

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

MCDR inspection REPORT

Bangalore regional office

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

Mine code : 30KAR03138

- (i) Name of the Inspecting : **P005**) **C.PARAMESHWARAN**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri. S. Mandal. Geologist.
Official with
Designation
- (iv) Date of Inspection : 27/02/2018
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **RAMANMALAI**
- (b) **Registration NO.** : **IBM/178/2011**
- (c) **Category** : **A Other than Fully Mech.**
- (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**
- Phone : **9611786655**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **19/08/2002**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** :
correspondance
3. (a) **Lease Number** : **KAR0344**
- (b) **Lease area** : **18.62**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **18/10/2012**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : VEERABHADRAPPA SANGAPPA & COMPANY
2/138, BELLARY ROAD,
HOSPET, BELLARY KARNATAKA
Phone:
FAX :

Owner : VEERABHADRAPPA SANGAPPA & COMPANY
NO.2/138, BELLARY ROAD,
SANDUR, BELLARY KARNATAKA
Phone:
FAX :

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 | nil |
| 1b | Exploration over lease area for geological axis 1 or 2 | G1+G2=42.59 ha. | same as above till 2014. | same as reported as G1=not given separately. G2=not given separately. |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | not reported | not reported | It is required to be submitted by the company. |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | no proposals. | 7.61 ha area is used for waste dumping in the non mineralized. | as above. |
| 1e | Balance reserve as on 01/04/20 | .Under G1=34818477t & G2=3869389t | the reserves & resources is as above. | yes thereserves & resources may change. |
| 1f | General remarks of inspecting officers on geology, exploration etc | No proposals in the present document. | No exploration during this document, but the lessee already undertaken, | Exploraation before 2014 completed by the lessee. |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--------------------------------|---|---|
| 2a | Location of development w.r.t.lease area | PROPOSED | AS per the proposed location. | yes only in the proposed locations, except waste developments at middle of the pit. |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | 2 OB benches & 11 ore benches. | Yes 2 OB benches & 11 ore benches in the pit. | yes followed accordingly. |
| 2c | Stripping ratio or ore to OB ratio | 1:0.50 | 1:0.15 | reduced from the proposals. |
| 2d | Quantity of topsoil generation in m3 | .nil | nil | small quantity generated has been used for plantations purposes. |

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|----|---|-----------|--|-------------------------------------|
| 2e | Quantity of overburden generation in m3 | 172319m3. | 61611m3 | reduced from the proposed quantity. |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | proposed | yes actual is slightly varying at the bottom of the pit, which was not proposed. | slight changes in the proposals. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--------------|--|--|
| 3a | Number of pit proposed for production | One pit only | One only | yes one is operation. |
| 3b | Quantity of ROM mineral production proposed | 0.844MMT. | 0.844MMT | same as above. |
| 3c | Recovery of sailable/usable mineral from ROM production | 95% | 98% | Increased by 3%, owing increase in between section R4 to R8. |
| 3d | Quantity of mineral reject generation | 32292t | 5000t of +35 to -45%Fe, which are considered under MR. | At present the above grades materials are kept stacked for future use. |
| 3e | Grade of mineral rejects generation and threshold value declared. | +35--45%Fe. | Same as above. | yes as above |
| 3f | Quantity of sub grade mineral generation. | nil | nil | nil |
| 3g | Grade of sub grade mineral generation | nil | nil | nil |
| 3h | Manual / Mechanised method adopted for segregating from ROM | mechanized. | mechanized. | yes same. |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | nil | nil | nil |

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| 3j | Provision of drilling and blasting in mineral benches | yes given | yes machines were used as applicable in the mine. | used as per the requirements. |
| 3k | Provision of mining machineries in mineral benches | yes given | details furnished in the annual returns. | given all the details. |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | height 7 to 7.5m and the width 8m | yes as proposed things are made in the mine workings. | appropriate. |
| 3m | Total area covered under excavation/pits | 26.470 ha. | 26.470 ha | as above. |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:0.51. | 1:0.15 | varied from the proposals, which is possible. |
| 3o | Total area put in use under different heads at the end of year | Pit =26.470, R/R given is wrong, which should come under dumping area i.e. 0.392 ha. waste dump=4.350, building , installation etc=1.270 & others =20.678 ha. | violation issued to rectify the R & r area to dump. | Rest of the things are ok. |
| 3p | Production of ROM mineral during the last five year period as applicable | 2011-12=nil ,2012-13=0.59MT, 2013-14=0.59MT, 2015-16=0.59MT, 2016-17=1.10MT | 2011-12=nil ,2012-13=0.288MT, 2013-14=0.588MT, 2015-16=0.59MT, 2016-17=0.844MT | A per the annual returns. |
| 3q | General remarks of inspecting officers on method of mining etc. | Proposed in approved document for systematic exploitation. | work is carrying out as per the proposals, but some place it is out of proposals. | violation issued as per the field observation. |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
|--------|------|-----------|-------------|---------|

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|----|--|--------------------------------------|--|--------------------------------------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | yes proposed | proposed is being carried out in the mine. | yes it is being followed. |
| 4b | Location of topsoil, OB and mineral reject dumps | N-1668650-1669050 E-659550-659905 | N-1668650-1669050 E-659550-659905 | same as proposed. |
| 4c | Number of dumps within lease area and outside of lease area | one within the ML area.. | one within the ML area.. | same as above. |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | within the UPL. | within the UPL. | yes within the UPL. |
| 4e | Number of active and alive dumps. | one active dumps within the ML area. | one only active. | one active only. |
| 4f | Number of dead dumps. | nIL | nIL | nIL |
| 4g | Number of dumps established. | None | nil | nil |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | proposed | yes provided. | yes provided. |
| 4i | Length of Retaining wall or garland drain all along dumps | 75m | 1053m retaining wall & Garland drain is 387m | it is reported as on date completed. |
| 4j | Number of settling ponds | No proposals | nil | 3 nos. of settling pond constructed. |
| 4k | Specific comments of inspecting officer on waste dump management | proposals are present. | carrying out the work as per the proposals. | work 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 proposals. | nil | nil |

