

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

**MCDR inspection REPORT**

**Chennai regional office**

**Mine file No :** TN/TNL/LST-38.MDS

**Mine code :** 38TMN29002

- (i) Name of the Inspecting : S011 ) SALIL SANDIP KUJUR  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : MR. JAGDESH GM-MINES  
Official with  
Designation
- (iv) Date of Inspection : 27-FEB-20
- (v) Prev.inspection date : 26-AUG-19

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : MELVENKATESWARAPURAM
- (b) **Registration NO.** : IBM/638/2011
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : TAMIL NADU
- District : THOOTHUKUDI (TUTICORIN)
- Village : SENNAYAMPATTI
- Taluka : VILATHIKULAM
- Post office : PUDUR
- Pin Code :
- FAX No. : 04562 - 256268
- E-mail : adminrn@madrascements.co.in
- Phone : 04562 - 256201, 202 & 203
- (f) **Police Station** :
- (g) **First opening date** : 27-JUN-85
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : MADRAS CEMENTS LIMITED  
RAMASAMYRAJA NAGAR  
VIRUDUNAGAR - 626204
3. (a) **Lease Number** : TMN1199
- (b) **Lease area** : 103.54
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 28-JUL-03
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.VENKETRAMA RAJA  
 98-A,AURAS CORPORATE CENTRE  
 RADHAKRISHNAN  
 SALAI,MYLAPORE CHENNAI  
 CHENNAI CITY TAMIL NADU  
 Phone:  
 FAX :

Agent : S. RAMALINGAM  
 Executive Director(Mines)  
 NLC Ltd.,Administrative  
 Office, Block-26, Neyveli-3  
 CUDDALORE TAMIL NADU  
 Phone: 04142-228376  
 FAX : 04142-228376

## Mining Engineer

Name : R.DINESH,Full Time  
 Qualification : B.E., MINING  
 Appointment/ : 23-JUN-15  
 Termination date

## Geologist

Name : R.RENGARAJAN,Full Time  
 Qualification : MSC(GEO)  
 Appointment/ : 09-JUN-17  
 Termination date

## Geologist

Name : C.KARUNAKARAN,Full Time  
 Qualification : MSc GEOLOGY  
 Appointment/ : 16-AUG-19  
 Termination date

## Manager

Name : R.DINESH  
 Qualification : BE(MINING)  
 Appointment/ : 23-JUN-15  
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	25-SEP-90
Plan/Scheme of Mining		Renewal under rule 22 MCR1960	18-FEB-03
		Mining Scheme rule 12 MCDR1988	26-SEP-08
		Mining Scheme rule 12 MCDR1988	06-JUN-13
		MP modif under MCR 1960	18-MAY-15
		MP review under 17(1) MCR 2016	03-NOV-17

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NIL, NO PROPOSAL
1b	Exploration over lease area for geological axis 1 or 2	41.72 Ha	41.72 Ha	Fully Explored Cumulative drilling of DDH(Core Holes)- 2998.15 mts & DTH- 1942.50 mts since the deposit is metamorphic and vertically move downward with 70-80 degree inclination. hence the footwall side no further drilling is required.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Entire area already explored by TRCL & GIEM	Sufficient exploration was already carried out by the Lessee.
1d	Balance area to be explored to bring Geological axis in 1 or 2	nil	nil	Fully Explored
1e	Balance reserve as on 01/04/20	7.01 Mil.Tons	7.01 Mil.Tons	nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	satisfactory

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	ML - 16.0 to 21.0	ML - 16.0 to 21.0	Though development work is carried out in the area proposed, the excavation is lacking behind the proposal quantity. Less Production due to the delay in obtaining of EC for expansion of Limestone production
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Western Block-Benches OB-6, Limestone-1	Western Block-Benches OB-6, Limestone-1 WIDTH=8 MTR HEIGHT=8 MTR	Separate benches are maintained in OB and Mineral.
2c	Stripping ratio or ore to OB ratio	1:1.71	1:1.69	Almost comensurating as per proposal.
2d	Quantity of topsoil generation in m3	13050	11075	Less Production due to the delay in obtaining of EC for expansion of Limestone production
2e	Quantity of overburden generation in m3	420130	59715	Less Production due to the delay in obtaining of EC for expansion of Limestone production
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	1Pit (Western Block)	As per Proposal	NIL

