

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-7/MDS

Mine code : 38TMN38010

- (i) Name of the Inspecting : 275) V.JAYA KRISHNA BABU
Officer and ID No.
- (ii) Designation : Controller of Mines
- (iii) Accompanying mine : G.R.Magesh, SGM,
Official with
Designation
- (iv) Date of Inspection : 05/09/2023
- (v) Prev.inspection date : 13/12/2022

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : PUDUPALAYAM (NORTH)
- (b) **Registration NO.** : IBM/638/2011
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : TAMIL NADU
- District : ARIYALUR
- Village : PUDUPALAYAM
- Taluka : ARIYALUR
- Post office : PUDUPALAYAM
- Pin Code :
- FAX No. : 04329-226005
- E-mail : Yadav_m@madrascements.co.in
- Phone : 04329-294400
- (f) **Police Station** : ARIYALUR
- (g) **First opening date** : 24/03/2009
- (h) **Weekly day of rest** : SUN
2. **Address for correspondence** : GOVINDPURAM ROAD
MADRAS CEMENTS LIMITED,
Govindrajapuram, Sendurai Road, Ariyalur-621713
3. (a) **Lease Number** : TMN1030
- (b) **Lease area** : 4.83
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 15/06/2015
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 : C. RAVICHANDRAN
GENERAL MANAGER (Adm)
MADRAS CEMENTS LTD,
GOVINDAPURAM WORKS,
SENDURAI ROAD ARIYALUR
TAMIL NADU
Phone: 04329-226001
FAX : 04329-226005

Mining Engineer

Name : Shri.Kesamsetti Maheshkumar, Full Time
Qualification : B.tech Mining
Appointment/ : 18/07/2018
Termination date

Geologist

Name : S ARUN, Full Time
Qualification : MSC.GEOLOGY
Appointment/ : 01/04/2017
Termination date

Manager

Name : A RAMBABU
Qualification : B.TECH MINING, FCC
Appointment/ : 01/07/2019
Termination date

6. Date of approval of Mining
Plan/Scheme of Mining

:	Fresh under rule 22 MCR1960	07/08/2006
:	MP modif under 17(3) MCR 2016	24/10/2016
:	MP review under 17(1) MCR 2016	30/10/2018
:	MP modif under 17(3) MCR 2016	18/08/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	Nil	As per Plan
1b	Exploration over lease area for geological axis 1 or 2	No Proposal	Nil	As per Plan
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal	Nil	As per Plan
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal	Nil	As per Plan
1e	Balance reserve as on 01/04/20	-	0.42 Million Tons	As per Plan
1f	General remarks of inspecting officers on geology, exploration etc	Nil	The entire Mining lease is mineralized with Buff Shell Limestone deposit which is having thickness of 28m which is overlain by 2-18m of overburden and soil cover varying from 0 TO 2m. The entire lease area is explored under G-1 level exploration.	Nil

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	No Proposal	Nil	As per the approved MMP, during the year 2022-23, there is no development proposal.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No Proposal	No of Topsoil benches-1 No of Overburden benches-3 No of Mineral benches-5	As per the approved MMP, during the year 2022-23, there is no development proposal.

2c	Stripping ratio or ore to OB ratio	1:0	1:0	As per the approved MMP, during the year 2022-23, there is no development proposal.
2d	Quantity of topsoil generation in m3	No Proposal	Nil	As per the approved MMP, during the year 2022-23, there is no development proposal.
2e	Quantity of overburden generation in m3	No Proposal	Nil	As per the approved MMP, during the year 2022-23, there is no development proposal.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Nil	The mine is an open cast mechanized mine developed as a single pit comprising of one top soil bench, 3 benches in overburden and 5 benches in the Mineral and the method of mining adopted is suitable for the flat bedded limestone deposit	Nil

Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit operation	Single pit operation	As per Approved Plan.
3b	Quantity of ROM mineral production proposed	101500 Tons	101400.16 Tons	As per the AR-2022-2023.
3c	Recovery of sellable/usable mineral from ROM production	100 % mineral recovered from ROM (101500 Tons)	100 % mineral recovered from ROM (101400.16 Tons)	As per the AR-2022-2023

3d	Quantity of mineral reject generation	Not Applicable as proposal is to consume on ROM (Run of Mine) basis only.	No Mineral Reject is generated.	The entire ROM is consumed in captive cement plant and no mineral reject generation is reported.
3e	Grade of mineral rejects generation and threshold value declared.	Not Applicable as proposal is to consume on ROM (Run of Mine) basis	Not Applicable as proposal is to consume on ROM (Run of Mine) basis	-
3f	Quantity of sub grade mineral generation.	Not Applicable as proposal is to consume on ROM (Run of Mine) basis	Not Applicable as proposal is to consume on ROM (Run of Mine) basis	No subgrade mineral is generated and the entire ROM is consumed in the captive cement plant.
3g	Grade of sub grade mineral generation	Not Applicable as proposal is to consume on ROM (Run of Mine) basis	Not Applicable as proposal is to consume on ROM (Run of Mine) basis	No subgrade mineral is generated and the entire ROM is consumed in the captive cement plant.
3h	Manual / Mechanised method adopted for segregating from ROM	Not Applicable	Not Applicable	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	No Proposal of Beneficiation as it proposed consume on ROM Basis
3j	Provision of drilling and blasting in mineral benches	Yes, Proposed to carryout Drilling & Blasting on contingency condition	Adopted Non-conventional method by engaging Xcentric Ripper	No drilling and blasting is carried out in the mine during the RY.

3k	Provision of mining machineries in mineral benches	Excavator - 1 No Xcentric Ripper- 1 No Tipper - 13 No's Water Tanker - 1 No	Excavator - 1 No Xcentric Ripper- 1 No Tipper - 7 No's Water Tanker - 1 No	The machineries reported were found deployed on the day of inspection.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8.0m	8.0m	Total area excavated is 21.73.0 Ha out of which 13.27.0 Ha
3m	Total area covered under excavation/pits	8.46.0 Ha	8.46.0 Ha	Total area excavated is 21.73.0 Ha out of which 13.27.0 Ha is Reclaimed & Rehabilitated
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	No waste generation is reported during the RY.
3o	Total area put in use under different heads at the end of year	Area under mining-8.46H, Infrastructure (workshop, administrative building)-0.20 H, Roads-0.60 H, Excavated area reclaimed- 13.27 H , Others to be specified (green belt, etc.,)-3.545 H.	Total area excavated is 21.73.0 Ha out of which 13.27.0 Ha is Reclaimed & Rehabilitated.	Nil

3p	Production of ROM mineral during the last five year period as applicable	2018-19: 1498032 2019-20: 1000200 2020-21: 600900 2021-22: 99980 2022-23: 101500 (in tonnes)	2018-19: 1245691 2019-20: 744618.28 2020-21: 372176.02 2021-22: 99959.98 2022-23:101400.16 (in tonnes)	Within the Approved Quantity & As per Annual Return 2022-23
3q	General remarks of inspecting officers on method of mining etc.	Nil	The mine is an open cast mechanized mine developed as a single pit comprising of one top soil bench, 3 benches in overburden and 5 benches in the Mineral and the method of mining adopted is suitable for the flat bedded limestone deposit.	Nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No Dump proposed	The entire Topsoil already used over the backfilled area (over burden) for plantation purpose.	The overburden generated in the past is backfill in the mined-out pit over which t entire Topsoil i used for spreadi for plantation i the past
4b	Location of topsoil, OB and mineral reject dumps	No proposal	As per the approved MMP, during the year 2022-23, there is no development proposal	There is no existing topsoil over burden or mineral reject dumps existing within or outsi the mining leas
4c	Number of dumps within lease area and outside of lease area	Lease area = No proposal Lease area = Nil	Lease area = Nil Non Lease area = Nil	-

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal	Nil	-
4e	Number of active and alive dumps.	Nil	Nil	-
4f	Number of dead dumps.	No proposal	Nil	-
4g	Number of dumps established.	No proposal	Nil	-
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil	-
4i	Length of Retaining wall or garland drain all along dumps	No proposal	700m length garland drainage is constructed in the past and maintained.	The garland dra constructed in past is being maintained.
4j	Number of settling ponds	No proposal	2 No's	-
4k	Specific comments of inspecting officer on waste dump management	Nil	There is no existing topsoil, over burden or mineral reject dumps existing within the mining lease. The entire waste generated in the past is back filled into the mined out pit.	-

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No Proposal of Back filling	There is no proposal of Reclamation in approved Modification to the approved Mining Plan	Backfilling started in the year 2012-13 and completed in the year 2020-21.
5b	Area under backfilling of mined out area	No Proposal of Back filling	Till date total area excavated is 21.73.0 Ha out of which 13.27.0 Ha is Reclaimed & Rehabilitated.	As per the proposals.

