

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

**MCDR inspection REPORT**

**Chennai regional office**

**Mine file No :** TN/SLM/MG-13 MDS

**Mine code :** 39TMN11001

- (i) Name of the Inspecting : **D009** ) **D.CHANDRA SEK HAR REDDY**  
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Sri.V.Ramesh, Mines Manager, D.ganesan, Geologist.  
Official with  
Designation
- (iv) Date of Inspection : 26/10/2023
- (v) Prev.inspection date : 07/01/2022

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **ARASU(177.96H)**
- (b) **Registration NO.** : **IBM/10727/2012**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : TAMIL NADU  
District : SALEM  
Village : THATHIENGARPATTI  
Taluka : OMALUR  
Post office : KARUPPUR  
Pin Code : 636012  
FAX No. : 0427-2346341  
E-mail : tanmag@eth.net  
Phone : 0427 - 2400272 / 2400675 /
- (f) Police Station : OMALUR
- (g) First opening date : 10/02/1979
- (h) Weekly day of rest : SUN
2. Address for : TAMILNADU MAGNESITE MINE  
correspondance : THATHIENGARPATTI PO& VILLAGE,  
OMALUR.TK. SALEM.DT.- 636012
3. (a) Lease Number : TMN0387
- (b) Lease area : 234.28
- (c) Period of lease : 30
- (d) Date of Expiry : 02/12/2007
4. Mineral worked : DUNITE Associated  
MAGNESITE Main

## 5. Name and Address of the

Lessee : M/s TAMIL NADU MAGNESITE CORPORATION LTD  
 5/53, OMALUR MAIN ROAD  
 JAGHIR AMMAPALAYAM SALEM  
 SALEM TAMIL NADU  
 Phone:  
 FAX :

Owner : JATINDRANATH SWAIN, IAS, M/S. TAMILNADU MAGNESITE  
 M/S. TAMILNADU MAGNESITE  
 LIMITED 5/53, OMALUR MAIN  
 ROAD, JAGIR AMMAPALAYAM,  
 SALEM. SALEM TAMIL NADU  
 Phone: 0427-2346333-6  
 FAX : 0427-2346341

Agent : N.VEERAKUMAR  
 16-A-1, RAJAJI ROAD, SALEM  
 SALEM TAMIL NADU  
 Phone: 0427-2417630, 2413883  
 FAX : 0427-2346341

Mining Engineer  
 Name : V.RAMESH, Full Time  
 Qualification : B.E., MINING  
 Appointment/ : 01/07/2004  
 Termination date

Geologist  
 Name : D.GANESAN, Full Time  
 Qualification : MSc Geology  
 Appointment/ : 05/11/2015  
 Termination date

Manager  
 Name : V.RAMESH  
 Qualification : BE(MINING)  
 Appointment/ : 14/06/2022  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining :

Renewal under rule 22 MCR1960	29/06/2001
Mining Scheme rule 12 MCDR1988	25/08/2005
Renewal under rule 24 MCR1960	05/10/2012
Mining Scheme rule 12 MCDR1988	16/12/2013
MP review under 17(1) MCR 2016	04/05/2018

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	NIL	NIL	Entire area already explored for G1
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NIL	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	NIL
1e	Balance reserve as on 01/04/20	—	Magnesite - 2341944 MT Dunite - 2150288 MT	NIL
1f	General remarks of inspecting officers on geology, exploration etc	—	—	satisfactory.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	2542440 E - 2542980 E	2542440 E - 2542980 E	Pit is water logged .
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No serate benches in Topsoil ,OB.	NIL	vein type deposit, there is no separate OB, bench.
2c	Stripping ratio or ore to OB ratio	Magnesite - 1:15.32, Dunite - 1:17.84	Magnesite - 1:30.51, Dunite - 1:12.14	NIL
2d	Quantity of topsoil generation in m3	No Top soil generation.	NIL	NIL
2e	Quantity of overburden generation in m3	NIL	NIL	NIL

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	—	—	Pits are currently waterlogged, lessee got temporary permission to dewater.
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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 Blocks (A and B block)	2 Blocks (A and B block)	NIL
3b	Quantity of ROM mineral production proposed	2022-23 = 2102138 2023-24 = 1728025	2022-23 = 735800.24 2023-24 = 317496.37 (upto sep,2023)	Production not achieved due to waterlogging of pit.
3c	Recovery of sailable/usable mineral from ROM production	Magnesite - 5.82 %, Dunite - 5%	Magnesite -2.94 %, Dunite - 7.38%	NIL
3d	Quantity of mineral reject generation	Not specified	No grade of minerals reject generated in the year 2022-23.	All grade of minerals was consumed, no grade of mineral reject generated.
3e	Grade of mineral rejects generation and threshold value declared.	Not specified	NA	NIL
3f	Quantity of sub grade mineral generation.	Not specified	NA	NIL
3g	Grade of sub grade mineral generation	No generation.	NIL	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Manual Method	Manual Method	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NIL	NIL

