

**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 : KQ07 ) SHAIVAL KARTIKEYA  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri A. V. Naidu, Manager (Mines)  
Official with  
Designation
- (iv) Date of Inspection : 24-AUG-22
- (v) Prev.inspection date : 08-MAR-21

**PART-I : GENERAL INFORMATION**

- 1. (a) Mine Name : SADANANDPURAM
- (b) Registration NO. : IBM/536/2011
- (c) Category : A Fully Mechanised
- (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 : rbssdfndasvzm@gmail.com  
Phone : 08952-282021
- (f) Police Station : GARIVIDI
- (g) First opening date : 15-SEP-85
- (h) Weekly day of rest : SUN
- 2. Address for : M/S R.B.S.S.D. & F.N. DAS,  
correspondance : 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-SEP-25
- 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-MAY-05  
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	31-JAN-06
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	31-JAN-06
	:	Mining Scheme rule 12 MCDR1988	14-MAR-11
	:	Modif.approved Mining Scheme	17-DEC-14
	:	MP modif under 17(3) MCR 2016	18-FEB-20
	:	MP modif under 17(3) MCR 2016	26-NOV-21

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal.	F.Y. 2021-22: 07 nos. of DTH boreholes have been drilled with cumulative depth of 323 meters.	-
1b	Exploration over lease area for geological axis 1 or 2	No proposal.	NIL	The entire mineralised area has already explored under G1 level. G1 level: 20.937 Ha. Non-mineralised: 35.90 Ha.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not mentioned in the approved document.	M/s Siva Borewells, Chipurupalli, Dist. Vizianagram Expenditure: Rs. 1,41,848/-	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal.	NIL	-
1e	Balance reserve as on 01/04/20	Balance reserves as on 01.04.2022  Under (111): 1.105 Million Tonnes	Balance reserves as on 01.04.2022  Under (111): 1.312 Million Tonnes	Average grade: Mn: 17% to 40.05% Fe: 6.59% to 15.08%  Environment clearance for Manganese production up to 0.30 Million Tonnes Per Annum is under process.

1f	General remarks of inspecting officers on geology, exploration etc	The host rock of manganese in Vizianagram-Visakhapatnam belt are Khondalites and Charnokites belongs to Dharwar Supergroup of Precambrian age which forms a part of the Eastern Ghat Complex. The manganese ore mineralization is mainly associated with garnetiferous quartzites and calc granulites with intercalations of pockets of clay and lithomarge and occurrence of manganese ore with chert at margins of some of the ore bodies suggest that some of the mineralization is also from garnet granulites.	The lease area is a part of Archean terrain consisting of Biotite Gneisses, Garnet Sillimanite Gneisses, Feldspathic Quartzites, Calc Granulites, Quartz Veins etc. The manganese ore horizon is in conformation with Calc Granulite. The Garnet Gneisses occurs intermittently with Kaolin or Red loam. Garnet Gneisses with Kaolin are predominant in the area.	The lithomarge (a compact massive form of Kaolin, considered as claystone) is generally yellow to brown in colour and at the contacts of the ore body; it is dull grey due to presence of Manganese Oxide termed as Wad. The Manganese form intrusive contact on both the sides by Calc gneisses/Kaolin. The in the pits is generally Psilomelane - brown, brownish black to black in colour and it is friable in nature.
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## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	F.Y. 2021-22: In between UTM co-ordinates N2019958.5 to N2020858.5 and E769450 to E769750	F.Y. 2021-22: In between UTM co-ordinates N2019958.5 to N2020858.5 and E769450 to E769750	Broadly development and production have been carried out within the proposed co-ordinates.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	OB/Waste: 14 nos. Mineral/Ore: 02 nos.	OB/Waste: 14 nos. Mineral/Ore: 02 nos.	-
2c	Stripping ratio or ore to OB ratio	1 : 1.48	1 : 3.48	Stripping ratio has been increased due to excess OB/Waste handling. EC is under process for production enhancement.
2d	Quantity of topsoil generation in m3	No proposal.	NIL	-
2e	Quantity of overburden generation in m3	317427.20 CuM	348500.00 CuM	Excess OB/Waste has been generated due to benches advancement.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development and production is being done through fully mechanized means.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01 no.	01 no.	-
3b	Quantity of ROM mineral production proposed	306865.80 Metric Tonnes	99970.00 Metric Tonnes	EC is under process for enhancement of mineral/ore production.

3c	Recovery of sailable/usable mineral from ROM production	70%	100%	-
3d	Quantity of mineral reject generation	No Proposal.	Nil, no mineral-reject has been generated during F.Y. 2021-22.	-
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal.	NIL	-
3f	Quantity of sub grade mineral generation.	No Proposal.	Nil, no mineral sub- grade has been generated during F.Y. 2021-22.	-
3g	Grade of sub grade mineral generation	No Proposal.	NIL	-
3h	Manual / Mechanised method adopted for segregating from ROM	ROM will be screened manually and sorted for removal of waste/gangue material.	Rom is being screened manually and sorted for removal of waste/gangue material.	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal.	Nil. No beneficiation study has been conducted during F.Y. 2021-22.	-
3j	Provision of drilling and blasting in mineral benches	No proposal has been given in the approved document for drilling and blasting, as the ore/mineral is soft and friable in nature.	NIL	-

3k Provision of mining machineries in mineral benches	1. Excavator 06 nos. with 0.90 CuM bucket capacity. 2. Tippers 20 nos. with 5.0 CuM carrying capacity. 3. Electric Pumps 03 nos. with 7.5 HP, 15.0 HP and 30.0 HP capacity. 4. Water Tanker 01 no. with 5000 Liters capacity. 5. Crawler Bulldozer 02 nos.	1. Shovel/Excavator 03 nos. with 1.10 CuM and 1.50 CuM bucket capacity. 2. Tippers 16 nos. with 4.0 CuM and 16.0 CuM carrying capacity. 3. Wheel Loader 01 no. with 1.50 CuM bucket capacity. 4. Water Tanker 01 no. with 3000 Liters capacity. 5. Generator 01 no. with 1.250 KWH capacity. 6. Electric Pumps 02 nos. with 2790.0 Liters/Min capacity.	-
3l Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height: OB/Waste: 4.0 meters Mineral/Ore: 6.0 meter	Bench height: OB/Waste: 4.0 meters Mineral/Ore: 6.0 meter	No major deviation has been found.
3m Total area covered under excavation/pits	21.474 Ha. up to end of F.Y. 2021-22	20.937 Ha. up to end of F.Y. 2021-22	-
3n Ore to OB ratio for the pit/mine during the year.	1 : 1.48	1 : 3.48	Stripping ratio has been increased due to excess OB/Waste handling.
3o Total area put in use under different heads at the end of year	Pit- 21.474 Ha. Waste/reject- 17.403 Ha. Others- 5.807 Ha. Up to end of F.Y. 2021-22	Pit- 20.937 Ha. Waste/reject- 17.403 Ha. Others- 5.688 Ha. Up to end of F.Y. 2021-22	-

3p	Production of ROM mineral during the last five year period as applicable	Yr. 2017-18:	Yr. 2017-18:	22080.00	-
		99990.00	Metric Tonnes		
		Metric Tonnes	Yr. 2018-19:	21690.00	
		Yr. 2018-19:	Metric Tonnes		
		99990.00			
		Metric Tonnes	Yr. 2019-20:	21990.00	
			Metric Tonnes		
		Yr. 2019-20:			
		99990.00	Yr. 2020-21:	99905.00	
		Metric Tonnes	Metric Tonnes		
	Yr. 2020-21:	Yr. 2021-22:	99970.00		
	100075.50	Metric Tonnes			
	Metric Tonnes				
	Yr. 2021-22:				
	306865.80				
	Metric Tonnes				

3q General remarks of inspecting officers on method of mining etc.

