

**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 : **T003** ) **S.THIRUNAVUKKARASU**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri. J.Ravi Sr.Manager Geology & A.Santhosh Asst.Ge  
Official with  
Designation
- (iv) Date of Inspection : 17/08/2019
- (v) Prev.inspection date : 26/09/2018

**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 : 20
- (d) Date of Expiry : 29/11/2028
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 : S SHANMUGAM  
 Madras Cements Ltd, TALUKA-  
 Sendurai ARIYALUR TAMIL  
 NADU  
 Phone: 04329-248305248306  
 FAX : 04329-248303

## Geologist

Name : J.Ravi,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

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	Not applicable	Mine fully explored G-1 Level, Total 42 Exploration borehole. Drilled with total meterage of 2380.50 m.
1b	Exploration over lease area for geological axis 1 or 2	NIL	NA	Mine fully explored G-1 Level
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	NA	Mine fully explored G-1 Level
1e	Balance reserve as on 01/04/20	---	81,17,141	NIL
1f	General remarks of inspecting officers on geology, exploration etc	---	----	Geology, exploration of the mine found satisfactory

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	ML 2-6 0 to 500	ML 2-6 0 to 500	As per proposal
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil - 1, OB - 2, Mineral - 3	Topsoil - 1, OB - 2, Mineral - 3	NIL
2c	Stripping ratio or ore to OB ratio	1 : 0.71	1 : 0.52	Proposed production qty not archived for due to quality problem
2d	Quantity of topsoil generation in m3	1,05,600	19,859	NIL

2e	Quantity of overburden generation in m3	2,83,000	1,92,941	with in the limite
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	---	---	development of pit is found satisfactory

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one	one	As per proposal
3b	Quantity of ROM mineral production proposed	9,87,000	6,22,737	Total ROM is Used
3c	Recovery of sailable/usable mineral from ROM production	9,87,000	6,22,737	NIL
3d	Quantity of mineral reject generation	NIL	NIL	No Mined Reject Generation
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NIL	NIL
3f	Quantity of sub grade mineral generation.	NIL	NIL	No sub grade mineral
3g	Grade of sub grade mineral generation	NIL	NIL	No Subgrade Mineral Generation
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NA	Beneficiation Study is Not Required

3j	Provision of drilling and blasting in mineral benches	Surface Minor is Deployed	Surface Minor is Deployed	NIL
3k	Provision of mining machineries in mineral benches	Surface Miner-1, Dumper-2, Shovel-2, Tipper-8, Water Tanker-1	Surface Miner-1, Dumper-2, Shovel-2, Tipper-8, Water Tanker-1	as per the proposal
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	NIL
3m	Total area covered under excavation/pits	14.725	14.725	As per proposal
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.71	1 : 0.52	As per Proposed production qty not archived for due to quality problem.
3o	Total area put in use under different heads at the end of year	Minedout land - 14.725 Ha Road & Infra - 0.50 Ha Greenbelt - 7.610 Ha	Minedout land - 14.725 Ha Road & Infra - 0.50 Ha Greenbelt - 7.610 Ha	As per proposal
3p	Production of ROM mineral during the last five year period as applicable	2014-15 6,30,000 2015-16 9,98,371 2016-17 9,98,205 2017-18 9,90,508 2018-19 9,87,000 2019-20 9,98,000	2014-15 98,901 2015-16 1,04,605 2016-17 67,152 2017-18 109328 2018-19 7,29,787 2019-20 3,67,733 Up to July2019	Aer the proposal
3q	General remarks of inspecting officers on method of mining etc.	-----	----	method of mining is found satisfactory

