INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

Inspection under SDF for star rating of mines REPORT

Bangalore regional office

| | Mine : | file No : KNT/BLR/FE/ | 79/I | BNG Mine code : 30KAR03012 |
|----|------------|--|------|---|
| | (i) | Name of the Inspecting Officer and ID No. | g : | 278) KRISHNENDU CHATTERJEE |
| | (ii) | Designation | : | Junior Mining Geologist |
| | (iii) | Accompaning mine Official with Designation | : | S/Shri. Laxmikanth-Manager & Ekambrappa.B-Mining Engi |
| | (iv) | Date of Inspection | : | 06/09/2018 |
| | (v) | Prev.inspection date | : | |
| | | PI | ART- | I : GENERAL INFORMATION |
| 1. | (a) | Mine Name | : | S.V.CHETTY'S |
| | (b) | Registration NO. | : | IBM/293/2011 |
| | (g) (h) | Weekly day of rest | | BELLARY JAISINGPUR SANDUR SUSHILNAGAR 08394 - 230439 svciom@gmail.com, 08394230439, 9742779999, 9; SANDUR 28/05/1979 SUN |
| 2. | | ess for espondance | : | S.V.SRINIVASULU ,OLD INCOME TAX OFFICE BUILDING, NEAR SAHAKARI KALYANA MANATAPA, N.C.COLONY HOSPE BELLARY-583201 |
| 3. | | | : | KAR0226 60 50 31/03/2020 |
| 4. | Miner | ral worked | : | IRON ORE Main |

| 5. Name | e and Address of | the | |
|---------|------------------|------|--------------------------------|
| | Lessee | : | S.V.SRINIVASULU |
| | | | MINE OWNER M.J.NAGAR HOSPET |
| | | | BELLARY KARNATAKA |
| | | | Phone: |
| | | | FAX : |
| | Owner | : | S.V.SRINIVASULU |
| | | | M.J. ROAD, HOSPET, BELLARY. |
| | | | BELLARY KARNATAKA Phone: |
| | | | FAX : |
| | | | PAA · |
| | Mining Enginee | r | |
| | Name | : | EKAMBRAPPA B,Full Time |
| | Qualification | : | B E MINING |
| | Appointment/ | | 18/01/2012 |
| | Termination da | te | |
| | Manager | | |
| | Name | : | LAXMIKANTH |
| | Qualification | : | FCC |
| | Appointment/ | : | 16/06/2016 |
| | Termination da | te | |
| | | | |
| 6. Date | e of approval of | Mini | ng : Existing rule 11 MCDR1988 |

| б. | Date of approval of Mining Plan/Scheme of Mining | : | Existing rule 11 MCDR1988 Renewal under rule 24 MCR1960 Modif.of approved Mining Plan Mining Scheme rule 12 MCDR1988 Modif.approved Mining Scheme Mining Scheme rule 12 MCDR1988 MP modif under MCR 1960 MP modif under 17(3) MCR 2016 | 09/08/1994 08/07/2005 22/09/2008 29/07/2010 03/01/2014 30/04/2015 22/06/2016 05/04/2018 |
|----|---|---|---|--|
|----|---|---|---|--|

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|---------------|---|---|
| la | Backlog of previous year | 10 DTH holes | 8 DTH holes drilled. | |
| 1b | Exploration over lease area for geological axis 1 or 2 | | G2 Stage. | So far, lessee has carried out 75 nos. of trial pits and 8 nos. of DTH holes in the ML area. |
| lc | Exploration Agencies and Expenditure in lakh rupees during the year | Not specified | Rs. 1.10 lakhs | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | G1 | G1 & G2 stage. | |
| 1e | Balance reserve as on 01/04/20 | No proposal. | 3.1 million tonnes as or 01.04.2018 | ı |
| lf | General remarks of inspecting officers on geology, exploration etc | | Violation of rule 11(1) was issued to the lessee dated 03.10.2018 for not carrying out exploration as per the approved proposal. | : |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|----------------|---|--|
| 2a | Location of development w.r.t.lease area | side of the ML | No change in location. | |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | | Seperate benches in float ore maintained as per fall of topography. | Since it is a float ore deposit, thre was no seperate benches in top soil and OB. |
| 2c | Stripping ratio or ore to OB ratio | 1:0.22 | 1:0.26 | |
| 2d | Quantity of topsoil generation in m3 | No proposal | No top soil generation during 2017-18. | |

2e Quantity of 11100 m3 overburden generation in m3

2f General remarks of inspecting officers on development of pit w.r.t. type of deposit etc No deviation in respect of mine development was observed during the course of inspection dated 06.09.2018.