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3b	Quantity of ROM mineral production proposed	714250 Tonnes of ROM	100827 Tonnes	Less Production due to the delay in obtaining of EC and Consent to Operate from TNPCB for expansion of Limestone production
3c	Recovery of sailable/usable mineral from ROM production	70 %	70 %	NIL
3d	Quantity of mineral reject generation	NIL	NIL	ROM Limestone transported to Common Crushing Plant at Pandalgudi. No beneficiation activities involved within MLB
3e	Grade of mineral rejects generation and threshold value declared.	<35 CaO	<35 CaO	NIL
3f	Quantity of sub grade mineral generation.	NIL	NA	NIL
3g	Grade of sub grade mineral generation	NIL	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	NA	NIL
3j	Provision of drilling and blasting in mineral benches	YES. Deep hole drilling and blasting is proposed.	Deep hole drilling and blasting is practiced . Holes are drilled upto 10 m depth with a spacing of 3.5-4 m .	Controlled blasting by using STD, NTD & Electronic Detonators are being used as recommended by study Conducted through Anna University

3k	Provision of mining machineries in mineral benches	Yes	Yes SHOVEL=2 DUMPERS=10 DRILL=2 WT=2 PUMP=2 ARE USED.	AS PER PLAN
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	9 m height benches proposed both in Ore and OB.	9 m height benches proposed both in Ore and OB ARE maintained	Bench height and width are found suitable for mechanized method and machinery deployed.
3m	Total area covered under excavation/pits	22.05Ha	22.05Ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1:1.71	1:1.69	WITHIN LIMIT,As per Proposal
3o	Total area put in use under different heads at the end of year	35.21 Ha	Area under mining 22.05 Storage of top soil 1.03 Waste Dump site 4.58 Mineral Storage Nil Infrastructure(Workshop / Building) 0.05 Roads 0.20 Railways Nil Tailing pond Nil Effluent treatment plant Nil Mineral Separation plant Nil Town ship area Nil Others (Green Belt Garland drains, settling Tank) 7.30 GRAND TOTAL(Used) 35.21 Unused area 63.41 Grand Total 98.62	AS PER PLAN
3p	Production of ROM mineral during the last five year period as applicable	2014- 15=7,14,286 2015- 16=7,19,625 2016- 17=7,26,950 2017- 18=7,26,950 2018- 19=7,14,250 2019- 20=7,14,544	2014-15=92,300 2015-16=99,782 2016-17=1,00,727 2017-18=1,00,827 2018-19=1,00,462 2019-20=3,54,335 (upto Jan'2020)	Production proposals are not achieved due to the delay in obtaining Environmental Clearance from MoEF for the expanded production capacity.

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

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Existing Dump to be used for rejects dumping/ob dumping as no topsoil is available.	Existing Dump is used for rejects dumping/ob dumping as no topsoil is available.	as per proposal
4b	Location of topsoil, OB and mineral reject dumps	OB Dump ML-7 to ML-10 Location: N 90 17' 43" E 780 10' 30"	OB Dump ML-7 to ML-10 Location: N 90 17' 43" E 780 10' 30"	Nil
4c	Number of dumps within lease area and outside of lease area	6 Nos	6 Nos	6 No.of old dumps are located within the ML
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside Pit Limit	Outside Pit Limit	nil
4e	Number of active and alive dumps.	2	2	nil
4f	Number of dead dumps.	3	3	nil
4g	Number of dumps established.	1	1	nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Inactive Sides of Dump area covered by Garland Drain & earthen bund.	Inactive Sides of Dump area covered by Garland Drain & earthen bund.	Dimension of Garland Drain. 1200 m x 2 m x 2 m
4i	Length of Retaining wall or garland drain all along dumps	garland drain to be provided	Inactive Sides of the Dump area covered by Garland Drain with earthen bunds. 1200 m x 2 m x 2 m	nil

