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 : S41) Y M SIVA PRASAD

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : P.S.K.Kishore, Mines Manager

Official with Designation

(iv) Date of Inspection : 09/01/2018
(v) Prev.inspection date : 23/05/2017

PART-I : GENERAL INFORMATION

. (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 : 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 : 14/09/2025

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/ : 03/05/2005

Termination date

6. Date of approval of Mining

Plan/Scheme of Mining

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

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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 Nos of core bore holes have been proposed. | The lessee has carried out 25 nos of Core bore holes and 03 nos DTH holes, as proposed in the Approved document. | |
| 1b | Exploration over lease area for geological axis 1 or 2 | G 1 scale. | G 1 scale. | |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | No proposals | | |
| 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 | 16,24,462 T. | 15,540 T. | The balance reserveis on heigher side as the anticipated product ion has not been achieved due topoor market. |
| 1f | General remarks of inspecting officers on geology, exploration etc | | | |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|----------------------------|--|---------|
| 2a | - | Development is carried out | Development is carried out on Section lines G-G', I-I', J-J', M-M' and | |
| | | and N-N' | between RLs 102 m to 48 m RL. | |

 $\begin{array}{c} \text{between} \\ \text{RLs 102 m to} \\ \text{48 m RL.} \end{array}$

| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Proposed | Seperate benches in ore and OB are maintaned as proposed. |
|----|--|--------------|---|
| 2c | Stripping ratio or ore to OB ratio | 1: 2.07 | 1: 2.03 |
| 2d | Quantity of topsoil generation in m3 | No proposals | NIL |
| 2e | Quantity of overburden generation in m3 | 89130 Cum. | 61128 Cum. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------------------------------|--|---|
| 3a | Number of pit proposed for production | One. | One. | |
| 3b | Quantity of ROM mineral production proposed | 99,990 Tonnes. | 15,540 Tonnes. (Upto Dec.2017) | ROMpropoduction is less due to poor market condition. |
| 3с | Recovery of sailable/usable mineral from ROM production | 70% | 70% | |
| 3e | Grade of mineral rejects generation and threshold value declared. | No proposals | N I L | |
| 3f | Quantity of sub grade mineral generation. | NO PROPOSALS | There is no generation of mineral rejects. | |
| 3g | Grade of sub grade mineral generation | No proposals | No generation of subgrade mineral. | |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Manual | Manual. | |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | No such proposals have been made. | N I L | |

| 3ј | Provision of drilling and blasting in mineral benches | No proposals | | No drilling and blasting is required, since OB and Ore are softin nature. |
|----|--|---|--|---|
| 3k | Provision of mining machineries in mineral benches | Yes. | Provision is made for movement of machinery. | |
| 31 | 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 propsalsmade in the approved document. | |
| 3m | Total area covered under excavation/pits | 14.78 ha. | 14.71ha. | |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1: 2.83 | 1:2.6 | |
| 30 | Total area put in use under different heads at the end of year | 33.06 ha. | 32.98 ha | |
| 3р | Production of ROM mineral during the last five year period as applicable | | 2013-14= 64,890 T. 2014- 15= 21,310 T, 2015-16= 21,860 T. 2016-17= 30,180 T. & 2017-18= 15,540 T.(upto Dec.2017) | |
| 3q | General remarks of inspecting officers on method of mining etc. | Semi- mechanised opencast method of mining is proposed. | As proposed semi- mechanised method of mining is carried out without adopting 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) | dumping of OB | As proposed seperate waste dumping is done. | |

| 4b | Location of topsoil, OB and mineral reject dumps | tobe dumpedon | 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 | 03 dumps exists within the ML AREA. | Out of three dumps only one dump is active which exists on the North Western side of the 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, However there is one dump is active which exists onthe North Western part of the ML area, | |
| 4f | Number of dead dumps. | NIL | | |
| 4 g | Number of dumps established. | None. | | |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Yes. | Retaing wall and garland drains have been made. | |
| 4i | Length of Retaining wall or garland drain all along dumps | x1m D garland | The construction of retaining wall and Garland drain is under progress. | The given dimension proposals are for thefive years period. |
| 4j | Number of settling ponds | N I L | | |
| 4k | Specific comments of inspecting officer on waste dump management | the form | | |

