

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

Mining Plan Modification REPORT

Hyderabad regional office

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

Mine code : 40APR20028

- (i) Name of the Inspecting : **PG01**) **P.GURUVAIAH**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Sri.A.Vishwanath Rao Naidu, Mine Manager.Sri P. Ganes
Official with
Designation
- (iv) Date of Inspection : 28-OCT-21
- (v) Prev.inspection date :

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 VIZAINAGARAM
 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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal.	Nil	
1b	Exploration over lease area for geological axis 1 or 2	No proposal.	20.937 Ha Mineralised area has been explored under G1 Axis.	35.9 Ha Non-mineralised area.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal.	Nil	
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	As on As on 1/04/2021 under 111 : 14,12,030 Tonnes , 211- 1,79,663 Tonnes.	As on 1/04/2021 under : 111 : 15,11,935 Tonnes, 211- 1,79,663 Tonnes.	Average grade of Manganese ore Mn - 17.0 to 40..05 % , Fe -6.59 to 15. 08 %.
1f	General remarks of inspecting officers on geology, exploration etc	The topography is more or less a flat terrain altitudes ranges from 92 to 114 m above MSL.and interspersed with isolated hummocks at a distance in the weast of srikakulam twon,these few rugged hills ridges mark the beginning of the Eastern ghat hiilly teraain.	The manganese ore deposits are of alteration of original rocks like kodurites /khodalites .The orezone is admixed with clay,iron oxide ,altred rocks patches and are aften cut across by quartz veins. The area is associated with meta sedimentary rocks of Khondalite series of precambrian Eastern ghat Group of rocks.	

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	F.Y 2020-21 in between local co-ordinates S 080 to S 250 and W 30 to W 105.	F.Y 2020-21 in between local co-ordinates S 080 to S 250 and W 30 to W 105.	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	It was proposed to have seperate benches in the ore and overburden. Overburden/waste : 9 nos Mineral/ore :3 nos.	Seperate benches in the ore and overburden have been maintained. Overburden/waste : 9 nos Mineral/ore :3 nos.	
2c	Stripping ratio or ore to OB ratio	1 : 2.64	1 : 2.10	-
2d	Quantity of topsoil generation in m3	No proposal.	Nil, as the entire production and development have been done within working pit.	
2e	Quantity of overburden generation in m3	F.Y. 2020-21: 98,130 cum	F.Y. 2020-21: 1,23,800 cum	
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 mechanised 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	F.Y.2020-21 : 1,42,965.00 Metric Tonnes.	F.Y.2020-21 : 99,905.00 Metric Tonnes.	Less production during F.Y. 2020-21 as the lessee did not get Environment Clearance from MoEF for the proposed and the approved quantity.

3c	Recovery of sailable/usable mineral from ROM production	70 %	70%	-
3d	Quantity of mineral reject generation	No mineral reject will be generated during plan period.	No mineral reject has been generated during F.Y. 2020-21.	-
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	Nil	-
3f	Quantity of sub grade mineral generation.	No proposal.	Nil	-
3g	Grade of sub grade mineral generation	Not applicable.	Nil	-
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal.	Nil	The ROM is screened manually and sorted for removal of waste material.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation study has been proposed during plan period.	Not applicable.	-
3j	Provision of drilling and blasting in mineral benches	No drilling and blasting was proposed.	No drilling and blasting was carried out.	-

3k	Provision of mining machineries in mineral benches	1. Excavators 2 nos with 0.9 cum. 2. Tippers 06 nos with 10 T capacity. 3. Electrical pump set 3 nos 7.5 HP, 15 HP , and 30 HP. 4. Water tanker 1 no 5000 L capacity.	1. Excavators 2 nos with 0.9 cum. 2. Tippers 06 nos with 10 T capacity. 3. Electrical pump set 3 nos 7.5 HP , 15 HP , and 30 HP. 4. Water tanker 1 no 5000 L capacity.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	It was proposed to maintain a bench height and width of 3 m x 3 min OB and 1.5 m x 1.5 m in ore.	It was proposed to maintain a bench height and width of 3 m x 3 m in OB and 1.5 m x 1.5 m in ore.	Height of the benches in ore/mineral and overburden/waste are compatible with the digging height of the deployed excavator.
3m	Total area covered under excavation/pits	20.937 Ha. up to end of F.Y. 2022-23	20.937 Ha. up to end of F.Y. 2020-21	-
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.62	1 : 2.10	
3o	Total area put in use under different heads at the end of year	32.54 Ha.	45. Ha.	
3p	Production of ROM mineral during the last five year period as applicable	Yr. 2016-17: 99971 Metric Tonnes., Yr. 2017-18 : 99990 Metric Tonnes., Yr. 2018-19 : 99990 Metric Tonnes., Yr. 2019-20 : 99999 Metric Tonnes, Yr. 2020-21 : 1,00,075 Metric Tonnes.	Yr. 2016-17: 41,710 Metic Tonnes., Yr. 2017-18 : 22,080 MetricTonnes., Yr. 2018-19 : 21,690 Metric Tonnes. , Yr. 2019-20 : 21,990 Metric Tonnes, Yr. 2020-21 : 99,905 Metric Tonnes.	Less production during F.Y. 2020-21 as the lessee did not get Environment Clearance from MoEF for the proposed.

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

Mining is being done through the opencast method with fully mechanized means.

