

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

**MCDR inspection REPORT**

**Chennai regional office**

**Mine file No :** TN/PBRLST-56.MDS

**Mine code :** 38TMN24056

- (i) Name of the Inspecting : **M017** ) **Matiul Islam**  
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Mr J Ravi & Mr K Elansurian  
Official with  
Designation
- (iv) Date of Inspection : 23/09/2023
- (v) Prev.inspection date : 28/09/2022

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **MANAKUDIYAN MINE(GO.76)**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : TAMIL NADU  
District : PERAMBALUR  
Village :  
Taluka :  
Post office :  
Pin Code :  
FAX No. : 04329-248303  
E-mail : minesalr@madrascements.co.:  
Phone : 04329-248305, 248306
- (f) Police Station : SENDURAI
- (g) First opening date : 30/12/2008
- (h) Weekly day of rest : SUN
2. Address for : AURAS CORPORATE CENTRE,  
correspondance : 5 TH FLOOR,98-A,DR RADHA KRISHNAN ROAD,  
MYLAPORE,CHENNAI-600004
3. (a) Lease Number : TMN1045
- (b) Lease area : 44.8
- (c) Period of lease : 50
- (d) Date of Expiry : 29/12/2058
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : MADRAS CEMENTS LIMITED  
 Auras Corporate Center Vth  
 Floor, 98 A Dr.Radha  
 Krishnan salai, Mylapore  
 CHENNAI CITY TAMIL NADU  
 Phone:044-28478666  
 FAX :044-28478676

Owner : P.R.RAMA SUBRAMANYA RAJA  
 AURAS CORPORATE CENTRE  
 VFLOOR,98A,RADAKRISHNAN R  
 MYLAPORE,CHENNAI CHENNAI  
 CITY TAMIL NADU  
 Phone: 044-8555815  
 FAX : 044-830248

Agent : ASHISH KUMAR SRIVASTAVA  
 ALATHIYUR CEMENT WORKS  
 CEMENT NAGAR POST ARIYALUR  
 DT. ARIYALUR TAMIL NADU  
 Phone:  
 FAX :

## Mining Engineer

Name : Mooli Madhu Mohan Reddy,Full Time  
 Qualification : B.TECH-MINING  
 Appointment/ : 09/04/2019  
 Termination date

## Geologist

Name : K.Elansuriyan,Full Time  
 Qualification : M Sc Geology  
 Appointment/ : 01/04/2019  
 Termination date

## Manager

Name : A.Santhosh  
 Qualification : B.E Mining  
 Appointment/ : 10/07/2015  
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	21/04/2006
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	06/06/2013
		Modif.approved Mining Scheme	09/07/2015
		MP review under 17(1) MCR 2016	06/11/2017
		MP modif under 17(3) MCR 2016	11/01/2021
		MP review under 17(1) MCR 2016	05/12/2022

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Lease already fully explored upto G1 level
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	-do-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	-do-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	-do-
1e	Balance reserve as on 01/04/20	4,220,456.00 tonnes	4,165,598.00 tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Geology & exploration of the lease were found satisfactory.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ML 1 - 4	ML 1 - 4	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil - 1, OB - 1, Mineral - 7	Topsoil - 1, OB - 1, Mineral - 7	Separate benches proposed and maintained
2c	Stripping ratio or ore to OB ratio	1 : 1.39	1 : 1.63	Violation pointed out for deviation
2d	Quantity of topsoil generation in m3	34,300 M3	26,985 M3	-do-
2e	Quantity of overburden generation in m3	7,24,164 cu.m.	5,95,456.11 cu.m.	-do-

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Violation pointed out for deviation in top soil & waste removal & stripping ratio.
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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit proposed	Single pit operated	As proposed
3b	Quantity of ROM mineral production proposed	9,77,000 tonnes	7,27,438 tonnes	Violation pointed out for deviation
3c	Recovery of sailable/usable mineral from ROM production	100 %	100 %	As proposed
3d	Quantity of mineral reject generation	Nil	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	NA	NA	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	NA	NA	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	Nil	Nil	Non-conventional mining using Surface Mining proposed & carried out

3k	Provision of mining machineries in mineral benches	Surface Miner-1, Other HEMM-4, Tipper-7, Water Tanker-1	Surface Miner-1, Other HEMM-4, Tipper-7, Water Tanker-1	As proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height - 5m, Width - 6m	Height - 5m, Width - 6m	Suitable for method of mining proposed
3m	Total area covered under excavation/pits	20.749 Ha	13.665 Ha	Within proposed limits
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.39	1 : 1.63	Violation pointed out for deviation
3o	Total area put in use under different heads at the end of year	Covered under current (O/C) Workings - 20.749 OB & Topsoil Dump-8.596 Reclaimed/Rehabilitated - 6.499 Occupied by plant, buildings, & roads - 0.963	Covered under current (O/C) Workings - 13.665 OB & Topsoil Dump- 5.736 Reclaimed/ Rehabilitated - 8.857 Occupied by plant, buildings, & roads - 0.627	Within proposed limits
3p	Production of ROM mineral during the last five year period as applicable	2018-19 9,87,000 2019-20 9,98,000 2020-21 9,92,000 2021-22 9,82,000 2022-23 9,77,000	2018-19 7,29,787 2019-20 9,32,424 2020-21 8,87,228 2021-22 9,42,173 2022-23 7,27,438	Within proposed limits
3q	General remarks of inspecting officers on method of mining etc.	-	-	Violation pointed out for deviation from ROM & Stripping ratio proposals.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping proposed	Separate dumping carried out	As proposed
4b	Location of topsoil, OB and mineral reject dumps	Top Soil-1 Grid 700 to 900 ML -1 - 3	Top Soil-1 Grid 700 to 900 ML -1 - 3	-do-
4c	Number of dumps within lease area and outside of lease area	Top soil - 1 OB - 1	Top soil - 1 OB - 1	Within lease
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	-do-
4e	Number of active and alive dumps.	2	2	1 - Top Soil 1 - OB
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.	Garland drain proposed	Garland drain maintained	Pre-existing garland drain maintained by desilting.
4i	Length of Retaining wall or garland drain all along dumps	Not specified	420 m	Pre-existing garland drain maintained by desilting.
4j	Number of settling ponds	Not specified	1	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory.