4j	Number of settling ponds	2 Nos	3 nos	Settling Pond Dimension 1 - 90 m x 50 m x 3 m 2 - 60 m x 40 m x 3 m 2 - 60 m x 40 m x 3 m inside the lease.
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.	nil	nil	nil
5b	Area under backfilling of mined out area	na	All Benches are Still Active. Backfilling not at this stage.	All Benches are Still Active. Backfilling not at this stage.
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.	-	-	satisfactory

#### Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Periodically Submitted	Periodically Submitted in time	nil
6b	Area available for rehabilitation (ha) .	nil	na	nil
6c	afforestation done (ha).	na	nil	nil
6d	No. of saplings planted during the year	nil	na	nil as no area is fully reclaimed.
6e	Cumulative no .of plants	nil	nil	nil
6f	Any other method of rehabilitation	na	na	nil
6g	Cost incurred on watch and care during the year	na	na	nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	no void is available for backfilling	no void is available for backfilling	nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	no void is available for backfilling	nil	nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	no area is available for backfilling	no area is available for backfilling	nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	mineral is completely mined out	no area available for making water reservoir	nil

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	na	nil	nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1000 Nos	2000 Nos	Location of the Afforested area as follows Lat: N 9* 19' 04'' Long: E78* 08' 53''
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.00 Ha	1.7 ha	nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation with 1000 Nos of Neem, Pungai & Vagai Sapplings.	Plantation with 2000 Nos of Neem, Pungai & Vagai Sapplings.	So far 16600 No. of Saplings Planted by covering 13.86 Ha upto Sep'2019.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodically Monitored	Quarterly environment monitoring data submitted. All the parameters are under permissible limit.	Environmental Monitoring Report Periodically submitted .
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	na	nil	No mineral sorting at pit level. Entire ROM is being transported to beneficiation plant located outside the ML area at Pandalgudi.

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	na	nil	nil
7c	Different grade of mineral sorted out at mines.	na	nil	No segregation of mineral at mine head.
7d	Any beneficiation process at mines .	na	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)	13050	11075	Top Soil is being Stacked Separately and utilized for garland plantation and plantation on waste dump.
8b	Concurrent use or storage of topsoil	nil	na	nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps proposed for OB and waste.	As per Proposal	nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	nil	No Proposal	Mine is in advancing stage.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	nil	nil	No proposal during the plan period.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1000 Nos	2000 Nos	So far 16600 No. of Saplings Planted by covering 13.86 Ha upto Sep'2019.
8g	Survival rate	-	80%	Survival Rate is 80%
8h	Water sprinkling on roads to control airborne dust	10 KL Water Tanker used for water sprinkling on haul roads and transit points	Water tanker deployed for the purpose as proposed.	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	SUBMITTED	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details furnished in Annual Return 2018-2019.	Shri. R.Dinesh (Mining Engineer) & Shri. C.Karunakaran (Geologist)	Shri.C.Karunakaran (Geologist) appointed on 16-08-2019

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	22.050 Ha. Under current workings, 5.610 Ha. for waste diposal,0.250 Ha for office etc,70.71 Ha virgin and green belt area as per AR 2018-19.	DETAILS ARE AS GIVEN	NIL
9d	Scrutiny of Annual return on afforestation	2000 No of Plants as per Annual Return-2018-19	Plantation covered in 1.70 Ha	Sofar 16600 No. of Saplings Planted by covering 13.86 Ha upto Sep'2019.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject generated during the period under review.	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	100461.960 tonnes of ROM production reported as per 2018-19	Production reported during 2019-20 (upto Jan'2020) 3,54,335 tonnes.	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Details furnished.	It is captive mine, Ex.mine price and cost of production checked and found correct.	NIL
9h	Scrutiny of Annual return on fixed assets	Rs.1363160 shown as fixed asset value in AR 2018-19.	The details given are reasonable. No additions in year 2018-19.	NIL
9k	Scrutiny of Annual return on mining machineries	FRONT END LOADER 3.200 CUM- 1, BACK HOE 0.900 CUM - 1, TIPPER 12.000 CUM -4 BLAST HOLE DRILL 115 MM - 1, AIR COMPRESSOR 400 CUM/min-1	Deployment of machinery found.	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 :**

(SALIL SANDIP KUJUR)

Indian Bureau of Mines