

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

**Mining Plan Modification REPORT**

**Hyderabad regional office**

**Mine file No :** AP/VZNR/MN-116/HYD

**Mine code :** 40APR20056

- (i) Name of the Inspecting : **PR09** ) **M.Pratap.Reddy**  
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : NARESH QP  
Official with  
Designation
- (iv) Date of Inspection : 16/10/2017
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **GIRIJA**
- (b) **Registration NO.** : **IBM/6596/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address :  
State : ANDHRA PRADESH  
District : VIZIANAGARAM  
Village : CHINTALAVALLASA  
Taluka : RAMABHADRAPURAM  
Post office : RAMABHADRAPURAM  
Pin Code :  
FAX No. :  
E-mail :  
Phone :
- (f) Police Station :
- (g) First opening date : 27/08/1999
- (h) Weekly day of rest : SUN
2. Address for : H.No:4/20, Main Road, Opp. SBI,  
correspondance Ramabhadrapuram,  
Vizianagaram Dt.
3. (a) Lease Number : APR1302
- (b) Lease area : 29.48
- (c) Period of lease : 20
- (d) Date of Expiry : 26/08/2017
4. Mineral worked : MANGANESE ORE Main

## 5. Name and Address of the

Lessee : Y.P.RAMA RAO  
VIZIANAGARAM ANDHRA  
PRADESH  
Phone:  
FAX :

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 28/08/2009  
Plan/Scheme of Mining Modif.approved Mining Scheme 26/03/2012  
Mining Scheme rule 12 MCDR1988 02/04/2013

## 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 Year 2016-17   | However the Lessee has carried out exploration by means of drilling of 18 Core boreholes                        |  |
| 1b     | Exploration over lease area for geological axis 1 or 2              | G2 Scale of Exploration.   | G2 Scale of exploration has been carried out over an extent of 4.87 ha in mineralised area.                     |  |
| 1c     | Exploration Agencies and Expenditure in lakh rupees during the year | The Lessee her self under the supervision of a Technical person. No expense details have been given. | The lessee carried out exploration under the supervision of a Geologist. The expense incurred is Rs.12,12,000/- |  |
| 1d     | Balance area to be explored to bring Geological axis in 1 or 2      | 2 ha- G2 scale of exploration  | 2 ha G2 scale of exploration  |  |
| 1e     | Balance reserve as on 01/04/20                                      | *314886 T  | *314886 T   | * A fresh reserve estimate is done based on the recent exploration as furnished in the draft Mining Plan |
| 1f     | General remarks of inspecting officers on geology, exploration etc  | Precambrian metasedimentary deposit with partly G2 Scale of exploration.                             | Meta sedimentary Mangnese deposit with G2 scale of exploration over an extent of 4.87 ha.                       |  |

## Development :

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

|    |   |  |   |   |
|----|---|--|---|---|
| 2a | Location of development w.r.t.lease area  | During the year 2016-17, the development is proposed around section 12-12' btween coordinates 90E-265N and 67E-755E in Block-E | The lateral degradation has been done withn in the Planned coordinates but depth wise only three benches(9m depth) could be achived around section 12-12' in block-E. |   |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15)                          | Yes,   | No top soil benches since there is hardly any soil.two overburden benches and one bench in maganese ore zone has been formed.   |   |
| 2c | Stripping ratio or ore to OB ratio  | 1:4  | 1;0.5   |   |
| 2d | Quantity of topsoil generation in m3  | There is no proposal of top soil generation in the year 2016-17  | -   |   |
| 2e | Quantity of overburden generation in m3   | 108281 cum   | About 1000 cum  | The excess development was carried out in the previous year i.e 2015-16 |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | It was proposed to form 9 benches in the 2016-17 for winning of the ore in two ore zones                                       | During 2016-17, the development and winning of the ore took place in one ore band(zone) only.   |   |

#### Exploitation:

| Sl.No. | Item  | Propasals | Actual work | Remarks |
|--------|---|-----------|-------------|---------|
| 3a     | Number of pit proposed for production                   | One       | One         |         |
| 3b     | Quantity of ROM mineral production proposed             | 24,956 T  | 6,646 T     |         |
| 3c     | Recovery of sailable/usable mineral from ROM production | 22460 T   | 6,646 T     |         |

|    |  |  |  |
|----|--|--|--|
| 3d | Quantity of mineral reject generation  | Nil  | Nil  |
| 3e | Grade of mineral rejects generation and threshold value declared.                                    | Mineral rejection: nil, Theshold value: 10% Mn | There is no generation of mineral rejects. The Thershold value for Manganese Ore is 10% Mn                     |
| 3f | Quantity of sub grade mineral generation.  | 2496 T   | No subgrade mineral is generated in the year 2016-17.  |
| 3g | Grade of sub grade mineral generation  | 10-20% Mn                                      | -  |
| 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.      | None   | None   |
| 3j | Provision of drilling and blasting in mineral benches  | Yes  | In the mineralised zone manual operations are only being carried out. No drilling and blasting is carried out. |
| 3k | Provision of mining machineries in mineral benches   | Yes  | No provision of mining macinary in mineral benches is done.  |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Yes  | The suitable bench heights in OB and in mineral is being maintained.   |
| 3m | Total area covered under excavation/pits   | 4.056 ha                                       | 2.9015 ha  |
| 3n | Ore to OB ratio for the pit/mine during the year.  | 1:4  | 1:0.5  |
| 3o | Total area put in use under different heads at the end of year                                       | 6.7811 ha                                      | 4.1492 ha  |

|    |  |  |  |
|----|--|--|--|
| 3p | Production of ROM mineral during the last five year period as applicable | 2012-13-17985T, 2013-14-33651 T, 2014-15-33000 T, 2015-16-25245T & 2015-16=24956 T | ,2012-13-1779 T, 2013-14-NIL,2014-15-NIL,2015-16-1343 T and 2016-17=6,646 T  |
| 3q | General remarks of inspecting officers on method of mining etc.          | The mining operations are of opecast semi mechanised method of mining.             | As proposed mining is being done by semi mechanised method of minind. The machinery is being deployed on need based approach while handling the overburden/sideburden. |

## Solid Waste Management - Dumping:

| Sl.No. | Item   | Propasals   | Actual work   | Remarks |
|--------|--|---|---|---------|
| 4a     | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)   | One   | As proposed dumping is being done ii stipulated place in F block.   |         |
| 4b     | Location of topsoil, OB and mineral reject dumps                   | F Blocok between coodinates 165N-215N and 105E-225E | OB dump lies in F block between coordinates 180N-215N and 155E-220E |         |
| 4c     | Number of dumps within lease area and outside of lease area        | One dump with in the ML area.                       | One dump with in ML area.   |         |
| 4d     | Location of dumps w.r.t. ultimate pit limit (Rule 16)              | Beyond UPL  | The waste dump lies beyond UPL.                                     |         |
| 4e     | Number of active and alive dumps.                                  | One   | One.  |         |
| 4f     | Number of dead dumps.  | Nil   | Nil   |         |
| 4g     | Number of dumps established.                                       | Nil   | Nil   |         |
| 4h     | Whether Retaining wall or garland drain all along dumps are there. | Yes   | Retaining wall and graland drain are under progress.                |         |
| 4i     | Length of Retaining wall or garland drain all along dumps          | 380m  | Work under progress.  |         |

|    |  |   |   |
|----|--|---|---|
| 4j | Number of settling ponds   | Nil   | Nil   |
| 4k | Specific comments of inspecting officer on waste dump management | Only one waste dump is proposed in F block. | The waste material dumped in F block is beyond UPL. |

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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 is made.   | -               |         |
| 5b     | Area under backfilling of mined out area  | No such proposal has been made.   | Nil             |         |
| 5c     | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)     | No such proposal is made.   | Does not arise. |         |
| 5d     | Total area fully reclaimed and rehabilitated  | No such proposal is made  | -               |         |
| 5e     | General remarks of inspecting officers on backfilling and reclamation etc.                    | No back filling reclamation proposlas have been made as such the area is not matured. | Does not arise. |         |

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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). | No such proposal is given in the AMP | -           |         |

|    |  |                                   |   |
|----|--|-----------------------------------|---|
| 6b | Area available for rehabilitation (ha) .   | Nil                               | -   |
| 6c | afforestation done (ha).   | Afforestation in 7.5 is proposed. | Afforestation as proposed is done with less survival rate due to lack of watch and ward |
| 6d | No. of saplings planted during the year  | 327                               | 330   |
| 6e | Cumulative no .of plants   | 1635                              | 1400  |
| 6f | Any other method of rehabilitation   | None                              | -   |
| 6g | Cost incurred on watch and care during the year  | Rs 25,000/-                       | Rs 30,000/-   |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D | No such proposal is made.         | -   |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings          | No such proposal is made.         | -   |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area       | No such proposal is made.         | -   |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir  | Not appicable                     | -   |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.                   | No such proposal is made.         | -   |



|    |   |   |  |
|----|---|---|--|
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation                          | No such proposal is made.                                 | -  |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)              | No such proposal is made.                                 | -  |
| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation             | No such proposal is made.                                 | -  |
| 6p | Compliance of environmental monitoring (core zone and buffer zone)                                | Environmental monitoring is proposed.                     | Done   |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | Afforestation proposal along 7.5m buffer zone is proposed | As proposed afforestation in 7.5 is being carried out. |

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Mineral Conservation:

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

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
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Compliance of Rule 45:

| Sl.No. | Item   | Propasals | Actual work                           | Remarks                                 |
|--------|--|-----------|---------------------------------------|---|
| 9a     | Status of submission of Monthly and Annual returns |           | No Annual return for the year 2016-17 | Violation letter is issued on 7.11.2017 |

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**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 :**

**(M.Pratap.Reddy)**

Indian Bureau of Mines