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. | Noproposals | |
|----|--|--------------|---|
| 5b | Area under backfilling of mined out area | No proposals | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | No proposals | |
| 5d | Total area fully reclaimed and rehabilitated | No proposals | |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | The mineral is continuing at depth. |

Progressive Mine Clousre Plan:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|---|--|---------|
| ба | Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2). | Yes. | The yearly report for the year 2016-17 is submitted. | |
| 6b | Area available for rehabilitation (ha) . | No proposals. | NIL | |
| 6c | afforestation done (ha). | Yes. | Yes. Done. | |
| 6d | No. of saplings planted during the year | During the year 2017-18, 650 saplings have been proposed. | 350 saplings have been planted. | |
| бе | Cumulative no .of plants | 10,000. saplings. | Around 15,850 saplings. | |
| 6f | Any other method of rehabilitation | No proposals. | | |

| 6g | Cost incurred on watch and care during the year | No proposals. | | |
|----|--|--|--|--|
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | No proposals. | | |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | No proposals | | |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area | No proposals | | |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | No proposals | | |
| 61 | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | No proposals | | |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | Afforestation is proposedinthe non mineralisedare a. | As proposaed afforestation is done in the non 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 5.25 ha in the non mineralised area. | |

| 60 | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | Rehabilitation by means of afforestation proposed. | As proposed rehabilitation in the non mineralised areawith 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 despatch=99,99 0 T, Entire ROM is meant for selling. | ROM despatched = 15,540 tonnes (upto Dec.2017) | |
| 7b | Method of grade- wise mineral sorting i.e. manual or mechanical. | Manual | Manual | |
| 7c | Different grade of mineral sorted out at mines. | + 10% Mm. | + 10% Mn content. | |
| 7d | Any beneficiation process at mines . | None. | | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | is meant for sale.No benificiation | The entire ROM is sold out. | |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|-----------|-----------|-------------|--------------|
| DI.NO. | T C C !!! | FIUDASAIS | ACCUAI WOIN | 1/Ciliat 1/2 |

| 8a | Separate removal and utilization of topsoil (Rule 32) | No proposals | |
|----|---|---|---|
| d8 | Concurrent use or storage of topsoil | No proposals | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Sepearate OB dump is proposed. | OB dump is dumped seperately beyond UPL. |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No proposals | |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No proposals | |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | Additional plantation to the existing plantation is proposed. | Additional plantation 450 sapliongs have been done. |
| 8g | Survival rate | 80% | 70% |
| 8h | Water sprinkling on roads to control airborne dust | Yes. | Water sprinkling is done on haul roads periodcally. |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Plantation is proposed toimprove the aesthetic beauty in and around the mines area. | Plantation is done in and around tjhe ML area has improved the aesthetic beautytjhe mines area. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
| | | | | |

| 9a | Status of submission of Monthly and Annual returns | Monthly returns and Annual returns are to be submitted as per Statuate. | Monthly returns are submitted upto March 2018. Annual return for the year 2017-18 is due as on June 2018. |
|----|---|---|---|
| 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 | 400 Saplings have been done. |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | To be furnished. | N I L |
| 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. | Rs 2838/ |
| 9k | Scrutiny of Annual return on mining machineries | To be furnished. | Mining machinary details have been furnished. |

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| Details of violations observed oviolation pointed out | during current | inspection and | compliance | position | of |
|---|----------------|----------------|--------------|----------|----|
| Violation observed | | Show c | ouse positio | on | |

| Violation observed | | | Show couse position | | |
|--------------------|-----------|---------------|---------------------|-------------------------|--|
| Rule NO. | Issued on | Compliance on | Rule NO. | Issued on Compliance on | |

Date :

(Y M SIVA PRASAD)

Indian Bureau of Mines