12979 m3

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-------------------------|---|---|
| 3a | Number of pit proposed for production | Single pit proposed. | Single pit worked during 2017-18, Al pit. | 05 nos. of pits located in the ML area with following dimentions: A1 Pit: 440m(L) x 400m (W) x 5m (D) A2 Pit: 250m(L) x 350m (W) x 3m (D) A3 Pit: 300m(L) x 230m (W) x 3m (D) A5 Pit: 60m(L) x 130m (W) x 5m (D) A6 Pit: 100m(L) x 50m (W) x 4m (D) |
| 3b | Quantity of ROM mineral production proposed | 100,000 tonnes | 100,000 tonnes of ROM produced during 2017-18 | This quantity was exclusive of intercalated waste within float ore. |
| 3c | Recovery of sailable/usable mineral from ROM production | 75% recovery proposed. | 75% recovery of ROM from float ore | |
| 3d | Quantity of mineral reject generation | No proposal | No mineral reject generation during 2017- 18. | |
| 3e | Grade of mineral rejects generation and threshold value declared. | No proposal | Not Applicable. | |
| 3f | Quantity of sub grade mineral generation. | No proposal | Nil | |
| 3g | Grade of sub grade mineral generation | No proposal | Not Applicable. | |

| 3h | Manual / Mechanised method adopted for segregating from ROM | Mechanized method proposed. | Mechanized method adopted. |
|----|--|--|--|
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | No proposal for beneficiation. | Nil |
| 3ј | Provision of drilling and blasting in mineral benches | No proposal for drilling and blasting. | Drilling and blasting not carried out. |
| 3k | Provision of mining machineries in mineral benches | Proposed. | Excavators in combination with tippers. |
| 31 | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Yes. | Bench height maintained from 3 to 5m as per the thickness of the float ore. |
| 3m | Total area covered under excavation/pits | 25.62 Ha. | Total 25.62 Ha. area covered by 5 pits, 1.2 Ha. area was mined during 2017-18 in Al pit. |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:0.22 | 1:0.26 |
| 30 | Total area put in use under different heads at the end of year | 38.71 Ha. | No change in area. |
| 3р | Production of ROM mineral during the last five year period as applicable | | 2014-15: Nil 2015-16: 80000 |
| 3q | General remarks of inspecting officers on method of mining etc. | | No deviation in respect of mineral exploitation was observed during the course of inspection. |

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|---|--|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | No proposal | Waste generated was used for concurrent backfilling. | |
| 4b | Location of topsoil, OB and mineral reject dumps | No proposal | Nil | |
| 4c | Number of dumps within lease area and outside of lease area | 1 within ML | 1 dump within ML | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Outside UPL | Outside UPL | |
| 4e | Number of active and alive dumps. | No proposal | No active dump within ML. | |
| 4f | Number of dead dumps. | 01 inactive dump | 01 inactive dump | |
| 4g | Number of dumps established. | 01 inactive dump | Inactive dump stabilized by plantation. | |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Proposed as per the approved R & R Plan. | Constructed as per the approved R & R Plan. | |
| 4i | Length of Retaining wall or garland drain all along dumps | | Retaining wall: 235m within ML and 244 m outside ML constructed. Garland drain: 235 m within ML and 339 m outside ML constructed. | |
| 4j | Number of settling ponds | 01 no. within ML | 01 no. within ML constructed. | |
| 4k | Specific comments of inspecting officer on waste dump management | | No deviation in respect of waste management was observed during the course of inspection. | |

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. | - | Concurrent backfilling was carried out. | |

| 5b | Area under backfilling of mined out area | 0.55 Ha. proposed | 0.56 Ha. area of Al pit backfilled. |
|----|--|-------------------------------|---|
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | No proposal | No topsoil generation. |
| 5d | | 7 Ha. during F.Y. 2017-18. | 7.09 ha. area reclaimed and rehabilitated. |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | No deviation in respect of backfilling was observed during the course of inspection. |

Progressive Mine Clousre Plan:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|------------------------|---|---------|
| ба | Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2). | Proposed. | Annual report submitted for F.Y. 2017-18 on 06.07.2018. | |
| 6b | Area available for rehabilitation (ha) . | 7 Ha. | 7.09 Ha. area. | |
| бс | afforestation done (ha). | 0.65 Ha. | 0.65 Ha. | |
| 6d | No. of saplings planted during the year | 3000 nos. within ML | No change. | |
| бе | Cumulative no .of plants | Not specified. | Approx. 125,000 nos. within ML. | |
| 6f | Any other method of rehabilitation | No proposal | Nil | |
| бg | Cost incurred on watch and care during the year | Rs. 650,000/- | Rs. 700,000/- | |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | 0.55 На. | 0.56 Ha. in Pit no. Al | |

| 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 | No waste land involve within ML, entire ML located within Sandur Reserve Forest. |
| бn | 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) | Proposed. | Carried out on monthly basis and results were found within permissible limit. |

Afforestation on backfilled area not yet commenced.

