

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

**MCDR inspection REPORT
Hyderabad regional office**

Mine file No : AP/VZNR/MN-A2/HYD

Mine code : 40APR20045

- (i) Name of the Inspecting : **25**) **SHRI IBRAHIM SARIF**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Diwakar, Mining Engineer ,
Official with
Designation
- (iv) Date of Inspection : 28/02/2020
- (v) Prev.inspection date : 11/01/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **AVAGUDAM**
- (b) **Registration NO.** : **IBM/536/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
- State : ANDHRA PRADESH
- District : VIZIANAGARAM
- Village : AVAGUDAM
- Taluka : GARIVIDI
- Post office : VEDULLAVALASA
- Pin Code :
- FAX No. : 08952-282021
- E-mail : montymor@rediffmail.com
- Phone : 08952-282129
- (f) Police Station : GARIVIDI
- (g) First opening date : 08/03/1968
- (h) Weekly day of rest : SUN
2. Address for : M/S RBSSD & FN DAS
correspondance : SREERAM NAGAR
GARIVIDI, VIZIANAGARAM DT.
3. (a) Lease Number : APR1283
- (b) Lease area : 13.87
- (c) Period of lease : 30
- (d) Date of Expiry : 06/12/2025
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S RBSSD &FN DAS
M/S RBSSD &FN DAS PO
SHREERAMNAGAR
DIST:VZIANAGARAM
VIZIANAGARAM ANDHRA PRADESH
Phone: NIL.
FAX : NIL

Owner : M/S RBSSD &FN DAS
M/S R B S S D & F N D A S T U
M S A R, DIST
VIZIANAGARAM. VIZIANAGARAM
ANDHRA PRADESH
Phone: 089522---- 2021
FAX : NIL

Agent : K.V.MAHESWARA RAO
SHREERAM NAGAR GARIVIDI RS
VIZIANAGARAM-535101
VIZIANAGARAM ANDHRA PRADESH
Phone:
FAX :

Mining Engineer

Name : Divakar. R, Full Time
Qualification : Bachelor of Engineering. (Mining)
Appointment/ : 18/09/2017
Termination date

Geologist

Name : S.MURALI KRISHNA, Full Time
Qualification : B.Sc(GEOLOGY)
Appointment/ :
Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	12/02/2004
Plan/Scheme of Mining		Modif.approved Mining Scheme	31/01/2006
		Mining Scheme rule 12 MCDR1988	06/02/2009
		Modif.approved Mining Scheme	04/04/2011
		Mining Scheme rule 12 MCDR1988	17/12/2013
		MP modif under 17(3) MCR 2016	19/09/2016
		FMCP under 23C(1)	25/11/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Exploration proposals in the previous year.	05 Core bore holes drilled	
1b	Exploration over lease area for geological axis 1 or 2	G1 scale	Entire lease has explored the mineralised area under G1 scale.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Lessee M/s RBSSD FN DASS	Lessee M/s RBSSD & FN DASS, Cost incurred for exploration is Rs.34,52,242.00.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Entire mineralised area has been explored in G1 scale	Geological report is also submitted.
1e	Balance reserve as on 01/04/20	111 : 19,849 tonnes 211 : 37847 tonnes 331 : 8,25,691 Tonnes	111 : 19,849 tonnes 211 : 37847 tonnes 331 : 8,25,691 Tonnes	As on 01.4.2019
1f	General remarks of inspecting officers on geology, exploration etc		Ore body occurrence is of Vein type with nature of pinching and swelling. The general strike of the ore body is WNW-ESE with dip of 80° towards South. Entire mineralised area has been explored in G1 Scale and additional reserves/ resources have not been assessed based on the above exploration carried out during 2018-19 & 2019-20.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	Development is proposed between sectionlines C- C' to D - D' & FF' to JJ'	Development has been carried out in between sections FF' to JJ' & C - C' to D -D'. as proposed	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	This is a vein type of deposit, seperate benches for Overburden and Mineral is not possible to maintain, in one bench both ore and waste occurrence is anticipated accordingly proposals are made.	Mining operations are being carried out as proposed	
2c	Stripping ratio or ore to OB ratio	1 :1.65	1 :0.83	
2d	Quantity of topsoil generation in m3	No top soil bench is there.	Nil	
2e	Quantity of overburden generation in m3	1, 29, 556 cum	70,000 Tonnes	Development as per proposal has not been done, violations were pointed out earlier in this regard.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Deviation in development and exploitation has been observed during the inspection.	Violation were pointed out earlier in this regard.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two	Two	
3b	Quantity of ROM mineral production proposed	49,934 MT 2019-20	49,930 MT, 2019-20	