3j	Provision of drilling and blasting in mineral benches	Proposed.	Deep hole drilling and blasting adopted.	NIL
3k	Provision of mining machineries in mineral benches	Yes, provision made.	HEM deployed on benches.	Presently most of benches water logged.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	5m height of benches.	5m height benches maintained.	NIL
3m	Total area covered under excavation/pits	66.51.5 HC	64.32 Hc.	2.195 ha. Back filling was carried out in 2022-23.
3n	Ore to OB ratio for the pit/mine during the year.	Magnesite-1:15.32, Dunite - 1:17.84	Magnesite-1:30.51, Dunite - 1:12.14	NIL
3o	Total area put in use under different heads at the end of year	pits-64.32 Hc. Reclaimed&rehabilitated-2.2 Hc. waste disposal - 6.14 Hc. infrastructure - 23.68 Hc.	pits-64.32 Hc. Reclaimed&rehabilitated-2.2 Hc. waste disposal - 6.14 Hc. infrastructure - 23.68 Hc.	NIL
3p	Production of ROM mineral during the last five year period as applicable	2018-19 26,73,951 tonnes 2019-20 24,19,175 tonnes 2020-21 19,64,738 tonnes 2021-22 21,81,538 tonnes. 2022-23 21,02,138 tonnes.	2018-19 - 85,253.97 tonnes 2019-20 - 0 tonnes 2020-21 - 3,89,580.86 tonnes 2021-22 - 10,95,254.91 tonnes 2022-23 - 7,35,800.24 tonnes.	NIL
3q	General remarks of inspecting officers on method of mining etc.	—	—	Lower production due to water logging of mine.

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	backfilling proposed.	back filling carried out using waste generation.	Pits fully water logged
4b	Location of topsoil, OB and mineral reject dumps	2542320 E - 2542800 E; 888550 N - 888200 N	2542320 E - 2542800 E; 888550 N - 888200 N	Pits fully water logges
4c	Number of dumps within lease area and outside of lease area	4	4	With in lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	with in Lease area	As per proposal.	NIL
4e	Number of active and alive dumps.	One	One	NIL
4f	Number of dead dumps.	NIL	NIL	NIL
4g	Number of dumps established.	NIL	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes.proposed retaining wall and drains.	Garland drains and Retaing wall maintained.	NIL
4i	Length of Retaining wall or garland drain all along dumps	Not mentioned.	NIL	Repair and maintained Retaining wall: 990 mtrs Graland Drain: 990 mtrs
4j	Number of settling ponds	NIL	NIL	NIL
4k	Specific comments of inspecting officer on waste dump management	—	—	Pit is water logged.Back filling work restricted.

#### 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.	Back filling in northern side of A block over 1.206 Hc	Back filling done over 1.20 Hc.	Currently pits water logged.
5b	Area under backfilling of mined out area	1.20.684 ha.	1.20.00 ha.	During 2022-23.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Topsoil .	NIL	NIL
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	back filling in progress.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	—	—	Pits water logged, backfilling in progress.

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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).	yes.	Submitted.	NIL
6b	Area available for rehabilitation (ha) .	NIL	NIL	NIL
6c	afforestation done (ha).	0.05 Hc.	0.05 Hc.	NIL
6d	No. of saplings planted during the year	500 saplings.	500 saplings.	NIL
6e	Cumulative no .of plants	--	1,16,903 nos. since 1998	NIL
6f	Any other method of rehabilitation	NIL	NIL	NIL
6g	Cost incurred on watch and care during the year	NIL	Rs. 500000	NIL

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	1.206 Hc	1.20 Hc	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	1895681 tonnes	659814 tonnes.	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NIL	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NIL	NIL	NIL
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NIL	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NIL	NIL



6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed.	Quarterly monitoring report submitted.	All parameters within limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	—	—	Pit water logged, mine workings affected.

#### Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manual sorting proposed.	Manual dressing/ segregation of magnesite/dunite done.	NIL
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting.	Manual sorting.	NIL
7c	Different grade of mineral sorted out at mines.	Refractory/Non-refractory grade.	Refractory grade upto 6.5% SiO <sub>2</sub> /Non-refractory grade above 6.5% SiO <sub>2</sub>	NIL
7d	Any beneficiation process at mines	NIL	NIL	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	—	—	No mineral conservation problem.

#### Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NIL	NIL	No generation of topsoil.

8b	Concurrent use or storage of topsoil	NIL	NIL	No generation of topsoil.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	4 dumps	4 dumps	waste being used for backfilling.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Back filling proposal given.	Backfilling in A block over 1.20 Hc done.	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilled qty. of 1895681 MT in area is 1.20.68 ha.	Backfilled qty. of 659814.64 MT in area is 1.20.00 ha.	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 saplings during 2022-23.	total plantation sofor 1,16,903 nos. since 1998	NIL
8g	Survival rate	80%	75 %	NIL
8h	Water sprinkling on roads to control airborne dust	Proposed.	Water srinkling done .	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	—	—	Satisfactory.

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted.	Monthly and AR 2022-23 submitted,	NIL

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details given.	V,Ramesh- Mines manager & Mining Engineer. D.ganesan - Geologist.	Presented during inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details furnished.	Area under workings - 64.32 Hc., Reclaimed - 2.2 Hc., waste disposal - 6.140 Hc., Infrastructure - 23.680 Hc.	NIL
9d	Scrutiny of Annual return on afforestation	Details given.	500 saplings planted during the year 2022-23 .	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	No mineral reject generation.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Details given.	Magnesite - 21625 tonnes, Dunite - 54360 tonnes.	Violation pointed out for difference in production .
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Details given.	Magnesite Ex.mine price Rs.7489, Dunite - Rs. 1000	Low recovery factor.
9h	Scrutiny of Annual return on fixed assets	Details given.	Rs.22721000	NIL
9k	Scrutiny of Annual return on mining machineries	Details given.	Air Compressor (1 cum)- 3 last Host Drill (32 mm) - 2 Rock Drill (Non- Elec.) (110 mm) - 1 Shovel (Hydraulic) (1 cum) - 10 Dumper (25 ton) - 23 Tipper (10 cum) - 3 Explosive Van (2 ton) - 2 Jeep/Tractor - 1 Water Tank (12000 lit) - 4	NIL

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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 :**

(D.CHANDRA SEKHAR REDDY)

Indian Bureau of Mines