

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

**Mining Plan Modification REPORT**

**Chennai regional office**

**Mine file No :** TN/SLM/MG-2. MDS

**Mine code :** 39TMN11004

- (i) Name of the Inspecting : **T028** ) **T.PHALTHURAIRAJHEN**  
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : PG.KALIDASS-AGENT. SS.KUJUR.DCOM.  
Official with  
Designation
- (iv) Date of Inspection : 20/03/2019
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **CHETTICHAVADI/JAGHIR(532H)**
- (b) **Registration NO.** : **IBM/4125/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **TAMIL NADU**
- District : **SALEM**
- Village : **CHETTICHAVADI**
- Taluka : **SALEM**
- Post office : **KARUPPUR**
- Pin Code : **636012**
- FAX No. : **0427- 2345616**
- E-mail : **dalmiamagnesite@yahoo.com**
- Phone : **0427- 2345601**
- (f) **Police Station** :
- (g) **First opening date** : **22/02/1966**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **CHETTICHAVADIJAGHIR MINE**  
**correspondance** : **CHETTICHAVADIJAGHIR .VILLAGE,**  
: **SALEM.TALUK & DISTT.**
3. (a) **Lease Number** : **TMN0381**
- (b) **Lease area** : **562.35**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **19/08/1986**
4. **Mineral worked** : **DUNITE** Associated  
: **MAGNESITE** Main

## 5. Name and Address of the

Lessee : DALMIA BHARAT SUGAR AND INDUSTRIES LTD.  
 C/O DALMIA MAGNESITE CORP.  
 SALEM-636012 SALEM TAMIL  
 NADU  
 Phone:  
 FAX :

Owner : M/S.Dalmia Magnesite Corporation  
 SALEM TAMIL NADU  
 Phone:  
 FAX :

Agent : P.G.KALIDASS  
 DALMAG MAGNESITE  
 CORPORATION SALEM TAMIL  
 NADU  
 Phone:  
 FAX :

## Mining Engineer

Name : D. Rajakumar, Full Time  
 Qualification : Dip (Min) with AMIE and FCC.  
 Appointment/ : 22/12/2006  
 Termination date

## Geologist

Name : P.G.KALIDAS, Full Time  
 Qualification : M.TECH(APP.GEOLOGY)  
 Appointment/ : 27/07/1990  
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	09/09/2003
Plan/Scheme of Mining		Renewal under rule 24 MCR1960	01/09/2005
		Mining Scheme rule 12 MCDR1988	12/01/2012
		Mining Scheme rule 12 MCDR1988	28/07/2016

## 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	G1(partialy Explored)	65 boreholes	G1 level(partialy explored)
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Sri Ganapathy Core Bore ,coimbatore	Rs 23 lakhs in 2018-19 , Rs 13 lakhs in 2019-20.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	657 bore holes to be drilled in future years	mine faces with ore exposures are developed over the entire area	Nil
1e	Balance reserve as on 01/04/20	Nil	magnisite-(111)969078 Ts , (121)-6323901 Ts , (211)3725576 ts =11.018 million Ts dunite-(111)-398947 Ts , (211)-302926 Ts =7.018 Million Ts	Not required.
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Systematic exploration is required.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	MT& B- BLOCKS	MT BLOCK	presentlt mine is not operating.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	OVERBURDEN FIRST BENCH MINERAL 2,3,4 BENCHES	being maintained	Nil
2c	Stripping ratio or ore to OB ratio	As proposed	01:23.8	Nil
2d	Quantity of topsoil generation in m3	Nil	Nil	Already opened mine topsoilis nil or scanty.

2e	Quantity of overburden generation in m3	495833m3/year	994m3 in 2018-19	presently mine is not operating since 29/08/2018.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Satisfactory.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3	1	presently mine is not operating since 29/08/2018.
3b	Quantity of ROM mineral production proposed	11,90,000 T/year	1167.487 T in 2018-19	actual production 1167487 t less than proposed quantity.
3c	Recovery of sailable/usable mineral from ROM production	50,000 T	11670.487 T	sailable/ usable is 1167.487 T less than proposed quantity.
3d	Quantity of mineral reject generation	1150	40	less than proposed
3e	Grade of mineral rejects generation and threshold value declared.	Nil	more than 10% SIO2	No comments.
3f	Quantity of sub grade mineral generation.	Yes	795 T .	no comments
3g	Grade of sub grade mineral generation	Yes	6.2 To 10 %	No comments
3h	Manual / Mechanised method adopted for segregating from ROM	manual	manual	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Analysis carried out to identify sub grade mineral and rejects	mineral stockwise analysis carried out.	Nil