3c	Recovery of sailable/usable mineral from ROM production	100%	100%	More recovery of ore in ROM is reported during the year 2019-20
3d	Quantity of mineral reject generation	No proposal	Nil	old mineral reject dumps are observed in the lease area, but details in respect of quantity and quality not yet ascertained by the lessee.
3e	Grade of mineral rejects generation and threshold value declared.	Below 17% Mn and above threshold value of 10% Mn	No generation of Mineral Reject reported during the year	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual segregation from ROM is in practice.	Manual segregation from ROM is in practice.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	No Drilling and Blasting is proposed	Nil	No Drilling and Blasting is required since the OB and Ore are soft in nature.
3k	Provision of mining machineries in mineral benches	Excavator : 1.0 cum- 2 Nos, Tippers : 4cum- 8 nos., WaterTanker- 1	Excavator : 1.0 cum- 2 Nos, Tippers : 4cum- 8 nos. WaterTanker- 1 , Mining operations are being undertaken by deploying machineries as proposed.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	To maintain bench height of 3.0 meters and width more than the 3.0 meters in overburden benches and 1.5 meters height and 2.0 meters width in ore benches	Bench height of more than 9 meters and width of about 1.5 meters in overburden and 3.0 meters height and 1.5 meters width in ore is observed.	Violation was pointed out earlier for deviation in the development.

3m	Total area covered under excavation/pits	7.0051 Ha	7.005 Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.65	1 : 0.83	
3o	Total area put in use under different heads at the end of year	13.388	Mining - 7.0051 Waste Dump - 5.7237 Mineral - 0.153 Infrastructure - 0.0062 Road - 0.5 Total = 13.388	Area in Ha
3p	Production of ROM mineral during the last five year period as applicable	2015-16 : 41,355 Tonnes. 2016-17: 48,953 Tonnes. 2017-18 : 43,500 Tonnes. 2018-19 : 45,290 Tonnes, 2019-20 : 49,934 Tonnes	2015-16 : 44,872 Tonnes. 2016-17 : 29,798 Tonnes. 2017-18 : 13,370 Tonnes. 2018-19 : 49,990 Tonnes, 2019-20 : 499,930 Tonnes	Graded Ore
3q	General remarks of inspecting officers on method of mining etc.		Mining operations are being carried out by other than fully mechanised method without drilling and blasting. One pit	

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Seperate dumping of OB is proposed.	Seperate dumping of OB is being done. Mineral reject dumps reported as old one were also observed and are dumped separately	
4b	Location of topsoil, OB and mineral reject dumps	OB is proposed to be dumped between grid lines N18 °21'11.65" to 18 °21'16.40", E 83 °32'8.9" to 83 °32'18.80	Dumping of waste is carried out as per proposals	
4c	Number of dumps within lease area and outside of lease area	Two within lease	Within lease- Two Out side lease- one	

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side UPL	Out side UPL	
4e	Number of active and alive dumps.	Active dump- one within lease area	Active dump- one within lease area, Inactive dump- On Western side of lease area	
4g	Number of dumps established.	Two	Nil	No Plantation is not carried out on dump slopes.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes proposed to maintain Garland drain and retaining wall all along waste dump.	Garland drain all along the dump lying on western side of the lease area was maintained, whereas drain along new dump and low grade ore stack is not done.	Not Complied so far
4j	Number of settling ponds	One	One	
4k	Specific comments of inspecting officer on waste dump management		1. Two terrace is done in the Dumps on Western side of lease. No terrace on new dump developed. 2. Garland drain about 250 meters along bottom of dump on Western side is completed., No Garland drain around new dump and Low grade Mineral dump is made. 3.No Plantation is not carried out on dump slopes 4. Only 15 meters length of retaining wall is made and balance 462 meters is not constructed	

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, as no area is matured for reclamation.	Nil	Mineral is not extracted fully in the lease area. Hence no backfilling, proposal furnished, carried out

5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	no area is matured for reclamation
5e	General remarks of inspecting officers on backfilling and reclamation etc.		No area is matured for backfilling. The lease is going to expire on 31.03.2020, whereas the Manganese ore is found to available at pit bottom hence no backfilling is done.	