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	separately top soil dump proposed	Topsoil are dumped separately	Separately stacked
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	NIL
4c	Number of dumps within lease area and outside of lease area	Top soil - 1 OB - 2	Top soil - 1 OB - 2	Dumped within lease area as per proposal
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	700'-900' ML-02 to 04 RL - 67	700'-900' ML-02 to 04 RL - 67	As per proposal
4e	Number of active and alive dumps.	2	2	1 - Top Soil 1 - OB
4f	Number of dead dumps.	1	1	NIL
4g	Number of dumps established.	NIL	NIL	Dumps not Stabilished
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	all along dump	NIL
4i	Length of Retaining wall or garland drain all along dumps	2000 x2x 2.5 mtr 420 x 2 x 2.5 mtr	2000 x2x 2.5 mtr 420 x 2 x 2.5 mtr	garland drain all along dump
4j	Number of settling ponds	1	1	Settling pond construction cost Rs. 15,000/-.
4k	Specific comments of inspecting officer on waste dump management	----	-----	waste dump management is 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.	NIL	NA	Minerla not yet fully mined
5b	Area under backfilling of mined out area	NIL	NA	Not at the stage
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NA	Top soil stock for future use of afforestation and reclamation.
5d	Total area fully reclaimed and rehabilitated	NIL	NA	No backfilling proposal during the year
5e	General remarks of inspecting officers on backfilling and reclamation etc.	----	---	backfilling, reclamation doesnot arise at the stage since mineral is not fully mined out

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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	Yes	Submitted in time
6b	Area available for rehabilitation (ha) .	NIL	NA	Not at the stage
6c	afforestation done (ha).	0.30 hect	1.60 Hect	NIL
6d	No. of saplings planted during the year	750	4,000	Plantation carried out more than the proposal
6e	Cumulative no .of plants	18,700	22,700	NIL
6f	Any other method of rehabilitation	NIL	NA	No other method Rehabilitation
6g	Cost incurred on watch and care during the year	Rs.56,250	Rs.3,00,000	NIL

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	NA	nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NA	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NIL	NA	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NA	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	NO Rehabilitation of waste land within lease
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NA	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)	Periodicaly monitored	Quartely environment monitoring data submitted,all the parameters are under permissible limite	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	----	---	PMCP compliance & progressive closure operations is founs satisfactory.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	9,87,000	6,22,737 dispatch	No mieral sorting at mine pit,Entire ROM is beingtransported.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NIL	NA	No Subgrade Mineral
7c	Different grade of mineral sorted out at mines.	NIL	NA	All ROM is used, no diffrent grade
7d	Any beneficiation process at mines	NIL	NA	No other Beneficiation process on mine
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	---	----	Mineral conservation & beneficiation issues is found satisfactory

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yea proposed,700'-900' ML-01 to 03	700'-900' ML-01 to 03	As per the proposal

8b	Concurrent use or storage of topsoil	Stored	NA	Top soil storage for future use
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	700'-900' ML-02 to 04	700'-900' ML-02 to 04	As per proposal
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	The OB & IB are stocked at dump	The OB & IB are stocked at dump	OB stocked for future backfilling.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	NIL	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	15,800 Nos	22,700 Nos	NIL
8g	Survival rate	80 %	80 %	NIL
8h	Water sprinkling on roads to control airborne dust	Proposed	yes water taker deployed for water sprinkling on road to control airborne dust.	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	----	----	aesthetic beauty in and around mines area is found 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	submitted	submitted in time

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9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Mining Engineer- A. Santhosh	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	G-1 Provided in Annual Return	As per Proposal	Given in Part - V. Sl no.4.4
9d	Scrutiny of Annual return on afforestation	Given	As per Proposal	Given in Part - V. Sl no.4.2
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	No mineral reject generation	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	9,87,000 tonns of ROM production proposed for 2018-19	7,29,787 tonns of Production reported during 2018-19	nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Provided in Annual Return	Production Cost Rs. 277.05/-	Given in Part - VII
9h	Scrutiny of Annual return on fixed assets	Given in completed statement	Given in Part - V Sec - 5	NIL
9k	Scrutiny of Annual return on mining machineries	Surface Miner-1, Dumper-2, Shovel-2, Tipper-8, Water Tanker-1	Surface Miner-1, Dumper-2, Shovel-2, Tipper-8, Water Tanker-1	Found as per the return submitted.

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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 :**

(S. THIRUNAVUKKARASU)

Indian Bureau of Mines