

**INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT 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 : **PR09**) **M.Pratap.Reddy**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : R P SINGH MINING ENGINEER
Official with
Designation
- (iv) Date of Inspection : 24/05/2017
- (v) Prev.inspection date : 30/07/2016

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** : 08/12/1995
- (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** : 20
- (d) **Date of Expiry** : 06/12/2015
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 DAS T U
M S A R, DIST
VIZIANAGARAM. VIZIANAGARAM
ANDHRA PRADESH
Phone: 089522----- 2021
FAX : NIL

Agent : G.S.DHILLON
GARIVIDI VIZIANAGARAM DT.
VIZIANAGARAM ANDHRA PRADESH
Phone:
FAX :

Geologist

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

Manager

Name : k.Siva Prasada Rao
Qualification : D.Min. Engg and II Class certificate
Appointment/ : 29/03/2011
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

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.	-	
1b	Exploration over lease area for geological axis 1 or 2	G1 Scale	So far, the lessee has carried out G2 scale of exploration.	It is proposed to convert the G2 level to G1 scale in the year 2017-18 by carrying out exploration by means of drilling 6 Boreholes.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	The Lessee himself	No exploration has been carried out in the year 2016-17.	So far the lessee incurred an amount of Rs.8,55,000/- towards the cost of exploration.
1d	Balance area to be explored to bring Geological axis in 1 or 2	During the preceeding there was no exploration proposals.	-	An extent of about 4 ha in the mineralised area to be converted to g1 scale from G2 level.
1e	Balance reserve as on 01/04/20	9,19,830 T	9,38,985 T	The balance reserve is on higher side as as the actual achieved production is less than the targetted production.
1f	General remarks of inspecting officers on geology, exploration etc	Archean terraaain with Khondalite host rock for Manganese mineralisatio n with proposed e G1 scale of exploration.	It is Metamorphic terrain of Arechean era consisting of Khondalite which is hosting Manganese mineralisation. The exploration activity is under progress to covert it into G1 scale of exploration.	

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	Development cum Production is proposed between section lines A-A' to C-C'	Development cum Production is done as proposed in the approved document.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, Proposed.	As proposed separate benches in OB and Ore have been formed.
2c	Stripping ratio or ore to OB ratio	1:3.05	1:2.95
2d	Quantity of topsoil generation in m3	8,340 cum	Around 4500 cum
2e	Quantity of overburden generation in m3	56,272 cum	Around 20,450 cum
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Pit development cum production is proposed between section lines A-A' to C-C' from 141 RL to 126 RL	Pit development cum production could not be done to the extent proposed as there was less market demand.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One.	
3b	Quantity of ROM mineral production proposed	48,953 T	29,798 T	
3c	Recovery of sailable/usable mineral from ROM production	70%	70%	
3d	Quantity of mineral reject generation	Nil	-	

3e	Grade of mineral rejects generation and threshold value declared.	No mineral rejection proposals. Threshold limit is 10% Mn.	-	
3f	Quantity of sub grade mineral generation.	Nil	There is no generation of subgrade mineral.	
3g	Grade of sub grade mineral generation	None	-	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual segregation from ROM.	Manual segregation from ROM as proposed is done.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal has been made.	-	
3j	Provision of drilling and blasting in mineral benches	No such proposals have been made.	-	No drilling and blasting is required since the OB and Ore are soft in nature.
3k	Provision of mining machineries in mineral benches	yes,	Provision is being made movement of machinery.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes,	The benches in OB and mineral have been made as per the proposals made in the approved document.	
3m	Total area covered under excavation/pits	6.492 ha	6.124 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:3.05	1:2.95	
3o	Total area put in use under different heads at the end of year	8.56 ha	8.21 ha	

3p	Production of ROM mineral during the last five year period as applicable	2012-13= No proposals, 2013-14= 60,412 T, 2014-15=51,919 T, 2015-16=41,355 T & 2016-17=48,953 T	2012-13= 39,634 T, 2013-14= 40,810 T, 2014-15=48,040 T, 2015-16=44,872 T & 2016-17=29,798 T	During the year 2012-13, the document was under processing.
3q	General remarks of inspecting officers on method of mining etc.	Semi mechanised opencast method of mining is proposed.	As proposed Semi mechanised opencast method of mining is practiced without resorting to drilling and blasting.	