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Solid Waste Management - Backfilling:

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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.	Full extraction of mineral proposed from mined out area before starting backfilling	Full extraction of mineral done from mined out area before starting backfilling	As proposed
5b	Area under backfilling of mined out area	12,00,000 tonnes (Area not specified in approved document)	4.875 Ha	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	Yes	Utilised in afforestation
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Backfilling & reclamation activities were found satisfactory

#### Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Submitted	Along with AR	Submitted in time
6b	Area available for rehabilitation (ha) .	12,00,000 tonnes proposed to be backfilled (Area not specified in approved document)	4.875 Ha	Commensurate with quantitative proposal in approved document.
6c	afforestation done (ha).	0.8 Ha	0.08 Ha	Violation pointed out for deviation from afforestation proposals.
6d	No. of saplings planted during the year	2,000 nos	200 nos	Violation pointed out for deviation from afforestation proposals.

6e	Cumulative no .of plants	28,700 nos proposed	31,777 nos planted	Since inception
6f	Any other method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch and care during the year	Not specified	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	12,00,000 tonnes proposed to be backfilled (Area not specified in approved document)	4.875 Ha	Commensurate with quantitative proposal in approved document.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	12,00,000 tonnes proposed to be backfilled (Area not specified in approved document)	4.875 Ha	Commensurate with quantitative proposal in approved document.
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)	NA	NA	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodic monitoring proposed	Periodic monitoring carried out	All parameters within norms
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	Violation pointed out for deviation from afforestation proposals.

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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 proposed	Grade wise sorting carried out	As proposed
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised	Mechanised	-do-
7c	Different grade of mineral sorted out at mines.	High Grade, Low grade, Very low grade, Very very low grade	High Grade, Low grade, Very low grade, Very very low grade	-do-
7d	Any beneficiation process at mines	Nil	Nil	Nil

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Entire ROM is consumed. No issues were observed with mineral conservation. Beneficiation facilities exist nearby lease.
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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Carried out	As proposed
8b	Concurrent use or storage of topsoil	No proposal	Nil	Top soil stored for future use in afforestation over mined out benches.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps proposed for OB & TS	Separate dumps maintained for OB & TS	As proposed
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed	OB backfilled into mined out benches	-do-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Backfilling being carried out	-do-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	28,700 nos saplings proposed to be planted cumulatively	31,777 nos saplings planted cumulatively	Since inception
8g	Survival rate	Not specified	85%	Nil

8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out	Water tanker deployed for water sprinkling
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	The aesthetic beauty in and around mines area was found satisfactory.

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Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Given	Submitted in time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	7. Manager : T.Sureshkumar 8. Mining Engineer in charge: M.Sureshbabu 9. Geologist in charge : K.Elansurian	Given in Part I, Sl 7-9	Nil

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(ii) Covered under current (O-C) Workings 0.000 13.665 13.665 (iii) Reclaimed-rehabilitated 0.000 8.857 8.857 (iv) Used for waste disposal 0.000 5.736 5.736 (v) Occupied by plant, buildings, residential, welfare buildings and roads 0.000 0.627 0.627 (vi) Used for any other purpose (specify) Green belt and Remaining area 0.000 15.920 15.920	Given in Part I, Sl 12	Nil
9d	Scrutiny of Annual return on afforestation	Description Within lease area Outside lease area i) Number of trees planted during the year 2000 ii) Survival rate in percentage 85 0 iii) Total no. of trees at the end of the year 31777 2500	Given in Part V, Sl 5	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Given in Part V, Sl 3	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Category Opening stock Production Closing stock (a) Open Cast workings 727438.420 0.000 (b) Underground Workings 0.000 0.000 0.000 (c) Dump workings 0.000 0.000	Given in Part VI, Sl 1 & 3(ii)	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine Price & Cost of Production - Rs 301.74/- per tonne	Given in Part VI, Sl 3(ii) & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Given combinedly with another lease with code 38TMN38006	Nil	Nil

9k	Scrutiny of Annual return on mining machineries	Type of machinery Capacity of each type of machinery Unit (in which capacity is reported) No. of machinery Electrical Non-electrical (specify) Used in opencast underground (specify) SURFACE MINER 1200.000 HP 1 Non Electrical Opencast TIPPER 12.000 CUM 7 Non Electrical Opencast WATER TANKER 10000.000 LITRE 1 Non Electrical Opencast BACK HOE 0.600 CUM 1 Non Electrical Opencast OTHER HEM MACHINERY 2.000 1 Non Electrical Opencast OTHER HEM MACHINERY 250.000 2 Non Electrical Opencast	Given in Part V, Sl 6	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 :

(Matiul Islam)

Indian Bureau of Mines