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|----|---|------------------|-----|---|
| 5b | Area under backfilling of mined out area | nil | nil | nil |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | nil | nil | nil |
| 5d | Total area fully reclaimed and rehabilitated | No land matured. | nil | nil |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | no proposals. | nil | no area is matured as such for the above works. |

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). | yes submitted foe the year 2016-17 | nil | nil |
| 6b | Area available for rehabilitation (ha) . | nil | nil | nil |
| 6c | afforestation done (ha). | nil | nil | nil |
| 6d | No. of saplings planted during the year | nil | nil | nil |
| 6e | Cumulative no .of plants | nil | nil | nil |
| 6f | Any other method of rehabilitation | nil | nil | Nil |
| 6g | Cost incurred on watch and care during the year | nil | nil | ni; |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | nil | nil | nil |

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|----|---|-------------------------------|---|---|
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | nil | nil | nil |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area | nil | nil | nil |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | nil | nil | nil |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v) any other specific means. | nil | nil | nil |
| 6m | Compliance of rehabilitation of waste land within lease (i) afforestation | nil | nil | nil |
| 6n | Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha) | 0.32 ha | 0.32 ha | yes as above |
| 6o | Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation | Through plantation | same as above | Same as above. |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Environment report submitted. | datas are found to be within the limit. | Yes core and buffer zone datas are furnished. |

6q General remarks .
of inspecting
officers on PMCP
compliance and
progressive
closure
operations etc.

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|---|--|---|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | Yes proposed. | carrying out sorting and sizing. | Yes carrying out mineral dispatch after sorting and sizing. |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | mechanical means. | mechanical means only sorting and dispatch done. | yes mechanical means. |
| 7c | Different grade of mineral sorted out at mines. | yes proposed for different grades. | +10mm to -40mm 62-63%Fe, -10mm of Fe 60-62%Fe respectively. | Yes as above |
| 7d | Any beneficiation process at mines . | No beneficiation at mines proposed. | dry process screening & sizing method only available. | yes only dry process. |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | proposed for systematic method of conservation of minerals. | yes systematically workings are being carried out and continued. | Mine is working systematically. |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---------------|-------------|--|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No proposals. | nil | small quantity generated and are used for the plantations. |
| 8b | Concurrent use or storage of topsoil | no proposals. | nil | nil |

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|----|---|--|--|---|
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Yes separate waste is proposed for dumping and not others. | yes only waste is developed and stacked. | only waste is generated. |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | no proposals. | not matued for any such activities. | yes no such work is being carried in the ML area. |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | no proposals. | nil | nil |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | 500 nos. | 805nos. | regular maintenance is being carried out in the mine. |
| 8g | Survival rate | 85%. | 85% | may be between 70-80%. |
| 8h | Water sprinkling on roads to control airborne dust | yes proposed. | Yes within the ML area the dust suppression is being done. | yes it is being done in the ML area for dust suppression and for the growth of the trees and the plantations. |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | yes proposed | Environment within the ML area is being maintained well. | yes it is maintained. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|--------------------------------|-------------------|
| 9a | Status of submission of Monthly and Annual returns | Submitted the monthly & the annual returns for the year 2016-17. | submitted to the satisfaction. | Yes satisfaction. |

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| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | manager is S/Shri Nandakumar, Mining engineer is Imran Khan, & Geologist is Shanmukhappa Mandal. | Present during the inspection. | yes present during the inspection of the mine. |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | OC working=26.47 ha, reclaimed & rehabilitated area =0.392 ha, waste disposal is 4.35 ha, plant & building etc., =1.27 ha & green belt & road etc., = 20.678 ha. | Reclaimed & rehabilitated area indicated for 0.392 ha is not correct, this needs to be under waste dump area. | other things are ok. |
| 9d | Scrutiny of Annual return on afforestation | within the lease area is nil & outside the lease area is 350 nos with 85% survival rate. | within the ML it is comes under forest, hence only outside ML area plantations undertaken. | yes did only in outside ML area. |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | 5000t with 32-35%Fe. | As reported, possibly may vary little. | As above. |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | OC working production reported as 844000t with 56000t as closing stock. Besides, 1575t as opening stock from dump working & same quantity as closing stock. | Not appropriate to report on dump working as 1575t from dump working OS & CS. | the dump working stock need to be reconciled & update. |

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| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Cost of production is rs. 951/t, ex-mine price is rs. 975/t , 2016, 2513 & 2856/t for lumps & for fines it goes from 915/t to 1650, 2521/t, respectively. sale price is rs. 2180/t for 58-60%Fe for lumps , 60-62%fe is 2153/t. for fines. for 62-65%Fe is 2120/t. <55Fe% is 915/t. | the prevailing rates are given as per the grade & the quality are found to be appropriate. | Yes as prevalent in the e-auction. |
| 9h | Scrutiny of Annual return on fixed assets | the vale of fixed assets is Rs. 31893893 on mine, beneficiation, workshop & water installation etc. depreciation on fixed assets is Rs. 5696509. | reported is found to be correct. | yes correct to the available assets. |
| 9k | Scrutiny of Annual return on mining machineries | Given all HEMM used in the mines as proposed. | Used machineries are as proposed. | proposed method of working and the machineries are as per the approved document. |

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 |

Date :

(C.PARAMESHWARAN)

Indian Bureau of Mines