3j	Provision of drilling and blasting in mineral benches	yes	2 wagan drills, 2 Atlas copco compressors 100 mm dia holes	Nil
3k	Provision of mining machineries in mineral benches	loader-2, dozer-2 dumper-7	loader-2, dozer-2 dumper-7	nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	7.5 m benches permitted by DGMS	7m OB benches ,6 m in ore benches	Nil
3m	Total area covered under excavation/pits	-	366.89 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:23.9	raw magnesite waste spoil 1:23.8	ore production from old spoils
3o	Total area put in use under different heads at the end of year	Area of excavation-366.89 ha, storage of stop soil-1.50 ha ,OBdumps-46.853 ha ,mineral storage-3.00 ha ,Infrastru-1.00 ha Roads-4.89 ha , Greenbelt& rehabilitation-18.23 ha ,Area which will remain untouched7.001 ha	Area of excavation-366.89 ha, storage of stop soil-1.50 ha ,OBdumps-46.853 ha ,mineral storage-3.00 ha ,Infrastru-1.00 ha Roads-4.89 ha , Greenbelt& rehabilitation-18.23 ha ,Area which will remain untouched7.001 ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15=16596 ts. mag, 475500 ts. dun, 2015-16=15027 ts. mag,37815 ts. dun,2016-17=10343 ts. mag, 11620 ts. dun, 2017-18=3405 ts. mag, 11720 ts. dun, 2018-19=1167 ts. mag, 131 ts. dun	2014-15=16596 ts. mag, 475500 ts. dun, 2015-16=15027 ts. mag,37815 ts. dun,2016-17=10343 ts. mag, 11620 ts. dun, 2017-18=3405 ts. mag, 11720 ts. dun, 2018-19=1167 ts. mag, 131 ts. dun	no comments.

3q General remarks - - Nil  
of inspecting  
officers on  
method of mining  
etc.

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Nil	mineral rejects and overburden are dumped separately.	Nil
4b	Location of topsoil, OB and mineral reject dumps	in non ore bearing area.	in non ore bearing area.	in non ore bearing area.
4c	Number of dumps within lease area and outside of lease area	6	6	6 dumps within present lease hold area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	located away from ultimate pit limits	located away from ultimate pit limits	Nil
4e	Number of active and alive dumps.	6	6	Nil
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	6	6	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	yes-150 m retaining wall	yes-150 m retaining wall	Nil
4i	Length of Retaining wall or garland drain all along dumps	100 m /year	1680 m in the present lease area	Nil
4j	Number of settling ponds	Nil	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	Nil

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Solid Waste Management - Backfilling:

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Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Nil	Nil	Nil
5b	Area under backfilling of mined out area	Nil	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	Nil
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).	Yes Annual report on PMCP submitted on time correctly.	submitted for the year 2017-2018.	Nil
6b	Area available for rehabilitation (ha) .	Nil	21.23 ha of plantation	Nil
6c	afforestation done (ha).	yes.	1.00 ha	Nil
6d	No. of saplings planted during the year	2000/year	2000 tree saplings in 2018-19	Nil
6e	Cumulative no .of plants	yes	58674 nos.	Nil
6f	Any other method of rehabilitation	No	Nil	Nil
6g	Cost incurred on watch and care during the year	yes	Rs.3,00,000/	Nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Nil	NA at present	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	NA at present	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Nil	NA at present	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	NA at present	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	NA at present	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	200 saplings	yes, 2000 saplings planted	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	Plantation	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	Plantation	Nil



6p	Compliance of environmental monitoring (core zone and buffer zone)	quartly required	season wise water and Air monitoring carried out in core and buffer zone.	Nil
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	Nil	gradewise stacking of minerals are carried out	Rom dispatched on spoil banks which is within lease area and ore sorting was done at spoil banks only.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	manual	manual	Nil
7c	Different grade of mineral sorted out at mines.	low silica ore , sio2<6.2 % ,high silica ore ,Sio2=6.2% to 11 % , Rejects Sio2 >11%	Low silica magnesite , high silica magnesite, Rejects magnesite, Dunite , Reject Dunite	Nil
7d	Any beneficiation process at mines .	Nil	Nil	magnesite beneficiation plant is situated at factory premises.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Nil

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Top soil removed was used for plantation purpose	Top soil removed was used for plantation purpose	Nil
8b	Concurrent use or storage of topsoil	NA	for Afforestation	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	spoil banks 9 nos in barrier zone approve by mp	maintained	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	cannot be done at present as mine pits area still active.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	land used for water reservoirs and plantation	land used for water reservoirs and plantation	presently afforestation and mine sumps for supplying drinking water to surrounding villages are provided and maintained
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	-	planted 51674 saplings upto 2016-17.	Nil
8g	Survival rate	-	40-50%	Nil
8h	Water sprinkling on roads to control airborne dust	two water tanks are engaged	carried out	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	satisfactory.

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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	MR& AR returns submitted	submitted in time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	given in AR	found as given present.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	given	as given	Nil
9d	Scrutiny of Annual return on afforestation	provided	as given	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	stock shown	shown in field	as given found as site.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	captive mine	production cost provided	Nil
9h	Scrutiny of Annual return on fixed assets	given	found at site.	Nil
9k	Scrutiny of Annual return on mining machineries	provided	as provided	Nil

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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

**Date :**

**(T.PHALTHURAJHEN)**

Indian Bureau of Mines