6q General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. No deviation in respect of PMCP compliance was found during the course of inspection.

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|--|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | ROM proposed to be crushed and dry screening. | ROM was being crushed and dry screening. | |
| 7b | Method of grade- wise mineral sorting i.e. manual or mechanical. | Mechanised Crushing | Mechanised Crushing | |
| 7c | Different grade of mineral sorted out at mines. | Proposed for all +45% Fe. | 45 to 55%, 58 to 60%, 60 to 62% Fe. | |
| 7d | Any beneficiation process at mines | No proposal | Nil | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | | No deviation in respect of mineral conservation was observed during the course of inspection. | |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-------------|---|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No proposal | No top soil generation during F.Y 2017-18. | |
| 8b | Concurrent use or storage of topsoil | No proposal | Nil | |

| 0 - | Computer dummer | Gamanata | Masta was diseased by |
|-----|--|--|--|
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Seperate dumping for OB not proposed. | Waste was disposed by means of concurrent backfilling. |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Backfilling proposed by waste. | Concurrent backfilling of mined out pit in progress. |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Restoation proposed for mined out pits. | Compiled through concurrent backfilling and afforestation. |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | Proposed | 3000 nos. of saplings were planted during 2017-18, cumulative 125,000 nos. of trees planted within the ML area. |
| 8g | Survival rate | 70% | 70 to 80% |
| 8h | Water sprinkling on roads to control airborne dust | proposed. | Yes, Dust suppression carried out by deploying water tanker on mine haul road. |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | | Aesthetic beauty in and around mine was good and lessee had carried out afforestation and other environmental protective measures as per approved RMP. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------|--|---------|
| 9a | Status of submission of Monthly and Annual returns | | Monthly Returns submitted upto Oct.2018 Annual Return submitted upto 2017-18. | |

9b Scrutiny of Mining Engineer: B. Mining Annual return Engineer: B. Ekambarappa for information Ekambarappa Mining Geologist: on Mining Mining Harshavardana A.S. Manager: Laxmikanth Engineer, Geologist: Geologist and Harshavardana Manager A.S. Manager: Laxmikanth Scrutiny of Appear to be correct. 9c Area covered Annual return on under current land use pattern O/C working: for area under 25.62 Ha. pits, reclaimed Already area, dumps etc. exploited and abandoned: 4.8 Ha. Used for waste disposal: 2.35 Ha. Reclaimed: 7.09Ha. Infrastructure and road: 9.54 Ha. Sub-grade stack: 10.82 Ha. 9d Scrutiny of 3000 nos. No change. Annual return on afforestation 9e Scrutiny of Nil No mineral reject Annual return on generation. mineral reject generation (Grade and quantity) 9f Scrutiny of ROM stack: Nil Sub grade dump located Annual return on Dump working: north eastern side of ROM stock and/or 112047 tonnes the ML. graded ore

| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | | Appear to be correct. |
|----|---|--|---|
| 9h | Scrutiny of Annual return on fixed assets | Rs. 32420,484/- | Office building, Mining machineries, Crushers & dry screens were present within the ML area. |
| 9k | Scrutiny of Annual return on mining machineries | 3 nos. of hydraulic excavators, 6 nos. of tippers, 3 nos. of wheel loaders, 1 no. of crusher and lno. of water tanker | No change. |

| Details of violations observed during current inspection and compliance position of violation pointed out | | | | | |
|---|--------------------|------------|---------------|----------|-------------------------|
| | Violation observed | | | | ouse position |
| Rule 1 | NO. | Issued on | Compliance on | Rule NO. | Issued on Compliance on |
| MCDR17 | Rule 11(1) | 01/10/2018 | 04/12/2018 | | |
| MCDR17 | Rule 35(1) | 01/10/2018 | 04/12/2018 | | |
| MCDR17 | Rule 11(1) | 04/10/2018 | | | |
| MCDR17 | Rule 35(2) | 04/10/2018 | | | |

Date :

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines