

**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/79/BNG

Mine code : 30KAR03012

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri.Laxmikanth-Manager Mining & Shri B Eekambrappa-M
Official with
Designation
- (iv) Date of Inspection : 28/11/2019
- (v) Prev.inspection date : 06/09/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **S.V.CHETTY'S**
- (b) **Registration NO.** : **IBM/293/2011**
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : KARNATAKA
- District : BELLARY
- Village : JAISINGPUR
- Taluka : SANDUR
- Post office : SUSHILNAGAR
- Pin Code :
- FAX No. : 08394 - 230439
- E-mail : svciom@gmail.com,
- Phone : 08394230439, 9742779999, 98
- (f) **Police Station** : SANDUR
- (g) **First opening date** : 28/05/1979
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : S.V.SRINIVASULU ,OLD INCOME TAX OFFICE BUILDING,
NEAR SAHAKARI KALYANA MANATAPA, N.C.COLONY HOSPE
BELLARY-583201
3. (a) **Lease Number** : KAR0226
- (b) **Lease area** : 60
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 27/05/2019
4. **Mineral worked** : IRON ORE Main

5. Name 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 :

Mining Engineer

Name : EKAMBRAPPA B, Full Time
 Qualification : B E MINING
 Appointment/ : 18/01/2012
 Termination date

Manager

Name : LAXMIKANTH
 Qualification : FCC
 Appointment/ : 16/06/2016
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	09/08/1994
Plan/Scheme of Mining		Renewal under rule 24 MCR1960	08/07/2005
		Modif.of approved Mining Plan	22/09/2008
		Mining Scheme rule 12 MCDR1988	29/07/2010
		Modif.approved Mining Scheme	03/01/2014
		Mining Scheme rule 12 MCDR1988	30/04/2015
		MP modif under MCR 1960	22/06/2016
		MP modif under 17(3) MCR 2016	05/04/2018
		FMCP under 23C(1)	05/11/2018
		MP review under 17(1) MCR 2016	14/11/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	4 DTH Boreholes and 23nos of Trial Pits proposed	4 DTH Boreholes amounting to 135mts and 24nos of Trial Pits ,total of 80 mts were drilled	DTH were drilled at 100x100mts grid intervals
1b	Exploration over lease area for geological axis 1 or 2	Gland G2	G1-19.68 Ha, G2-10.91 Ha and Non-mineralized area -29.41 Ha.	Total mineralized area =30.59 Ha as per FMCP submitted
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration agency-Hirva Enterprises, Bellary for DTH and Trial pits by the department	Exploration agency was deployed as per the proposal	1.10 lakhs were spent on exploration including sampling and analysis.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Entire mineralized area of 30.59Ha has been covered under G1 and G2 level.	Fully explored as per FMCP submitted.
1e	Balance reserve as on 01/04/20	Nil	2.297 MMT	As per AR submitted for FY 2018-19.
1f	General remarks of inspecting officers on geology, exploration etc			Entire mineralized area of 30.59Ha has been covered under G1 and G2 level as per FMCP submitted and approved.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Location of development proposed: Float Ore-A1 block- N1680170-1679751& E657393-657100,A2 block- N1680308-1680280, E656684-656600,A3 block- N1678418-1678245,E656187-656120 Insitu Iron Ore:A2 Block- N1680445-1680263,E657012-656925	Actual Working(Float ore):A1 Block- N1680170-1679751& E657393-657100 and A3 block- N1678418-1678245,E656187-656120, Insitu Iron Ore:A2 Block-N1680445-1680263,E657012-656925	Float Ore-In between section lines NN' to QQ'(A1block)& BB'in A3 block. Insitu Iron Ore:J1J1'toJ2J2'
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed in float ore	Separate benches in reef ore maintained as per the topography	Since it is a float ore deposit ,no separate benches in top soil &OB.4 Benches in ore
2c	Stripping ratio or ore to OB ratio	1:0.51	1:0.35	In situ Ore - 3.0t/Cum, Float Ore-2.8 t/Cum and Waste-2.0 t/Cum. Violation issued.
2d	Quantity of topsoil generation in m3	No proposal	No generation of top soil	Working in the broken up area.
2e	Quantity of overburden generation in m3	95509 Tons	64624 Tons	No working was carried out in A2 Block & lower recovery in insitu ore. Violation issued
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Violation issued for lower handling of OB & reduction in stripping ratio

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	3pits namely A1,A2 & A3 blocks were proposed for working	Actual working in two pits, A1& A3 pits.	Total 06 Nos of pits are located in the ML area,
3b	Quantity of ROM mineral production proposed	187002 Tons	187000 Tons	No change
3c	Recovery of sailable/usable mineral from ROM production	In Float Ore-75% & In Insitu Ore-80% proposed	In Float Ore-75% & In Insitu Ore-74% achieved	Nil
3d	Quantity of mineral reject generation	No proposal	No mineral reject generated	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not applicable	Nil
3f	Quantity of sub grade mineral generation.	No proposal	No generation of sub-grade mineral	Nil
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 & screening with 80 TPH
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No beneficiation study carried out	Nil
3j	Provision of drilling and blasting in mineral benches	Drilling & Blasting proposed in in-situ area	Drilling & Blasting carried in in-situ area (A2 Block).	No proposal of D& B in float area
3k	Provision of mining machineries in mineral benches	Excavators in combination with tippers proposed	Excavators in combination with tippers deployed	For handling of ROM.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Float Ore-5 Mts & in Insitu Ore-9 Mts	Bench Height & Width maintained as proposed	Nil

3m	Total area covered under excavation/pits	25.64 Ha at the end of plan period	25.64 ha		No change
3n	Ore to OB ratio for the pit/mine during the year.	1:0.51	1:0.35		Based on tonnage
3o	Total area put in use under different heads at the end of year	Area under mining-25,64 Ha,OB dump-2.35 Ha,Mineral storage-7.12 Ha,Roads-2.42 Ha,Safety Zone-2.36 Ha,Afforestation-13.56 Ha, Biodiversity area-2,59 Ha,Others-3.96 Ha	Already exploited & abandoned by opencast (O/C) mining-4.58 Ha, Covered under current (O/C) Workings-25.640Ha, Reclaimed/Rehabilitated-8.98 Ha, Used for waste disposal-2.35 Ha, Occupied by plant, buildings, residential, welfare buildings & roads-9.54 Ha, Other Purpose (Biodiversity area, safety zone and Unused area)-8.91 Ha		Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15 79884 2015-16 80000 2016-17 99960 2017-18 100000 2018-19 187000	2014-15 Nil 2015-16 80000 2016-17 90000 2017-18 100000 2018-19 187000		All unit in Tons.Between 2012-13 to 2014-15 no mining operations was carried out as per the direction of supreme court
3q	General remarks of inspecting officers on method of mining etc.				Actual working in two pits, A1& A3 pits in combination with tippers & excavators.

Solid Waste Management - Dumping:

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.	Nil
4b	Location of topsoil, OB and mineral reject dumps	No proposal of dumping	Nil	Nil

4c	Number of dumps within lease area and outside of lease area	Within Lease - 01 dump 01 dump proposed	01 dump within ML area	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump proposed outside UPL	Waste dump carried outside the UPL in the past	Nil
4e	Number of active and alive dumps.	No proposal	No active dump within ML	Waste generated were used for concurrent backfilling.
4f	Number of dead dumps.	01 inactive dump	01 inactive dump	Nil
4g	Number of dumps established.	01 inactive dump	Inactive dump stabilized by plantation.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed as per the approved R & R plan	Constructed as the approved R & R plan	Nil
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	Retaining wall=235m inside lease & 244m outside lease. Garland drain=235m within & 339m outside in the previous years
4j	Number of settling ponds	No proposal	Nil	constructed 01 SST inside ML & 01 SST outside in the previous years
4k	Specific comments of inspecting officer on waste dump management			No deviation wrt waste dump management was observed during the course of inspection

