

**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 : **T003**) **S.THIRUNAVUKKARASU**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Sri.L.VENKATARAMASUBRAMANIAN, DGM(GEO)
Official with
Designation
- (iv) Date of Inspection : 26/08/2019
- (v) Prev.inspection date : 11/03/2019

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** : 27/06/1985
- (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** : 28/07/2003
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/ : 23/06/2015
Termination date

Geologist

Name : R.RENGARAJAN,Full Time
Qualification : MSC(GEO)
Appointment/ : 09/06/2017
Termination date

Geologist

Name : C.KARUNAKARAN,Full Time
Qualification : MSc GEOLOGY
Appointment/ : 16/08/2019
Termination date

Manager

Name : R.DINESH
Qualification : BE(MINING)
Appointment/ : 23/06/2015
Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 25/09/1990
Renewal under rule 22 MCR1960 18/02/2003
Mining Scheme rule 12 MCDR1988 26/09/2008
Mining Scheme rule 12 MCDR1988 06/06/2013
MP modif under MCR 1960 18/05/2015
MP review under 17(1) MCR 2016 03/11/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NA	No backlog in Exploration.
1b	Exploration over lease area for geological axis 1 or 2	41.72 Ha	41.72 Ha	Fully Explored Cumulative drilling of DDH-2998.15 mts & DTH-1942.50
1c	Exploration Agencies and Expenditure in lakh rupees during the year	nil	Entire area already explored by TRCL & GIEM	nil
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	---	--	The geology, exploration of the mine is found good

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ML - 16.0 to 21.0	ML - 16.0 to 21.0	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed	Yes. As per the Proposal	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 development work due to the delay in obtaining Consent to Operate from TNPCB for the expanded production of limestone

2e	Quantity of overburden generation in m3	420130	59715	Less development work due to the delay in obtaining Consent to Operate from TNPCB for the expanded production of limestone
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	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	one (Western Pit)	one (Western Pit)	As per the Proposal
3b	Quantity of ROM mineral production proposed	714250 Tonnes	100827 Tonnes	Production quantity is restricted within the consented quantity of 1,01,500 tonnes per annum. CTO for production expansion is in progress
3c	Recovery of sailable/usable mineral from ROM production	70 %	70 %	NIL
3d	Quantity of mineral reject generation	NIL	NA	No reject generation
3e	Grade of mineral rejects generation and threshold value declared.	<35 CaO	<35 CaO	NIL
3f	Quantity of sub grade mineral generation.	NIL	Not applicable	No sub-grade mineral generation.
3g	Grade of sub grade mineral generation	NIL	Not applicable	No sub-grade 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	Not applicable	NIL
3j	Provision of drilling and blasting in mineral benches	YES. Deep hole drilling and blasting is proposed	Holes are drilled upto 10 m depth with a spacing of 3.5-4 m	As per the proposal
3k	Provision of mining machineries in mineral benches	Yes	yes	NIL
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.	Benches maintained as per proposal	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	Not much deviation and Nearer to the proposal
3o	Total area put in use under different heads at the end of year	29.61 Ha	29.61 Ha	NIL
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	2014-15=92,300 2015-16=99,782 2016-17=1,00,727 2017-18=1,00,827 2018-19=1,00,462	Production proposals are not achieved due to the delay in obtaining Environmental Clearance from MoEF for the expanded production capacity
3q	General remarks of inspecting officers on method of mining etc.	---	--	method of mining is found satisfactory

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)	Existing dumps are to be used	As per the proposal	Dumping carried out separately on existing Top soil & OB dump.
4b	Location of topsoil, OB and mineral reject dumps	OB Dump ML-7 to ML-10	Found as per the proposal at ML-7 to ML-10	NIL
4c	Number of dumps within lease area and outside of lease area	6 Nos	6 Nos	6 No.of dumps are located within the ML
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Non Mineralised area	As per the proposal	NIL
4e	Number of active and alive dumps.	2 Nos	2 Nos	NIL
4f	Number of dead dumps.	3 Nos	3 Nos	NIL
4g	Number of dumps established.	1 Nos	1 Nos Stabilized	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	NIL	Inactive Sides of Dump area covered by Garland Drain & earthen bund.	Dimension of Garland Drain. 1200 m x 1.5 m x 1.5 m
4i	Length of Retaining wall or garland drain all along dumps	NIL	1 No	Dump area covered by Garland Drain with earthen bunds. 1200 m x 1.5 m x 1.5 m
4j	Number of settling ponds	2 Nos	2 Nos	Settling Pond Dimension, I - 90 m x 50 m x 3 m , II - 60 m x 40 m x 3 m
4k	Specific comments of inspecting officer on waste dump management	---	---	waste dump management is found satisfactory.

Solid Waste Management - Backfilling:

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	Not applicable	All Benches are Still Active. Backfilling does not arise at this stage
5b	Area under backfilling of mined out area	NIL	Not applicable	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	Not applicable	Not at the stage
5d	Total area fully reclaimed and rehabilitated	NIL	Not applicable	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-----	----	No backfilling, reclamation at the stage.

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).	Periodically Submitted	Yes Submitted	NIL
6b	Area available for rehabilitation (ha) .	NIL	Not applicable	NIL
6c	afforestation done (ha).	NIL	Not applicable	NIL
6d	No. of saplings planted during the year	NIL	Not applicable	NIL
6e	Cumulative no .of plants	NIL	Not applicable	NIL
6f	Any other method of rehabilitation			
6g	Cost incurred on watch and care during the year	NIL	Not applicable	NIL

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	Not applicable	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	NIL
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	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	1.70 Ha	Location of the Afforested area as follows Lat: N 9° 19' 04'' Long: E78° 08' 53''
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)	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.	----	---	PMCP compliance & progressive closure operations is found satisfactory, Nobac kfilling and rehabilitation proposal during the plan period.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NIL	NIL	No mineral sorting at pit level. Entire ROM is being transported to beneficiation plant located at Pandalgudi.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.			
7c	Different grade of mineral sorted out at mines.	NIL	NIL	No grade-wise mineral sorting.
7d	Any beneficiation process at mines	NIL	Not applicable	Nobeneficiation process at mines
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
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8a	Separate removal and utilization of topsoil (Rule 32)	NIL	NIL	Top soil removed are used for plantation in non mineralised area.
8b	Concurrent use or storage of topsoil	NIL	NIL	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps proposed for OB and waste.	As per Proposal	As per Proposal
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NIL	Not applicable	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	1.70 Ha. of Area covered with 2000 No. of Saplings during FY 2018-19.
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	Found the Water tanker deployed for Water sprinkling on roads 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 id found good

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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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 furnishd in Annual Return 2018-2019	Shri. R.Dinesh (Mining Engineer) & Shri. C.Karunakaran (Geologist)	NIL
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.	The information found correct	NIL
9d	Scrutiny of Annual return on afforestation	2000 No of Plants as per Annual Return- 2018-19	Plantation covered in 1.70 Ha	Neem, Pungai & Vagai
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 July) 77246 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 :

(S. THIRUNAVUKKARASU)

Indian Bureau of Mines