

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

**MCDR INSPECTION REPORT
Hyderabad regional office**

Mine file No : AP/VZNR/MN-2/HYD

Mine code : 40APR20028

- (i) Name of the Inspecting : **PR09**) **M.Pratap.Reddy**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : PSK KISHORE MINING ENGINEER
Official with
Designation
- (iv) Date of Inspection : 23/05/2017
- (v) Prev.inspection date : 29/07/2016

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SADANANDPURAM**
- (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 : SADANANDPURAM
- Taluka : GURLA
- Post office : SHREERAMNAGAR
- Pin Code :
- FAX No. : 08952-282021
- E-mail :
- Phone : 08952-282021
- (f) **Police Station** : GARIVIDI
- (g) **First opening date** : 15/09/1985
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : M/S R.B.S.S.D.& F.N. DAS,
PO:SRIRAM NAGAR,MANDAL: GARIVIDI,
DIST:VIZIAYANAGARAM.
3. (a) **Lease Number** : APR0240
- (b) **Lease area** : 56.84
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 14/09/2025
4. **Mineral worked** : MANGANESE ORE Main

5. Name and Address of the

Lessee : R.B.S.S.D&F.N.DAS
 SHREERAMNAGAR VIZIANAGARAM
 VIZIANAGARAM ANDHRA PRADESH
 Phone:
 FAX :

Owner : M/SRBSSD%F.N.DAS
 SREERAMNAGAR(P),
 VIZIANAGARAM VIZIANAGARAM
 ANDHRA PRADESH
 Phone: 0892-282041
 FAX :

Mining Engineer
 Name : P.S.K.KISHORE,Part Time
 Qualification : A.M.I.E
 Appointment/ : 03/05/2005
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	31/01/2006
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	31/01/2006
	:	Mining Scheme rule 12 MCDR1988	14/03/2011
	:	Modif.approved Mining Scheme	17/12/2014

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During the year 2016-17, 16 Boreholes have been proposed.	The proposed exploration work has not been done.	Rule 11(1) of MCDR 2017 for the non take up of the exploration has been pointed out.
1b	Exploration over lease area for geological axis 1 or 2	Further exploration to convert to G1 scale of exploration has been proposed.	A backlog of Exploration to be completed.	Rule 11(1) of MCDR 2017 has been pointed out.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Agency and Expenditure proposals have not been furnished.	So far incurred expenditure is about Rs.40,00,101/-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	16 ha	16 ha	
1e	Balance reserve as on 01/04/20	16,40,002 T	17,87,554 T	The balance reserve is on heigher side as the anticipated production has not been achived due to poor market demand.
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
2a	Location of development w.r.t.lease area	Development cum Production is proposed between section lines E-E' to G-G'	Development cum Production is done as proposed in the approved document.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Seperate benches in OB and Mineral is proposed.	As proposed seperate benches in OB and Ore have been formed.	
2c	Stripping ratio or ore to OB ratio	1:2.07	1:2.5	
2d	Quantity of topsoil generation in m3	Nil	-	
2e	Quantity of overburden generation in m3	61,110 cum	40,100 cum	generation OB is less due to less development and production.
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 E-E' to G-G' from 99 RL to 63RL	Pit development cum production could not be done tto 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 pit	One pit	
3b	Quantity of ROM mineral production proposed	99,971 T OF ROM	30,180 T ROM	ROM Producec is less due to poor market demand.
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 id 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 moveent of machinary.	
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 asper the proposals made in the approved document.	
3m	Total area covered under excavation/pits	14.78 ha	14.70 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:2.07	1:2.5	
3o	Total area put in use under different heads at the end of year	33.04 ha	32.92 ha	
3p	Production of ROM mineral during the last five year period as applicable	2012-13= 1,00,045 T, 2013-14= 1,00,104 T, 2014-15=73,521 T, 2015-16=99,621 T & 2016-17=99,621 T	2012-13=85,490 T, 2013-14= 64,890 T, 2014-15=21,310 T, 2015-16=21,860 T & 2016-17=30,180 T	

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.
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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 on the North western corner of the ML area.	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	5 dumps exists with in the ML area.	Out of five dumps only one dump is active which exists on the North western side of ML area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps have been proposed beyond UPL	The dumps exists beyond UPL.	
4e	Number of active and alive dumps.	All the dumps are alive.	All the dumps are alive however there is one dump is active which lies on the North western part of the ML area.	
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	Yes, Retaining wall and garland drains have been made.	
4i	Length of Retaining wall or garland drain all along dumps	850m Lx2m Wx 1m d garland drain. 850m Lx2mWx 1.5m 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	Nil	-	

4k	Specific comments of inspecting officer on waste dump management	The waste material is in the form weather Khondalite and ML area. which is proposed to be dumped beyond UPL.	As proposed the waste material is dumped beyond UPL on Northwestern part of the ML area.
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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 has been made.	-	
5d	Total area fully reclaimed and rehabilitated	No such proposal has been made.	Nil	
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.

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).	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,	Yes, done.	
6d	No. of saplings planted during the year	During the year 2016-17, 760 saplings have been proposed.	800 saplings have been done	
6e	Cumulative no .of plants	10,000 saplings	Around 15,500 saplings.	
6f	Any other method of rehabilitation	No such proposal has been made.	-	
6g	Cost incurred on watch and care during the year	No such proposal has been made.	It is reported that Rs 80,000/- has been incurred.	
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	Aforestation is proposed in the non mineralised area.	As proposed afforestation is done in the mineralised area.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	5.2 ha by means of afforestation	Afforestation is done over an extent of 5.24 ha in the non mineralised area.
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=99,97 1T, Etn tie ROM is meant for selling	ROM dispatched= 30,180 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)	No such proposals have been made since there is no top soil.	-	
8b	Concurrent use or storage of topsoil	No such proposals have been made	-	
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 800 saplings have been done,
8g	Survival rate	80%	75%
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.	Submitted.	
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	Furnished.	
9d	Scrutiny of Annual return on afforestation	To be furnished.	800 saplings have been done.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	To be furnished.	Furnished to be nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	To be furnished.	ROM stock furnished to be nil.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	To be furnished.	Ex mine price furnished to be Rs.2852/-
9k	Scrutiny of Annual return on mining machineries	To be furnished.	Mining machinery details have been furnished.

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

Date :
(M.Pratap.Reddy)

Indian Bureau of Mines