Mining has been carried out through the opencast method with fully mechanized means without drilling and blasting.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposal has been given in the approved document for separate dumping/stacking of OB/Waste and Mineral/Ore in the earmarked locations within lease area.	Separate dumping/stacking of OB/Waste and Mineral/Ore have been done in the earmarked locations within lease area.	-



4b	Location of topsoil, OB and mineral reject dumps	Proposed in-between UTM co-ordinates  OB/Waste: Dump No. 1: N2020385 to N2020858.5 and E769150 to E769450  Dump No. 2: N2019623.5 to N2020078 and E769430 to E770000  Mineral Stock: N2019958.5 to N2020258.5 and E769650 to E769950	Dumping/stacking has been done in-between UTM co-ordinates  OB/Waste: Dump No. 1: N2020385 to N2020858.5 and E769150 to E769450  Dump No. 2: N2019623.5 to N2020078 and E769430 to E770000  Mineral Stock: N2019958.5 to N2020258.5 and E769650 to E769950	No major deviation has been observed
4c	Number of dumps within lease area and outside of lease area	Within lease area: 02 nos. Outside lease area: No proposal.	Within lease area: 02 nos. Outside lease area: NIL.	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed beyond ultimate pit limit.	Waste dumps are situated beyond ultimate pit limit.	-
4e	Number of active and alive dumps.	02 nos.	02 nos.	-
4f	Number of dead dumps.	No Proposal.	NIL	-
4g	Number of dumps established.	No Proposal.	NIL	-
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal.	NIL	-
4i	Length of Retaining wall or garland drain all along dumps	No Proposal.	NIL	-

4j	Number of settling ponds	No Proposal.	NIL	-
4k	Specific comments of inspecting officer on waste dump management			NIL

#### Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No Proposal.	Nil, as the mineral/ore has not been mined-out completely from the existing pit.	-
5b	Area under backfilling of mined out area	No Proposal.	Nil, as the mineral/ore has not been mined-out completely from the existing pit.	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal.	Nil, as no topsoil has been generated during F.Y. 2021-22.	-
5d	Total area fully reclaimed and rehabilitated	No Proposal.	Nil, as the area not matured for reclamation and rehabilitation.	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			NIL

#### Progressive Mine Clousre Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 22 5(2)	Not submitted.	Violation has been issued.	-

6b	Area available for rehabilitation (ha) .	No Proposal.	NIL	-
6c	afforestation done (ha).	No Proposal.	NIL	-
6d	No. of saplings planted during the year	No Proposal.	NIL	-
6e	Cumulative no .of plants	No Proposal.	NIL	-
6f	Any other method of rehabilitation	No Proposal.	NIL	-
6g	Cost incurred on watch and care during the year	No Proposal.	NIL	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No Proposal.	NIL	-
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)Afforestation on on backfilled area	No Proposal.	NIL	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal.	NIL	-

6l	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	1200 nos.	2050 nos.	Plantation has been done in North-Eastern part of the lease area and at 7.5 m barrier zone.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.119 Ha.	0.40 Ha.	-do-
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	By plantation	By plantation	-do-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposal has been given in the approved document for regular monitoring of the environmental parameters in the core and buffer zone.	Being done as per proposal.	All the parameters are within the permissible limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			NIL

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**Mineral Conservation:**


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Sl.No.	Item	Proposals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manual screening and sorting of the manganese ore from the ROM has been proposed.	Manual screening and sorting from the ROM is being done.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	-do-	-do-	-
7c	Different grade of mineral sorted out at mines.	No proposal.	NIL	-
7d	Any beneficiation process at mines	No proposal.	NIL	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			NIL

#### Environment:

Sl.No.	Item	Proposals	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)	Separate dumping of Waste/OB has been proposed in between UTM co-ordinates	Separate dumping has been done in between UTM co-ordinates Dump No. 1: N2020385 to N2020858.5 and E769150 to E769450	No major deviation has been observed.
		Dump No. 1: N2020385 to N2020858.5 and E769150 to E769450	Dump No. 2: N2019623.5 to N2020078 and E769430 to E770000	
		Dump No. 2: N2019623.5 to N2020078 and E769430 to E770000		
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)	Green Belt in North - Eastern side of the lease area. through 1200 nos. of saplings over 0.119 Ha.	2050 nos. of saplings have been plated over 0.40 Ha. area at North - Eastern side of the lease area and along 7.5 m barrier zone.	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1200 nos. sapling will be planted over and area of 0.119 Ha.	2050 nos. of saplings have been plated over an area of 0.40 Ha.	-
8g	Survival rate	Approx. 55%	Approx. 50%	-