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/Waste has been proposed in the earmarked locations.	Separate dumping of OB/Waste has been proposed in the earmarked locations.	
4b	Location of topsoil, OB and mineral reject dumps	Overburden/Waste: In te: In between Local co-ordinate N00 to n 200 and E -00to W-200due SW of the mine.	Overburden/Waste: In between Local co-ordinate N00 to n 200 and E -00to W-200due SW of the mine.	
4c	Number of dumps within lease area and outside of lease area	Within lease area: Waste/Overburden: 02 nos. Outside lease area: NIL	Within lease area: Waste/Overburden: 02 nos. Outside lease area: NIL	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed within Local co-ordinates E424-E519, S168-S50.	Dumping of waste /OB has been done within Local co-ordinates E424-E519, S168-S50.	
4e	Number of active and alive dumps.	02 nos	02 nos	
4f	Number of dead dumps.	No propsal.	Nil	
4g	Number of dumps established.	01 no. of Temporary dump	01 no. of Temporary dump	

4h	Whether Retaining wall or garland drain all along dumps are there.	Proposal has been given in the approved document for construction of Retaining Wall and Garland Drain along Waste/Overburden Dumps Retaining Wall: 850.0 m (L) x 2.0 m (W) x 1.50 m (H) Garland Drain: 850.0 (L) x 2.0 m (W) x 1.5 m (D)	along Waste/Overburden Dumps constructed Retaining Wall: 800.0 m (L) x 1.0 m (W) x 1.0 m (H) Garland Drain: 800.0 (L) x 1.0 m (W) x 1.0 m (D)	
4j	Number of settling ponds	No proposal.	Nil	
4k	Specific comments of inspecting officer on waste dump management			Along Waste/Overburden Dumps constructed Retaining Wall: 850.0 m (L) x 2.0 m (W) x 1.50 m (H) Garland Drain: 850.0 (L) x 2.0 m (W) x 1.5 m (D)

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 during F.Y. 2020-21.	NIL, Area not matured for the reclamation and the rehabilitation.	-
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 topsoil will be generated during plan period.	Not applicable.	-
5d	Total area fully reclaimed and rehabilitated	No Proposal during F.Y. 2020-21.	Nil -Area is 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	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Submitted before due date.	Information has been cross verified during inspection.	No major deviation has been found.
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 preoposal.	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	Within the lease area. 600 nos	Within lease area. 1800 nos	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.225 ha	036 ha	-

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	By plantation	By plantation.	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	It 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.	-
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Nil

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	It was proposed to produce 1,42,965 tonnes during the year 2020-21.	The actual production reported during the year 2020-21 99,905 tonnes.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	It was proposed to carry out manual sorting and screening.	Being done as per proposal.	
7c	Different grade of mineral sorted out at mines.	No proposal.	Nil	

7d	Any beneficiation process at mines .	No beneficiation study has been proposed in the approved document.	Not applicable.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		In view of the Mineral conservation, below 25% Mn and 25% to below 35% Mn is being produce and despatch.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No topsoil will be generated during Review period.	Not applicable.	-
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 OB/Waste has been proposed in the earmarked locations. Within lease area in between UTM co-ordinates N 2019900 to N 2020100 and E769400 to E769500 (Dump No. 2)	Separate dumping of OB/Waste has been proposed in the earmarked locations. Within lease area in between UTM co-ordinates N 2019900 to N 2020100 and E769400 to E769500 (Dump No. 2)	

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)	No proposal.	Nil	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	600 nos. of saplings will be planted over 0..225 Ha. area within the lease area.	1800 nos. of saplings have been planted over 036 Ha. area within the lease area. .	-
8g	Survival rate	50%	60%.	-
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
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9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to September 2021 A.R. Submitted up to F.Y. 2020-21	M.R. Submitted up to September 2021 A.R. Submitted up to F.Y. 2020-21	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager- Sri A.V. Naidu; mining Engineer-Sri K. Ashok Reddy; Geologist- Sri P.Ganesh;	Manager- Sri A.V. Naidu; mining Engineer-Sri K. Ashok Reddy; Geologist- Sri P.Ganesh;	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 22.34Ha. Waste/reject- 16.025Ha. Others- 4.742 Ha. Up to end of F.Y. 2020-21	Pit- 22.34 Ha. Waste/reject- 16.025 Ha. Others- 4.742 Ha. Up to end of F.Y. 2020-21	-
9d	Scrutiny of Annual return on afforestation	Within the lease 1800 nos and out side lease. 1000 nos survival rate 55%	Within the lease 1800 nos and out side lease. 1000 nos survival rate 55%	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject: NIL Grade: NIL	Mineral Reject: NIL Grade: NIL	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock: ROM: 12852 Tonnes Below 25% Grade Mn : 10940 Tonnes	Closing Stock: ROM: 12852 Tonnes Below 25% Grade Mn : 10940 Tonnes	-

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value: Rs. Not given Ex-Mine Price: Rs. 3139.67 Per Metric Tonne Cost of Production: Rs. 1751.33 Per Metric Tonne	Sale Value: Rs. Not given Ex-Mine Price: Rs. 3139.67 Per Metric Tonne Cost of Production: Rs. 1751.33 Per Metric Tonne	
9h	Scrutiny of Annual return on fixed assets	Rs-2287567.00	Rs-2287567.00	-
9k	Scrutiny of Annual return on mining machineries	Given in the annual returns.	Cross verified from the field logbooks.	-

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 :

(P.GURUVAIAH)

Indian Bureau of Mines