

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

Mining Plan Modification REPORT

Chennai regional office

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

Mine code : 38TMN29002

- (i) Name of the Inspecting : **M017**) **Matiul Islam**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : K Saravanan, DGM (Mines) & R Rengaraj, QP
Official with
Designation
- (iv) Date of Inspection : 08/03/2024
- (v) Prev.inspection date : 30/04/2015

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** : Vilathikulam
- (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
 MP review under 17(1) MCR 2016 18/01/2023

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	15 Nos. of Borehole for a total meterage of 750 m during the year 2023-24	34 Nos. of Borehole for a total meterage of 1523.80 m during the year 2023-24	Potentially Mineralised Area 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	TRCL	TRCL 30.0 Lakhs	-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	8.56 Mil.Tons	8.56 Mil.Tons	As on 01.12.2023. Draft MMP with revised resource estimate currently being processed.
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Potentially Mineralised Area has been fully explored upto G1 level with 34 new boreholes drilled in the year 2023-24 for a total meterage of 1523.80mts.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ML - 15 to 21	ML - 15 to 21	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed	Separate benches maintained	-do-
2c	Stripping ratio or ore to OB ratio	1:1.47	1:1.46	-do-

2d	Quantity of topsoil generation in m3	15,995 cu.m.	15,835 cu.m.	-do-
2e	Quantity of overburden generation in m3	3,52,555 cu.m.	2,05,306 cu.m.	Violation already pointed out for deviation during previous inspection.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	The development of pit w.r.t. type of deposit was found satisfactory.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 No. of Pit ML - 15 to 21 (Western Block)	1 No. of Pit ML - 15 to 21 (Western Block)	As proposed
3b	Quantity of ROM mineral production proposed	7,13,876 Tonnes	4,02,174.12 Tonnes	Violation already pointed out during previous inspection
3c	Recovery of sailable/usable mineral from ROM production	70 %	100 %	Entire ROM generated was blended & consumed.
3d	Quantity of mineral reject generation	30%	Nil	-do-
3e	Grade of mineral rejects generation and threshold value declared.	<35 CaO	Nil	-do-
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	Mechanised	Nil	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	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. Hole dia 115 mm.	Controlled blasting by using Slurry Cartridge, NONEL & Electronic Detonators.
3k	Provision of mining machineries in mineral benches	Front End Loader 3 m Cum- 1, Back Hoe 0.900 Cum - 3, Tipper 12 Cum -6 Blast Hole Drill 115 Mm -1, Air Compressor 400 Cum/Min-1	Front End Loader 3 m Cum- 1, Back Hoe 0.900 Cum - 3, Tipper 12 Cum - 6 Blast Hole Drill 115 Mm -1, Air Compressor 400 Cum/Min-1	As proposed
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.	-do-
3m	Total area covered under excavation/pits	23.17 Ha	23.17 Ha	-do-
3n	Ore to OB ratio for the pit/mine during the year.	1:1.47	1:1.46	-do-
3o	Total area put in use under different heads at the end of year	40.33 Ha	39.06 Ha	Afforested Area- 4.185 Ha.
3p	Production of ROM mineral during the last five year period as applicable	2018-19=7,14,250 2019-20=7,14,544 2020-21=7,13,000 2021-22=7,14,781 2022-23=7,13,876 2023-24=6,00,000	2018-19=1,00,462 2019-20=4,98,845 2020-21=2,18,632 2021-22=4,60,932 2022-23=4,02,174.12 2023-24=5,55,592.64 (Till end of Feb-24)	Production proposals are not achieved due to the delay in obtaining Environmental Clearance from MoEF for the enhanced production capacity.

3q	General remarks - of inspecting officers on method of mining etc.	-	-	Violation already pointed during previous inspection for deviation from production proposal.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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	OB-N 90 17' 40" E 780 10' 39" Topsoil- N 90 17' 55" E 780 10' 24"	OB-N 90 17' 40" E 780 10' 39" Topsoil- N 90 17' 55" E 780 10' 24"	-do-
4c	Number of dumps within lease area and outside of lease area	5 Nos Within ML	5 Nos Within ML	-do-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of Ultimate Pit Limit	Outside of Ultimate Pit Limit	-do-
4e	Number of active and alive dumps.	2	2	-do-
4f	Number of dead dumps.	3	3	-do-
4g	Number of dumps established.	1	1	-do-
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Inactive Sides of Dump area covered by Garland Drain & earthen bund.	Inactive Sides of Dump area covered by Garland Drain & earthen bund.
4i	Length of Retaining wall or garland drain all along dumps	Nil	1200mx2x2x	-do-

4j	Number of settling ponds	Nil	3 nos	Settling Pond Dimension 1 - 90 m x 50 m x 3 m 2 - 60 m x 40 m x 3 m 3 - 60 m x 40 m x 3 m
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found 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.	No proposal	Nil	All Benches are Still Active. Backfilling not at this stage.
5b	Area under backfilling of mined out area	Nil	Nil	-do-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	-do-
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	-do-
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	All Benches are Still Active. Backfilling not proposed at this 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).	Periodical submission proposed	Periodically submitted	As proposed

6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	Nil	Nil	Nil
6d	No. of saplings planted during the year	Nil	Nil	Nil
6e	Cumulative no .of plants	Nil	Nil	Nil
6f	Any other method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch and care during the year	Nil	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Nil	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 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	1,000 Nos	5,150 Nos	As proposed
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.00 Ha	2.50 Ha	-do-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation	Afforestation	-do-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical monitoring proposed	Periodical monitoring carried out	As proposed
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	PMCP Compliance & Progressive closure operations were found satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Nil	Nil	Entire ROM consumed by blending.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	-do-
7c	Different grade of mineral sorted out at mines.	NA	NA	-do-
7d	Any beneficiation process at mines	Nil	Nil	-do-

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	No issues observed with mineral conservation. Entire ROM generated is consumed by blending.
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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	Proposed	Carried out	-do-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps proposed for OB and topsoil.	Separate dumps maintained for OB and topsoil.	-do-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1000 Nos proposed for the year	5150 Nos planted during the year	30548 No. of Saplings Planted cumulatively covering 4.185 Ha.
8g	Survival rate	90 %	90 %	As proposed
8h	Water sprinkling on roads to control airborne dust	Deployment of water tanker proposed	10 KL Water Tanker used for water sprinkling on haul roads	-do-

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	Shri. N.Arimavalavan (Mining Engineer) & Shri. C.Karunakaran (Geologist)	Given in part I, sec 7-9	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	23.17 Ha. Under current workings, 15.67 Ha. for waste disposal, 0.22 Ha for office etc, 59.5 Ha for virgin and green belt area	Given in Part 1, sl no 12	Nil
9d	Scrutiny of Annual return on afforestation	5150 No of Plants	Given in Part V, sec 5. Trees Planted - Survival Rate	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	402174.12 tonnes of ROM	Given in Part VI, Sl 1 & 2.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price @ Rs.566.51	Given in Part VI, Sl 2 & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Rs 87,60,922/-	Given in PART-II A (Capital Structure)	Nil

9k	Scrutiny of Annual return on mining machineries	Front End Loader 3.000 Cum- 1, Back Hoe 0.900 Cum - 3, Tipper 12.000 Cum -6 Blast Hole Drill 115 Mm - 1, Air Compressor 400 Cum/Min-1	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