8h	Water sprinkling on roads to control airborne dust	Proposal has been given in the approved document for water sprinkling on roads to control airborne dust through the water tanker.	Being done as per proposal.	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			NIL

#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to August 2022 A. R. Submitted up to F.Y. 2021-22.	M.R. Submitted up to August 2022 A. R. Submitted up to F.Y. 2021-22.	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Shri Addala Vishwanath Naidu Mining Engineer: Shri Divakar R. Geologist: Shri Ganesh Pappala	Manager: Shri Addala Vishwanath Naidu Mining Engineer: Shri Divakar R. Geologist: Shri Ganesh Pappala	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 20.937 Ha. Waste/reject- 17.403 Ha. Others- 5.688 Ha.	Pit- 20.937 Ha. Waste/reject- 17.403 Ha. Others- 5.688 Ha.	NIL

9d	Scrutiny of Annual return on afforestation	Within Lease area: 2050 nos. with 55% survival rate.	Within Lease area: 2050 nos. with approx 50% survival rate.	NIL
		Outside Lease area: 1000 nos. with 60% Survival rate.	Outside Lease area: 1000 nos. with approx 50% Survival rate.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral-reject: NIL Grade: NIL	Mineral-reject: NIL Grade: NIL	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock: ROM: NIL  Grade Wise: (1) Below 25% Mn: 130.00 Metric Tonne  (2) 25% to below 35% Mn: 142.00 Metric Tonne  (3) 35% to below 46% Mn: 365.00 Metric Tonne	Closing Stock: ROM: NIL  Grade Wise: (1) Below 25% Mn: 130.00 Metric Tonne  (2) 25% to below 35% Mn: 142.00 Metric Tonne  (3) 35% to below 46% Mn: 365.00 Metric Tonne	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value: (1) Below 25% Mn: Rs. 262434937.72  (2) 25% to below 35% Mn: Rs. 184256406.36  (3) 35% to below 46% Mn: Rs. 285653647.32	Sale value: (1) Below 25% Mn: Rs. 262434937.72  (2) 25% to below 35% Mn: Rs. 184256406.36  (3) 35% to below 46% Mn: Rs. 285653647.32	NIL



9h	Scrutiny of Annual return on fixed assets	Rs. 27122432/- Rs. 27122432/-	Common for all four leases i.e. for 40APR20010, 40APR20028, 40APR20045 and 40APR20046	
9k	Scrutiny of Annual return on mining machineries	<ol style="list-style-type: none"> <li>1. Shovel/Excavator 03 nos. with 1.10 CuM and 1.50 CuM bucket capacity.</li> <li>2. Tippers 16 nos. with 4.0 CuM and 16.0 CuM carrying capacity.</li> <li>3. Wheel Loader 01 no. with 1.50 CuM bucket capacity.</li> <li>4. Water Tanker 01 no. with 3000 Liters capacity.</li> <li>5. Generator 01 no. with 1.250 KWH capacity.</li> <li>6. Electric Pumps 02 nos. with 2790.0 Liters/Min capacity.</li> </ol>	<ol style="list-style-type: none"> <li>1. Shovel/Excavator 03 nos. with 1.10 CuM and 1.50 CuM bucket capacity.</li> <li>2. Tippers 16 nos. with 4.0 CuM and 16.0 CuM carrying capacity.</li> <li>3. Wheel Loader 01 no. with 1.50 CuM bucket capacity.</li> <li>4. Water Tanker 01 no. with 3000 Liters capacity.</li> <li>5. Generator 01 no. with 1.250 KWH capacity.</li> <li>6. Electric Pumps 02 nos. with 2790.0 Liters/Min capacity.</li> </ol>	Cross verified from the field logbooks.

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed

Show couse position

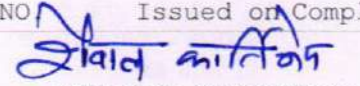
Rule NO.

Issued on Compliance on

Rule NO.

Issued on Compliance on

Date : 14/09/2022

  
(SHAIVAL KARTIKEYA)

Indian Bureau of Mines