N1666525 to N166635 ,E662651 to E662746	No change
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
4g	Number of dumps established.	One inactive dump proposed	Inactive dump stabilized by terracing & plantation	160 no's saplings planted 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 years & 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 are constructed in the previous years and are maintained
4k	Specific comments of inspecting officer on waste dump management			Waste dump management is satisfactory & dumping is carried out as per 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	No area is matured for backfilling	-
5b	Area under backfilling of mined out area	No proposal	Not applicable	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	No top soil is generated	-
5d	Total area fully reclaimed and rehabilitated	No proposal	No area is fully reclaimed & rehabilitated	-

5e	General remarks of inspecting officers on backfilling and reclamation etc.	No area is devoid of mineral & no proposal for 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 is submitted	Annual report on PMCP is submitted on 13/04/2019
6b	Area available for rehabilitation (ha) .	No Proposal	Nil	-
6c	afforestation done (ha).	Gap filling proposed	Plantation done all along the gap filled area	-
6d	No. of saplings planted during the year	100 nos of saplings proposed	160 nos of saplings planted	Part of the inactive dump area is stabilized by plantation
6e	Cumulative no .of plants	3020 saplings proposed	3180 saplings	-
6f	Any other method of rehabilitation	No proposal	Nil	-
6g	Cost incurred on watch and care during the year	Rs. 5250/-	1,92,709Rs/-	This cost includes for fire line gross 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	-
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)Afforestation on on backfilled area	No proposal	Nil	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	-
6l	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	No waste land available	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring in core zone & buffer zone proposed	Environmental monitoring is carried out on quarterly basis for air, water & noise	Air: 03 (B) 4(C),Water:1(C),5(B),Noise:1(c),3(B) 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	Grade wise sorting & dispatch proposed within the lease area	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	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation is done.All the ore is crushed,screened & dispatched

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 over burden proposed	Separate dump for overburden maintained	Apart from overburden dump, there is a BHQ dump 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	-
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)	Baseline information on existence of plantation available	WML-160 Saplings ,OML-283Saplings	Survival rate : WML-90%,OML-85%
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 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.

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-2018 A.R. Submitted for FY 2018-19	Annual return submitted on 28/06/2019	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mine manager- sri.R.Shivanan da Reddy, Mining Engineer - sri.vinod kumar Deshmukh, Geologist- sri.volvoikar Ambarish kalidas	Mining manager and mining engineer were accompanied during the course of inspection. no geologist is appointed	Violation pointed out for non appointment of geologist under rule 55
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:160@ 90% survival and OML-283 @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-0.00, production-99996 tonnes closing stock-0.00	Appears to be correct	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value: 2766 Rs/ton, Ex mine price: 2766 Rs/ton, cost of production:117 1.60Rs/ton	Appears to be correct	

9h	Scrutiny of Annual return on fixed assets	Rs 6906469 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 couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17 Rule 11(1)	11/09/2019				
MCDR17 Rule 55(1)(3)	11/09/2019				

Date :

(ARUN KUMAR)

Indian Bureau of Mines