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted annually	Annual report on PMCP not submitted	Violation issued
6b	Area available for rehabilitation (ha) .	6.4 ha	2.31ha	Nil
6c	afforestation done (ha).	1.56ha	1.95ha	-
6d	No. of saplings planted during the year	3000 saplings proposed	3000 saplings planted	survival rate-85%
6e	Cumulative no .of plants	1,30,000 saplings	132000 saplings planted	Nil
6f	Any other method of rehabilitation	No proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	Rs650000.00	Rs720000.00	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	0.42ha	0.42ha in pit no.1	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No proposals	NA	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposals	NA	nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposals	NA	Nil

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.55ha	0.65ha	Gap plantation carried out.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.35ha	0.35ha	nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation proposed	Plantation done.	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed once a month	Environmental monitoring carried out Monthly once as per the proposal	Environmental monitoring is carried out by Sai Universal Lab Hosapete
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities were 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	ROM proposed to be crushed & dry screened	ROM was being crushed & dry screened as per the proposal	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised crushing proposed	Mechanised crushing done in the ML area	Nil
7c	Different grade of mineral sorted out at mines.	Proposed for all +45% Fe	0-55%, 55-58%, 58-60%, 60-62%Fe	Nil
7d	Any beneficiation process at mines	No proposal	Nil	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
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	No top soil generated
8b	Concurrent use or storage of topsoil	No proposal	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	NA	Waste generated is disposed by means of concurrent back filling.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	To be used for backfilling of worked out area.	Utilized for backfilling of worked out area.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed concurrent back filling and afforestation	Complied through concurrent backfilling & afforestation.	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed	3000 no of saplings planted @85% survival rate	Nil
8g	Survival rate	80%	75-85% survival rate	-

8h	Water sprinkling on roads to control airborne dust	Proposed Water sprinkling on roads to control airborne dust	Water tanker were deployed on haul roads regularly to suppress the dust.	1No of Water tanker of 10 KL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in & around the mine was good & lessee hadcarried out plantation & other environmental protective measures as approved

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto October 2019 A.R. submitted upto 2018-19	AR submitted on 29.06.2019	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager Mining- Laxmikanth, Mining Engineer in charge - B.Ekambarappa Geologist in charge- Harshavardana. A.S	Manager Mining & Mining Engineer were present during the course of inspection	Violation issued for non appointment of Geologist

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited & abandoned by opencast (O/C) mining-4.58 Ha, Covered under current (O/C), Workings - 25.640Ha, Reclaimed/Rehabilitated-8.98 Ha, Used for waste disposal-2.35 Ha, Occupied by plant, buildings, residential, welfare buildings & roads-9.54 Ha, Other Purpose (Biodiversity area, safety zone and Unused area)- 8.91 Ha	Appears to be correct
9d	Scrutiny of Annual return on afforestation	3000 no of saplings @85% survival rate	Appears to be correct
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: OS- Nil, Production - 187000 Tons, CS- 43000 Tons Dump Workings- Opening stock- 112047 Tons & Closing stock- 108127 Tons	Appears to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value- Rs, 2609.18 /ton, Ex Mine price- 2651.71, Cost of production- 1279.86 Rs/ton	Appears to be correct

9h	Scrutiny of Annual return on fixed assets	Rs. 27557411/- including Plant, Machinery & Transport equipment	Appears to be correct
9k	Scrutiny of Annual return on mining machineries	Hyd.Excavator- 03 Nos.,Front end loaders-03 Nos.,Tippers- 06 Nos.,Water tanker & crusher -01 each	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)	13/12/2019	11/02/2020				
MCDR17	Rule 26(2)	13/12/2019	11/02/2020				
MCDR17	Rule 35(2)	13/12/2019	11/02/2020				
MCDR17	Rule 55(1)(1	13/12/2019	11/02/2020				

Date :

(ARUN KUMAR)

Indian Bureau of Mines