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	Yearly report for the year 2018-19 is submitted.	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	1500 on terrace of New dump and dump on Northern side	300 sapplions on bund maintained at pit top	
6d	No. of saplings planted during the year	1500	About 300	
6e	Cumulative no .of plants	No proposal	2400 sapplings along pit top bund, slopes of old dump	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal as Nil No void available for backfilling purpose.	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.707 ha	Nil	However , the lessee has done afforestation on barren land over an extent of 0.688ha.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring Environmental protective measures and Monitoring of environmental parameters is proposed.	Periodical monitoring of Environmental parameters is done	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Proposal of waste dump management like Terrace, Retaining wall, Garland drain, Green belt development is proposed up to plan period i.e. 2019-20.	1. Two terrace is done in the Dumps on Western side of lease. No terrace on new dump developed. 2. Garland drain about 250 meters along bottom of dump on Western side is completed.,No Garland drain around New- Dump and Low-Grade Mineral Stack is maintained. 3. No Plantation is not carried out on dump slopes of New Dump & Dump on Northern side of lease 4. Only 15 meters length of retaining wall is made and balance 462 meters is not constructed.	

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Entire ROM produced is being sorted for size and grade manually and will be sold/ Dispatched.	49,934 tonnes of ROM ore was produced and 502363 Tonnes were dispatched	2019-20, Annual Return
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	All Manganese ore generated is reported to be dispatched after sorting and sizing	Total 50263 tonnes of Graded ore is dispatched 2019-20 < 25% MN : 29890 TOnnes and >25 & < 35% Mn : 20373 Toones	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Entire ROM ore generated is being dispatched as there in no generation of Mineral reject during the year 2019-20. However there exist old mineral reject are observed near office in the lease area and its quality and quantity has to be ascertained.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes seperate dumps for waste/OB is proposed.	Yes, seperate dumps for overburden/ mineral reject is found maintained.	

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)	Yes proposal of dump stabilisation, fencing of quarry (1506 meters). Retaining wall (477 meters) and Garland drain (1533 meters), plantation of 1500 sapplings and Rehabilitation of 1.707 Ha	1). About 250 meters pit was fenced. 2). No dump was stabalised. 3). 15 meters retaining wall is constructed, 4) 300 sapplings were planted. No area is rehabiltated
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1500 sapplings is proposed to be planted.	300 sapplings were planted during the year . Total plantation is about 2400 no. is reported
8g	Survival rate	Not mentioned	80%
8h	Water sprinkling on roads to control airborne dust	Water tanker is to be deployed to suppress the dust	Water sprinkling arrangement is being carried out for dust suppression
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		2400 sapplings were planted in old dump on western side of lease and near mine office so far in the lease area to improve the aesthetic beauty.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and annual returns has to be submitted as per statuate	Monthly returns and annual returns for the year 2019-20 are being submitted regularly	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri Divakar Reddy, Mining Engineer Shri P Ganesh, Geologist	Shri Divakar Reddy, Mining Engineer and Sri P Ganesh as Geologist employed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(i) Already exploited & abandoned by opencast (O/C) mining 0 (ii) Covered under current (O/C) Workings : 6.08 (iii) Reclaimed/Rehabilitated 0 (iv) Used for waste disposal 2.39 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.624 (vi) Other Purpose (0) 0.56 (vii) Work done under progressive mine closure plan during the year 0	More area than the reported for the year 2018-19 was utilised for mining and allied activities.	During FMCP, lessee submitted the additional FA for majority of the lease area of 13.338 Ha
9d	Scrutiny of Annual return on afforestation	100 no of sapplings : 2018-19	100 : 2018-19 about 300 sapplings during the year 2019-20	2018-19
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil for the year	Old mineral reject stock is observed in the lease area, quantity and quality has not yet ascertained
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock is Nil, Graded Ore <25% Mn: 40 tonnes, >25% & <35% Mn : 293 Tonnes	ROM stock is Nil, Graded Ore <25% Mn: 40 tonnes, >25% & <35% Mn : 293 Tonnes	2018-19

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value : Below 25% Mn : Rs. 3484.56 , Above 25% Mn and Below 35% Mn : Rs. 2059.95 (As Domestic transfer) Cost of Production : Rs. 1408.00 per tonne	As reported by lessee	Lessee is dispatching ore to its sister concern Radhika Metals & Minerals as Domestic Transfer
9h	Scrutiny of Annual return on fixed assets	Rs. 35,472.00	As reported by Lessee	
9k	Scrutiny of Annual return on mining machineries	Excavator - 1.1 cum- 2 no., Tipper - 4 cum - 8no.s, Water Tanker- 1 No. Pump - 1 No.	All the machineries as reported are found being utilised for mining operation	

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 :

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines