

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

**Mining Plan Modification REPORT**

**Chennai regional office**

**Mine file No :** TN/PBR/LST-15.MDS

**Mine code :** 38TMN24040

- (i) Name of the Inspecting : **K08** ) **G.SORNADURAI KANNAN**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Thiru. G.R.Magesh GM(Mines)  
Official with  
Designation
- (iv) Date of Inspection : 03/11/2023
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **REDDIPALAYAM(63.60HA)**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : TAMIL NADU
- District : ARIYALUR
- Village : REDDIPALAYAM
- Taluka : ARIYALUR
- Post office : REDDIPALAYAM
- Pin Code : 621714
- FAX No. : 04329 - 226005
- E-mail : magesh@ramcocements.co.in
- Phone : 044-28478666 , 28478656, 0
- (f) Police Station : vikramangalam
- (g) First opening date : 05/10/2001
- (h) Weekly day of rest : SUN
2. Address for : AURAS CORPORATE CENTRE, V FLOOR  
correspondance : 98-A, RADHAKRISHNAN ROAD  
MYLAPORE CHENNAI- 4
3. (a) Lease Number : TMN1031
- (b) Lease area : 63.6
- (c) Period of lease : 30
- (d) Date of Expiry : 22/07/2034
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 : MADHUSUDAN KULKARNI  
 Govindapuram Works Sendurai  
 Road Ariyalur ARIYALUR  
 TAMIL NADU  
 Phone: 9943300504  
 FAX : 04329-226005

Mining Engineer  
 Name : KALLURI SURRENDRA,Full Time  
 Qualification : BE(MINING)  
 Appointment/ : 18/07/2018  
 Termination date

Geologist  
 Name : V.MOHAN,Full Time  
 Qualification : MSC (GEOLOGY)  
 Appointment/ : 01/10/2016  
 Termination date

Manager  
 Name : G.MAGESH  
 Qualification : BE (MINING)  
 Appointment/ : 11/01/2008  
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	16/05/2005
Plan/Scheme of Mining		Modif.of approved Mining Plan	01/09/2006
		Mining Scheme rule 12 MCDR1988	10/08/2011
		Mining Scheme rule 12 MCDR1988	14/05/2015
		MP modif under 17(3) MCR 2016	20/05/2019
		MP review under 17(1) MCR 2016	21/10/2019

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2 Nos Boreholes has been proposed during 2022-2023.	2 Boreholes has been drilled during 2022-2023.	Form-I has been submitted.
1b	Exploration over lease area for geological axis 1 or 2	2 Nos additional exploration was proposed during 2022-2023 in the lease area.	2 Boreholes was carried out in the lease area during 2022-2023	Entire lease area 63.60 hectares are under G-1 category.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Private exploration agencies	M/s. Inthitachitu Core drills has done exploration during 2022-2023 with 1 lakhs expenditure.	GSI has prospected this area during 1988-1989
1d	Balance area to be explored to bring Geological axis in 1 or 2	Entire Lease area is under G-1.	Entire Lease area is under G-1.	Entire area has been explored under G-1 category with 200m X 100m grid interval.
1e	Balance reserve as on 01/04/20	Limestone as on 01.04.2023 Proved Mineral Reserves (111) = 2504800 tons Pre-Feasibility Mineral Resources (221) = 14720000 tons	Limestone as on 01.04.2023 Proved Mineral Reserves (111) = 6145922 tons Pre-Feasibility Mineral Resources (221) = 14720000 tons	The available grade of Limestone in this lease area is CaO=35% Grade.
1f	General remarks of inspecting officers on geology, exploration etc	It is part of Kallankurichi formations	The formation is belongs to Ariyalur stage.	Limestones are mostly yellow in colour with a tinge of cream and brown. The rock is fine to medium grained and has varying amounts of ferruginous contents

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	No Development proposal during 2022-2023	Development has carried out from ML-1 to 6	Violation has been issued under Rule 11(1).
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	4 benches have proposed for Limestone.	Topsoil-1, OB benches-3, L.st benches- 4	Violation has been issued under Rule 11(1).
2c	Stripping ratio or ore to OB ratio	1 : 0.00	1 : 1.00	Stripping Ratio is increased due to unproposed development.
2d	Quantity of topsoil generation in m3	No Proposal during 2022-2023	137042 cu.m of topsoil has been generated	Violation has been issued under Rule 11(1).
2e	Quantity of overburden generation in m3	No Proposal during 2022-2023	1509557 cu.m of Overburden has been generated.	Violation has been issued under Rule 11(1).
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No Development of OB & Topsoil has propose during 2022-2023	Stripping Ratio is increased due to unproposed development.	Mining plan is Modified for not achieving proposal.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Production was proposed in between ML-7 to 8 of lease area.	Working was not carried out as per proposal. Worked in ML-1 to 6	Violation has been issued under Rule 11(1).
3b	Quantity of ROM mineral production proposed	The total target of Limestone ROM Production proposed was 2999680 tons during 2022-2023.	Achieved Limestone ROM Production is 2394315 tons during 2022- 2023.	Violation has been issued under Rule 11(1).
3c	Recovery of sailable/usable mineral from ROM production	100% Recovery	100% Recovery	Entire ROM is useable and sent to crusher.
3d	Quantity of mineral reject generation	There is no Mineral Reject generation	There is no Mineral Reject generation	Nil

3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	Nil	Nil
3f	Quantity of sub grade mineral generation.	No Sub Grade Generation	No Sub Grade Generation	Nil
3g	Grade of sub grade mineral generation	There is No Generation of Subgrade Mineral	There is No Generation of Subgrade Mineral	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised method	Entire ROM is useable and sent to crusher.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Beneficiation Study is Proposed	Nil	Outside the lease area beneficiation plant is present.
3j	Provision of drilling and blasting in mineral benches	Drilling & Blasting are proposed.	Drilling & Blasting are done as per proposal.	Control Blasting is done. Rock breakers are used for production.
3k	Provision of mining machineries in mineral benches	Excavators Xcentric Ripper Rock Breakers Tippers Dozer	As per proposal the machineries are there during inspection.	Available machinery are shown in Annual Returns
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	In 2022-2023, Bench height of 8m was proposed in Mineral.	As per proposal benches are formed.	Nil
3m	Total area covered under excavation/pits	22.88 hect area is proposed for Pit during 2022-2023	18.82 hect areas are under Pit only.	Area covered is lesser due to less production in first two years approved plan period.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.00	1 : 1.00	Stripping Ratio is increased due to unproposed development.

3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2023. Mines = 22.88 hect Infra = 0.20 hect	Land use Pattern as on 01.04.2023. Mines = 18.82 hect Infra = 0.20 hect	Due to less production land use pattern differ
3p	Production of ROM mineral during the last five year period as applicable	2022-2023 = 2999680 tons 2021-2022 = 2995660 tons 2020-2021 = 2999860 tons 2019-2020 = 2999800 tons 2018-2019 = 1699832 tons	2022-2023 = 2394315 tons 2021-2022 = 1557838 tons 2020-2021 = 1401925 tons 2019-2020 = 1659895 tons 2018-2019 = 1605545 tons	Achieved Limestone ROM Production is 2394315 tons during 2022-23.
3q	General remarks of inspecting officers on method of mining etc.	Production was proposed in between ML-7 to 8 of lease area.	Achieved ROM Production is 2394315 tons during 2022- 2023 against proposal of 2999680 tons.	Entire ROM is useable and sent to crusher.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	There is no proposal for dumping of Topsoil, OB in during 2022-2023	As per proposal the dumping are not carried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	No Proposal for dumps	Nil	Nil
4c	Number of dumps within lease area and outside of lease area	Lease area = Nil Non Lease area = Nil	Lease area = Nil Non Lease area = Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No Proposal for dumps	Nil	Nil
4e	Number of active and alive dumps.	No Proposal for dumps	Nil	Nil
4f	Number of dead dumps.	No Proposal	Nil	Nil

4g	Number of dumps established.	No Dumps have been established.	No Dumps have been established.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	Garland drains are constructed.	Garland drainage has made along the dump toe & safety barrier.
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	3544m of Garland drainage has been constructed.	Garland drainage has made along the dump toe & safety barrier.
4j	Number of settling ponds	One proposal	2 No of settling tanks has made.	Existing settling ponds are desilted.
4k	Specific comments of inspecting officer on waste dump management	There is no proposal for dumping of Topsoil, OB in during 2022-2023	Existing settling ponds are desilted.	3544m of Garland drainage has made along the dump toe & safety barrier.

#### 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 Backfilling proposal for 2022-2023	Partly Backfilling has done on southern side of lease area during 2022-2023	Violation has been issued under Rule 11(1).
5b	Area under backfilling of mined out area	No Proposal	9.90 hect has been backfilled during 2022-2023	Violation has been issued under Rule 11(1).
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal	Restoration use of topsoil	Violation has been issued under Rule 11(1).
5d	Total area fully reclaimed and rehabilitated	No Proposal	9.90 hect has been backfilled during 2022-2023	Violation has been issued under Rule 11(1).
5e	General remarks of inspecting officers on backfilling and reclamation etc.	There is no proposal for backfilling during 2022-2023	Partly Backfilling has done on southern side of lease area during 2022-2023	9.90 hect has been backfilled during 2022-2023

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).	It should be on or before 1st July every year.	Submitted for the year 2022-2023.	Submitted within time limit.
6b	Area available for rehabilitation (ha) .	0.20 hect	0.20 hect	Nil
6c	afforestation done (ha).	0.20 hect	0.20 hect	Nil
6d	No. of saplings planted during the year	200 saplings	500 saplings	Nil
6e	Cumulative no .of plants	45500 saplings	103150 saplings	Cumulatively 103150 saplings have been planted upto 2022-2023.
6f	Any other method of rehabilitation	No Proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	No Proposal	3.50 Lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	2.00 hect	2.00 hect	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	1300 saplings	2000 saplings	Cumulatively 103150 saplings have been planted upto 2022-2023.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	Nil	Nil



6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal for 2022-2023	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal for 2022-2023	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal for 2022-2023	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly basis Survey	Environment monitoring is carried out through Government as well as private agency.	Lessee is conducting Environmental monitoring and all are within permissible limit
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	1500 saplings have proposed during 2022-2023	Total 5000 saplings has achieved during 2022-2023 along dump and waste area.	Plantation has been done along the safety barrier.

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	The total target of Limestone ROM Production proposed was 2999680 tons during 2022-2023.	Achieved Limestone ROM Production is 2394315 tons during 2022- 2023.	Violation has been issued under Rule 11(1).

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	There is no proposal for grade wise mineral sorting in the lease area.	Entire ROM is useable and sent to outside lease area crusher.	The available grade of Limestone in this lease area is 35% CaO.
7c	Different grade of mineral sorted out at mines.	The Limestone of the lease area varies from 35% CaO.	The Limestone of the lease area is 35% CaO	Entire ROM is sent to outside lease area crusher to get the desired plant feed materials.
7d	Any beneficiation process at mines .	Crushing & Screening process at outside the lease area	Inside the lease area there is no beneficiation process.	Entire ROM is transported to crusher installed outside lease area.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Entire ROM is transported to crusher installed outside lease area.	Achieved ROM Production is 2394315 tons during 2022- 2023 against proposal of 2999680 tons.	Entire ROM is sent to outside lease area crusher to get the desired plant feed materials.

### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal during 2022-2023	137042 cu.m of topsoil has been generated	Violation has been issued under Rule 11(1).
8b	Concurrent use or storage of topsoil	No Proposal	Restoration use of topsoil	Topsoil is used for green belt development on backfilled area.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There is no proposal for dumping of Topsoil, OB in during 2022-2023	As per proposal the dumping are not carried out.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Partly Backfilling has done on southern side of lease area during 2022-2023	Violation has been issued under Rule 11(1).

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	There is no proposal for backfilling during 2022-2023	Partly Backfilling has done on southern side of lease area during 2022-2023	Violation has been issued under Rule 11(1).
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposal	Total 5000 saplings has achieved during 2022-2023.	Plantation has been done along the safety barrier and backfilled area.
8g	Survival rate	No Proposal in the document.	90%	Same has shown in annual return
8h	Water sprinkling on roads to control airborne dust	Yes, it is proposed for water sprinkling on haul roads.	Daily Water tanker is spraying water on mines roads side to control airborne dust.	During Inspection, water sprinkling on mines roads has been noticed.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Scanty vegetation, bushes, neem are observed in lease area	River Marudaiyur is flowing at distance of 1.50 km from lease area.	Outside lease area, agriculture is done with rainfed.

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#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR Submitted up to = September 2023 AR Submitted up to = 2022-2023	Returns are submitted within time limit.	Both Annual & Monthly returns are submitted in online
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Full time Mining Engineer & Mining Geologist has shown	During inspection Mining Engineer & Geologist are present.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use Pattern as on 01.04.2023. Mines = 18.82 hect	Landuse Pattern is filled as per approved Mining Plan	Nil

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9d	Scrutiny of Annual return on afforestation	Lessee has planted 5000 saplings during 2022-2023.	Plantation has been done as along the dump and waste area	Cumulatively 103150 saplings have been planted upto 2022-2023.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	There is no Mineral Rejects Generation	There is no Mineral Rejects Generation	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Limestone stock as on 01.04.2023 ROM opening stock = Nil ROM closing stock = Nil	Mine has produced 2394315 tons of ROM and 2443375 tons as dispatches during 2022-2023.	It is captive mine of M/s. The Ramco Cements Limited.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production & Ex. Mine price has shown	It is captive mine of M/s. The Ramco Cements Limited.	Nil
9h	Scrutiny of Annual return on fixed assets	Fixed Assets is given	Fixed asset is given for individual mine.	Nil
9k	Scrutiny of Annual return on mining machineries	Machineries details given	As available in field	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
MCDR17	Rule 11(1)	09/11/2023			

**Date :**

**(G.SORNADURAI KANNAN)**

Indian Bureau of Mines