

**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 : S011 ) SALIL SANDIP KUJUR  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : MR.RAVI-GEOLOGIST, MINES MANAGER  
Official with  
Designation
- (iv) Date of Inspection : 26-SEP-18
- (v) Prev.inspection date : 19-AUG-17

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : MANAKUDIYAN MINE(GO.76)
- (b) **Registration NO.** :
- (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-DEC-08
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : AURAS CORPORATE CENTRE,  
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** : 23-NOV-28
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

## Mining Engineer

Name : P.PRABHU,Full Time  
 Qualification : B.TECH  
 Appointment/ :  
 Termination date

## Geologist

Name : T.RAMAN,Full Time  
 Qualification : M.Sc- geology  
 Appointment/ :  
 Termination date

## Manager

Name : D.IRAWATHI  
 Qualification : DIP.MINING.FCMMC  
 Appointment/ : 15-OCT-18  
 Termination date

|                               |   |                                |           |
|-------------------------------|---|--------------------------------|-----------|
| 6. Date of approval of Mining | : | Fresh under rule 22 MCR1960    | 21-APR-06 |
| Plan/Scheme of Mining         |   | Mining Scheme rule 12 MCDR1988 | 06-JUN-13 |
|                               |   | Modif.approved Mining Scheme   | 09-JUL-15 |
|                               |   | MP review under 17(1) MCR 2016 | 06-NOV-17 |

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

## Exploration :

| Sl.No. | Item  | Proposals | Actual work | Remarks  |
|--------|---|-----------|-------------|--|
| 1a     | Backlog of previous year  | nil       | nil         | Exploration completed  |
| 1b     | Exploration over lease area for geological axis 1 or 2              | G1        | G1          | Exploration completed for proved reserves  |
| 1c     | Exploration Agencies and Expenditure in lakh rupees during the year | NIL       | 13,03,900   | Due to quality and existance of Limestone variation in the mine, LESSEE HAS drilled addional holes at 100 meter interval. Form-J Submitted on 26.08.2016 |
| 1d     | Balance area to be explored to bring Geological axis in 1 or 2      | NIL       | NIL         | not required as the area has been already explored   |
| 1e     | Balance reserve as on 01/04/20                                      | -         | 89,56,257   | NA   |
| 1f     | General remarks of inspecting officers on geology, exploration etc  | -         | -           | SATISFACTORY   |

## Development :

| Sl.No. | Item   | Propasals | Actual work | Remarks  |
|--------|--|-----------|-------------|--|
| 2a     | Location of development w.r.t.lease area                       | ML 2 - 6  | ML 2 - 6    | As per proposal                                    |
| 2b     | Separate benches in topsoil, overburden and minerals (Rule 15) | YES       | YES         | Formed as per proposal                             |
| 2c     | Stripping ratio or ore to OB ratio                             | 1 : 0.93  | 1 : 0       | no ob removed due to E.C requirement for expansion |
| 2d     | Quantity of topsoil generation in m3                           | 98,787    | NIL         | no ob removed due to E.C requirement for expansion |

|    |   |           |     |  |
|----|---|-----------|-----|--|
| 2e | Quantity of overburden generation in m3   | 152628 MT | NIL | no ob removed due to E.C requirement for expension |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | -         | -   | SATISFACTORY                                       |

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Exploitation:

| Sl.No. | Item  | Propasals  | Actual work | Remarks  |
|--------|---|------------|-------------|--|
| 3a     | Number of pit proposed for production   | 1          | 1           | As per proposal                                      |
| 3b     | Quantity of ROM mineral production proposed   | 998205     | 67152       | less production due to E.C requirement for expension |
| 3c     | Recovery of sailable/usable mineral from ROM production   | 998205MT   | 67152MT     | less production due to E.C requirement for expension |
| 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.   | NA         | NA          | NIL  |
| 3g     | Grade of sub grade mineral generation   | NA         | NA          | NIL  |
| 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        | NIL         | NIL  |

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|    |  |  |  |   |
|----|--|--|--|---|
| 3j | Provision of drilling and blasting in mineral benches  | NIL  | NIL  | NIL   |
| 3k | Provision of mining machineries in mineral benches   | YES  | YES  | Surface Minor operation is in practice for production.  |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | YES  | YES  | Benches suitable for the method of mining   |
| 3m | Total area covered under excavation/pits   | 14.725   | 14.725   | NIL, AS PER PROPOSAL  |
| 3n | Ore to OB ratio for the pit/mine during the year.  | 1:0.93   | 1:0  | NO OB DUE TO LESS PRODUCTION AND WANT OF E.C EXPENSION.   |
| 3o | Total area put in use under different heads at the end of year                                       | ROADS=2.5HA<br>MINING14.275HA<br>GREEN<br>BELT=0.75HA<br>OTHERS0.05HA  | ROADS=2.5HA<br>MINING14.275HA<br>GREEN BELT=0.75HA<br>OTHERS=0.05HA  | AS PROPOSED   |
| 3p | Production of ROM mineral during the last five year period as applicable                             | 2017-18<br>990508<br>2016-17<br>9,98,205<br>2015-16<br>9,98,371<br>2014-15<br>6,34,000<br>2013-14<br>6,50,000<br>2012-13<br>1,05,000 | 2017-18<br>103610<br>2016-17<br>67,152<br>2015-16<br>1,04,605<br>2014-15<br>98,901<br>2013-14<br>93,878<br>2012-13<br>38,006 | they have obtained EC for 10 lakhs tons. and applied for CTE & CTO to TNPCB. Hence the targeted production has not been achieved. |
| 3q | General remarks of inspecting officers on method of mining etc.                                      | -  | -  | 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)   | YES       | YES       | Separately stacked                         |
| 4b | Location of topsoil, OB and mineral reject dumps                   | 400 - 700 | 400 - 700 | Location in terms of grid as per proposal. |
| 4c | Number of dumps within lease area and outside of lease area        | 1         | 1         | Dumped within lease area as per proposal   |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16)              | RL-63     | NIL       | AS PER PROPOSAL                            |
| 4e | Number of active and alive dumps.                                  | ALIVE-1   | ALIVE-1   | 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       | YES       | 200X2X2.5 M3                               |
| 4i | Length of Retaining wall or garland drain all along dumps          | YES       | YES       | AS PER PROPOSAL                            |
| 4j | Number of settling ponds   | 1         | 1         | AS PER PROPOSAL                            |
| 4k | Specific comments of inspecting officer on waste dump management   | -         | -         | SATISFACTORY                               |