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 of OB is proposed.	As proposed seperate waste dumping is done.	
4b	Location of topsoil, OB and mineral reject dumps	OB is proposed to be dumped between 768029E-768214E and 2031088N-2031212 N.	As proposed the OB is dumped on the existing dump on the North western part of the ML area.	
4c	Number of dumps within lease area and outside of lease area	Two dumps with in ML area .	One existing dump and another fresh dump on the North Eastern part of the ML area exists.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Beyond UPL	The dumps exists beyond UPL.	
4e	Number of active and alive dumps.	Two dumps	Two dumps	
4f	Number of dead dumps.	Nil	-	
4g	Number of dumps established.	None.		
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes,proposed.	Yes, Retaining wall and garland drains have been made.	

4i	Length of Retaining wall or garland drain all along dumps	500m Lx1m Wx 1m d garland drain. 280m Lx2mWx1.5m H retaining wall	The costuction of retaining wall and garland drain is under progress	The given dimension proposals are for the five years period.
4j	Number of settling ponds	None	-	
4k	Specific comments of inspecting officer on waste dump management	The waste material is in the form weather Khondalite and which is proposed to be dumped beyond UPL.	As proposed the waste material is dumped beyond UPL on Northwestern part of the ML area.	

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 such proposal has been made.	-	The mineral is continuing at depth and the backfilling proposals at this stage does not arise at this stage.
5b	Area under backfilling of mined out area	No such proposal has been made.	-	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal is made	-	Concurrent use of top soil for afforestation is implimented.
5d	Total area fully reclaimed and rehabilitated	No such proposal is made	-	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No backfilling and reclamation proposals have been made.	-	The mineral is continuing at depth and therefore no such proposals of backfilling and reclamation proposals have been made.

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	yes	Not submitted.	Violation of Rule 26(2) of MCDR 2017 has been pointed out.
6b	Area available for rehabilitation (ha) .	No such proposal has been made.	Nil	
6c	afforestation done (ha).	Yes,	Afforestation done,	
6d	No. of saplings planted during the year	No such proposal has been made.	However the lessee has planted 150 saplings.	
6e	Cumulative no .of plants	No such proposal has been made.	The cumulative no of saplings exists with in ML area is 23,337 saplings	
6f	Any other method of rehabilitation	No such proposal has been made.	none	
6g	Cost incurred on watch and care during the year	No such proposal has been made.	About Rs1,00,000/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No such proposal has been made.	None.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposal has been made.	-	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No such proposal has been made.	-	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal has been made.	-	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal has been made.	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposal has been made.	However the lessee has done afforestation on the barren land
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No such proposal has been made.	However, the lessee has done afforestation on barren land over an extent of 0.688 ha.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Rehabilitation by means afforestation proposed	As proposed rehabilitation in the non mineralised area with in ML area has been done.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring 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.	Environmental protective measures and Monitoring of environmental parameters is proposed.	As proposed Environmental protective measures and Monitoring of environmental is done.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Proposed for dispatch=48,95 3 T, Etn tie ROM is meant for selling	ROM dispatched= 29,798 T. The entire ROM is sold out.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	

7c	Different grade of mineral sorted out at mines.	Sorting of +10% Mn in Mines.	As proposed sorting is done with in the mines.
7d	Any beneficiation process at mines .	None	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The entire ROM is meant for sale. No beneficiation is proposed.	The entire ROM is sold out.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes,	Top soil is being removed seperately cnd concurrently used for afforestation.	
8b	Concurrent use or storage of topsoil	Concurrent use.	Concurrently used for afforestation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate OB dump is proposed.	OB is dumped seperately beyond UPL.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals have been made.	-	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposals have been made.	-	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Additional Plantation to the existing plantation is proposed.	Additional plantation 150 saplings have been done,
8g	Survival rate	80%	80%
8h	Water sprinkling on roads to control airborne dust	Proposed.	Periodical water sprinkling is done on haul roads to arrest air born dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Plantation is proposed to improve aesthetic beauty in and around the mines area.	Plantation done in and around the ML area has improved the aesthetic beauty the mines area

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR shall be submitted before 10th of every month in respect of preceding month. AR which shall be submitted before 1st July each year for the preceding Financial Year.	Furnished.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	To be furnished	Furnished.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	To be furnished.	Land use pattern has been furnished.	
9d	Scrutiny of Annual return on afforestation	To be furnished.	Plantation of 100 saplings have been furnished.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	To be furnished	Nil generation of mineral rejectios.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	To be furnished.	No ROM stock exists.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	To be furnished.	The average Ex mine price is Rs.3500/
9h	Scrutiny of Annual return on fixed assets	To be furnished.	The reported value fixed assets is RS.12,36,712
9k	Scrutiny of Annual return on mining machineries	To be furnished.	The details have been furnished in mining machinary statement.

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 55(1)(3)	15/06/2017				
MCDR17 Rule 26(2)	15/06/2017				

Date :
(M.Pratap.Reddy)

Indian Bureau of Mines