

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

**MCDR inspection REPORT**

**Hyderabad regional office**

**Mine file No :** AP/VZNR/MN-106/HYD

**Mine code :** 40APR20054

- (i) Name of the Inspecting : **M029** ) **MADHU SUDHAN YADAV M**  
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sri.S.K. Mishra, Mine Manager & Sri. U. Venkata Raman  
Official with  
Designation
- (iv) Date of Inspection : 07-MAR-23
- (v) Prev.inspection date : 27-AUG-21

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **GARBHAM**
- (b) **Registration NO.** : **IBM/8741/2012**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ANDHRA PRADESH
- District : VIZIANAGARAM
- Village : GARBHAM
- Taluka : MEREKAMUDIDAM
- Post office : GARBHAM
- Pin Code :
- FAX No. :
- E-mail :
- Phone :
- (f) Police Station : BUDARAYAVALLASA
- (g) First opening date : 15-JUL-97
- (h) Weekly day of rest : SUN
2. Address for : M/S MAHALAKSHMI MINERALS,  
correspondance VILL:GARBHAM,  
DIST:VIZIAYANAGARAM.
3. (a) Lease Number : APR1121
- (b) Lease area : 10.52
- (c) Period of lease : 20
- (d) Date of Expiry : 15-JUL-17
4. Mineral worked : MANGANESE ORE Main

## 5. Name and Address of the

Lessee : M/S MAHALAKSHMI MINIERALS  
 SRI SASIDHAR RADDY,  
 VILL:GARBHAM  
 MANDAL:MERAKAMUDDIM,DI:VZNR  
 VIZIANAGARAM ANDHRA PRADESH  
 Phone:  
 FAX :

Owner : SASIDHAR REDDY  
 VILL:GARBHAM  
 MANDAL:MERAKAMUDIDAM,  
 DIST:VZNR VIZIANAGARAM  
 ANDHRA PRADESH  
 Phone:  
 FAX :

## Manager

Name : S.K.MISHRA  
 Qualification : B.TECH,MINING A.I.S.M.  
 Appointment/ :  
 Termination date

6. Date of approval of Mining	:	Modif.approved Mining Scheme	29-MAY-15
Plan/Scheme of Mining		MP modif under 17(3) MCR 2016	03-JUL-17
		MP review under 17(1) MCR 2016	23-DEC-21

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Proposed to drill 04 Boreholes in the year 2017-18	04 Boreholes drilled in the year 2020-21 & 04 Boreholes drilled in the year 2021-22	
1b	Exploration over lease area for geological axis 1 or 2	No proposal for the year 2021-22	04 Boreholes drilled in the year 2021-22	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	-----	Lessee reported that borehole drilling was carried by the lessee.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	-----	Entire area not covered under G1 level of exploration.	Detailed exploration (G1 level) over the potentially mineralised area has not been carried out within a period of five years from the date of commencement of MCDR 2017. Violation pointed out as per rule.
1e	Balance reserve as on 01/04/20		As per the approved Review of Mining Plan approved on 24/12/2021, Proved Mineral Reserve (111) is 414053 Tonnes and Feasibility Mineral Resources (221) is 83044 Tonnes, whereas in the Annual Returns (2021-22) submitted it is submitted that Proved Mineral Reserve is submitted as 436590 Tonnes. Violation pointed out for considerable difference in the Reserves and Resources compared to approved mining plan and annual returns.	

1f	General remarks of inspecting officers on geology, exploration etc	Violation pointed out for considerable difference in the Reserves and Resources compared to approved mining plan and annual returns.
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Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	2021-22: E220-247m to N152-303m	Work done within the proposed co-ordinates	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed for OB and ore	Separate benches maintained for OB and ore	
2c	Stripping ratio or ore to OB ratio	2021-22 - 0.19	It is reported in the annual returns that overburden removed is 5586 Tonnes, whereas during inspection it was reported that 7541 Tonnes of overburden generated during the year 2021-22. Violation pointed out as per rule.	
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	2021-22 - 4655 cu.m	It is reported in the annual returns that overburden removed is 5586 Tonnes, whereas during inspection it was reported that 7541 Tonnes of overburden generated during the year 2021-22. Violation pointed out as per rule.	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	It is reported in the annual returns that overburden removed is 5586 Tonnes, whereas during inspection it was reported that 7541 Tonnes of overburden generated during the year 2021-22. Violation pointed out as per rule.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	2021-22 - 24013 Tonnes	2021-22 - 21500 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	70%	It was reported by the lessee that 70% of mineral being recovered.	
3d	Quantity of mineral reject generation	No proposal	Nil	
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	Manual	Manual	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	