#### Solid Waste Management - Backfilling:

| Sl.No. | Item  | Propasals | Actual work | Remarks          |
|--------|---|-----------|-------------|------------------|
| 5a     | Status of part or full extraction of mineral from mined out area before starting backfilling. | YES       | YES         | FUULL EXTRACTION |

|    |   |     |     |                 |
|----|---|-----|-----|-----------------|
| 5b | Area under backfilling of mined out area  | NIL | NIL | AS PER PROPOSAL |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | YES | YES | NIL             |
| 5d | Total area fully reclaimed and rehabilitated  | NIL | NIL | NIL             |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc.                | -   | -   | SATISFACTORY    |

#### 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 |
| 6b     | Area available for rehabilitation (ha) .                                     | NIL       | NIL         | NIL       |
| 6c     | afforestation done (ha).   | 0.25HA    | 0.25HA      | NA        |
| 6d     | No. of saplings planted during the year                                      | 500       | 500         | NA        |
| 6e     | Cumulative no .of plants   | -         | 15800       | NA        |
| 6f     | Any other method of rehabilitation   | NA        | NA          | NIL       |
| 6g     | Cost incurred on watch and care during the year                              | 37500     | 37500       | NA        |

|    |  |    |    |                        |
|----|--|----|----|------------------------|
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D | NA | NA | NIL                    |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings          | NA | NA | NIL                    |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area       | NA | NA | NIL                    |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir  | NA | NA | NIL, NO AREA AVAILABLE |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.                   | NA | A  | NIL, NO AREA AVAILABLE |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation                                   | NA | NA | NIL, NO AREA AVAILABLE |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)                       | NA | NA | NIL, NO AREA AVAILABLE |
| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation                      | NA | NA | NIL, NO AREA AVAILABLE |



|    |   |     |   |              |
|----|---|-----|---|--------------|
| 6p | Compliance of environmental monitoring (core zone and buffer zone)                                | YES | YES, QUARTERLY MONITORING IS BEING DONE | SATISFACTORY |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | -   | -                                       | SATISFACTORY |

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Mineral Conservation:

| Sl.No. | Item   | Propasals | Actual work | Remarks      |
|--------|--|-----------|-------------|--------------|
| 7a     | ROM Mineral dispatch or grade-wise sorting within lease area                           | 9,98,205  | 67,152      | NIL          |
| 7b     | Method of grade-wise mineral sorting i.e. manual or mechanical.                        | NIL       | NIL         | NIL          |
| 7c     | Different grade of mineral sorted out at mines.  | NIL       | NIL         | NIL          |
| 7d     | Any beneficiation process at mines   | NIL       | NIL         | NIL          |
| 7e     | General remarks of inspecting officer on Mineral conservation and beneficiation issues | -         | -           | SATISFACTORY |

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Environment:

| Sl.No. | Item  | Propasals | Actual work | Remarks                        |
|--------|---|-----------|-------------|--------------------------------|
| 8a     | Separate removal and utilization of topsoil (Rule 32) | YES       | YES         | Top soil is separately removed |

|    |   |        |                              |   |
|----|---|--------|------------------------------|---|
| 8b | Concurrent use or storage of topsoil  | YES    | YES                          | Both are practiced                                  |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33)                                      | YES    | YES                          | NIL   |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use           | YES    | YES                          | OB is being used for reclamation of mined out area. |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | YES    | YES                          | Reclamation is being practiced in a phased manner   |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41)                    | 15,300 | 500                          | NA  |
| 8g | Survival rate   | 90%    | 80%                          | `NIL  |
| 8h | Water sprinkling on roads to control airborne dust  | YES    | YES WATER SPRINKLING IS 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 | YES       | YES         | Submitted in time |

|    |   |          |              |                |
|----|---|----------|--------------|----------------|
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager           | PROVIDED | PROVIDED     | NA             |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | GIVEN    | GIVEN        | NIL            |
| 9d | Scrutiny of Annual return on afforestation  | GIVEN    | GIVEN        | NIL            |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity)                   | PROVIDED | PROVIDED     | NIL            |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore                                      | GIVEN    | GIVEN        | NIL            |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost                   | PROVIDED | CAPTIVE MINE | NO SALE OF ORE |
| 9h | Scrutiny of Annual return on fixed assets   | PROVIDED | PROVIDED     | NIL            |
| 9k | Scrutiny of Annual return on mining machineries   | GIVEN    | GIVEN        | 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 :****(SALIL SANDIP KUJUR)**

Indian Bureau of Mines