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal	The entire Topsoil already used over backfilling area	The entire Topsoil generated in the past is utilized for spreading over the backfilled area for plantation
5d	Total area fully reclaimed and rehabilitated	No Proposal	Totally 13.27.0 Hectares of area has been fully Reclaimed and Rehabilitated	As per proposals
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Nil	Total area excavated is 21.73.0 Ha out of which 13.27.0 Ha is Reclaimed by backfilling with waste generated & rehabilitated by way of plantation.	-

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).	Proposal as cited in the Mining plan	Submitted the PMCP report vide Rule 23 E(2) of MCDR 2017 on 27.06.2023	PMCP report submitted within the due date as reported.
6b	Area available for rehabilitation (ha) .	Nil	Nil	-
6c	afforestation done (ha).	11.90.0 Hect	25.75.0 Hect	Total area excavated is 21.73.0 Ha out of which 13.27.0 Ha is Reclaimed by backfilling with waste generated & rehabilitated by way of plantation.
6d	No. of saplings planted during the year	500 No's	1000 No's	Appears to be in order.
6e	Cumulative no .of plants	17500 No's	44000 No's	Appears to be correct.

6f	Any other method of rehabilitation	Not applicable	Not applicable	-
6g	Cost incurred on watch and care during the year	Nil	1.0 Lakhs	Appears to be correct.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	No proposal	Nil	No proposals during the RY.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	450 No's	950 No's	Appears to be correct
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	-
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal	-	-
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No waste land available	Nil	-

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Propose to carryout Environmental monitoring both Core and Buffer Zones	ABC Techno Labs India Pvt. Ltd, Chennai has been engaged for monitoring Environmental Data on Quarterly basis.	Monitoring of environmental parameters is carried out on regular basis which is verified during site inspection
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	All the proposed PMCP activities are being carried out.	Nil

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Nil	Nil	The entire ROM is being transported to the Captive Cement plant located at Govindapuram.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Not Applicable	As proposed, consumed on ROM (Run of Mine) basis to consume on in the captive cement plant	-
7c	Different grade of mineral sorted out at mines.	Not Applicable	As proposed, consumed on ROM (Run of Mine) basis to consume on in the captive cement plant	-

7d	Any beneficiation process at mines	Not Applicable as we proposed to consume on ROM (Run of Mine) basis	As proposed, consumed on ROM (Run of Mine) basis in the captive cement plant.	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Nil	The entire ROM is being transported to the Captive Cement plant located at Govindapuram thereby taking care of Mineral Conservation aspects.	-

Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	-	-
8b	Concurrent use or storage of topsoil	No Proposal	-	Till date, the generated quantity of Topsoil is 476020Cu.m and has been utilized for spreading over backfilled area for green belt development
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposal	-	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	-	-

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	-	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	-	Planted 44000 No's of Saplings in entire lease area	Appears to be correct.
8g	Survival rate	-	90%	Appears to be correct.
8h	Water sprinkling on roads to control airborne dust	Propose to engage Water Tanker for control airborne dust	10000 Liters water tanker is being engaged for sprinkling to control airborne dust.	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Nil	Aesthetic beauty in and around the mines is good and satisfactorily maintained by way of green belt development	-

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	-	MR Submitted up to = July 2023 (Submitted on 08.08.2023) AR Submitted up to = 2022 - 2023 (Submitted on 28.06.2023)	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri.E.Thangak umar, Mining Geologist: Shri Arun.	The officials reported in the AR were present at site on the day of inspection.	-

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	-	Area under mining-8.46 H, Infrastructure (workshop, administrative building)-0.20 H, Roads- 0.60 H, Excavated area reclaimed-13.27 H, Others to be specified (green belt, etc.,)- 3.545 H.	-
9d	Scrutiny of Annual return on afforestation	1000 No's planted	The information was found correct	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No reject	The information was found correct	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	No stock is maintained	The information was found correct	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price - Rs.290.83	The information was found correct	-
9h	Scrutiny of Annual return on fixed assets	Fixed assets: Rs.20658681	The information was found correct	-
9k	Scrutiny of Annual return on mining machineries	Excavator - 1 No XcentricRipper - 1 No Tipper - 7 No's Water Tanker - 1 No	The information was found correct	-

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 :

(V. JAYA KRISHNA BABU)

Indian Bureau of Mines