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3j	Provision of drilling and blasting in mineral benches	Drilling and Blasting proposed in the mineral benches	Drilling and Blasting carried out in the mineral benches
3k	Provision of mining machineries in mineral benches	Yes, Provision for the deployment of mining machinery in mineral benches has been made.	Mining operations has been carried out with Hydraulic Excavators, drill machinery, Tippers etc. in mineral benches.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	It was proposed to maintain the bench height of 3 meters	Bench height is being maintained as 3 m. Digging height of the excavators are compatible with bench height
3m	Total area covered under excavation/pits	4.669 Ha	4.669 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1: 0.19	It is reported in the annual returns that overburden removed is 5586 Tonnes, whereas during inspection it was reported that 7541 Tonnes of overburden generated during the year 2021-22. Violation pointed out as per rule.
3o	Total area put in use under different heads at the end of year	6.0 Ha	5.335 Ha
3p	Production of ROM mineral during the last five year period as applicable	2017-18 - 23581 Te 2018-19 - 24003 Te 2019-20 - 23131 Te 2020-21 - 24012 Te 2021-22 - 24013 Te	2017-18 - 9431 Te 2018-19 - 7709 Te 2019-20 - 15036 Te 2020-21 - 17107 Te 2021-22 - 21500 Te
3q	General remarks of inspecting officers on method of mining etc.		Opencast mechanised method of mining being carried out.

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	2021-22 - 4655 cu.m	It is reported in the annual returns that overburden removed is 5586 Tonnes, whereas during inspection it was reported that 7541 Tonnes of overburden generated during the year 2021-22. Violation pointed out as per rule.	
4b	Location of topsoil, OB and mineral reject dumps	North west side of the ML	North west side of the ML	
4c	Number of dumps within lease area and outside of lease area	One dump within lease area	One dump within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump proposed outside UPL	Dump developed outside 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.	No proposal	Nil	
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management			Waste dump developed in the north west corner of the mining lease area as per proposal.

## Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	Nil	
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 proposal	Nil	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No area of the mine is excavated upto the ultimate pit limit to start backfilling.

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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).	To be submitted as per rule	Submitted	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	2021-22 - 0.12 Ha	2021-22 - 0.12 Ha	
6d	No. of saplings planted during the year	2021-22 - 200 Nos.	2021-22- 200 Nos.	
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	No proposal	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly environmental monitoring of core and buffer zone.	Quarterly environmental monitoring carried out during 2021-22.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Greenbelt development is well developed within the lease area to maintain the aesthetic beauty.

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within the mining lease	Grade wise sorting done within the mining lease	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	25% to 35% Mn	25% to 35% Mn	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Manual sorting and blending being done to get the desired grade.

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Environment:

Sl.No.	Item	Propasals	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)	Seperate dump proposed for overburden	Seperate dump maintained for overburden	
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)	200 Nos of saplings	200 Nos. of saplings planted.	
8g	Survival rate	No proposal	90%	
8h	Water sprinkling on roads to control airborne dust	Water Tankers to be provided for dust suppression.	Water tankers provided for dust suppression.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Greenbelt development is well developed within the lease area to maintain tha aesthetic beauty.

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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly and annual returns to be submitted in time	Violation issued (SOR) for the month of Oct'22 for delay submission of monthly returns. Annual returns submitted in time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager & Mining Engineer - Sri. S.K. Mishra Geologist - Nil	Manager & Mining Engineer - Sri. S.K. Mishra Geologist - Sri. U. Venkata Ramana	Advised the lessee to update the Geologist appointment in the returns portal.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mining pit - 4.669 Ha Waste dump - 0.164 Ha	Mining pit - 4.669 Ha Waste dump - 0.164 Ha	
9d	Scrutiny of Annual return on afforestation	200 Nos.	200 Nos.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock - 2370 Tonnes Closing stock - 1160 Tonnes	Opening stock - 2370 Tonnes Closing stock - 1160 Tonnes	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The ex-mine price reported as Rs.4400/- and cost of production is Rs.2507/-	In the cost of production details, reported overhead cost and royalty are not consistent with the values reported in Part-III. Violation pointed out as per rule.	
9h	Scrutiny of Annual return on fixed assets	The value of fixed assets is Nil.	In the Capital Structure, the value of fixed assets, building and machineries are submitted as NIL.	
9k	Scrutiny of Annual return on mining machineries	Shovel - 01 No. Tipper - 02 Nos.	Shovel - 01 No. Tipper - 02 Nos.	

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**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 12(4)	21-APR-23			
MCDR17	Rule 31(1)	21-APR-23			
MCDR17	Rule 34(1)	21-APR-23			
	Rule 45(7)	27-APR-23			

**Date :**

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines