

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

**Review and updation of Mining Plan REPORT**

**Chennai regional office**

**Mine file No :** TN/TCR/LST-74.MDS

**Mine code :** 38TMN38006

- (i) Name of the Inspecting : **K08** ) **G.SORNADURAI KANNAN**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Thiru.S. Durai Murugan DGM (Mines)  
Official with  
Designation
- (iv) Date of Inspection : 04/11/2023
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **ADANAKURICHI&MANAKUDAYAN(**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **TAMIL NADU**
- District : **ARIYALUR**
- Village :
- Taluka :
- Post office :
- Pin Code :
- FAX No. : **044-28478676**
- E-mail : **vssm@ramcocements.co.in**
- Phone : **044-28477504**
- (f) **Police Station** : **DALAVOI**
- (g) **First opening date** : **24/12/1999**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **ALATHIYUR WORKS,**  
**correspondance** **CEMENT NAGAR POST,ARIYALUR DISTRICT**
3. (a) **Lease Number** : **TMN1029**
- (b) **Lease area** : **89.88**
- (c) **Period of lease** : **50**
- (d) **Date of Expiry** : **30/03/2045**
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 : ASHISH KUMAR SRIVASTAVA  
 ALATHIYUR CEMENT WORKS  
 CEMENT NAGAR POST ARIYALUR  
 DT. ARIYALUR TAMIL NADU  
 Phone:  
 FAX :

## Mining Engineer

Name : R.Naren,Full Time  
 Qualification : BE(MINING)  
 Appointment/ : 13/05/2022  
 Termination date

## Mining Engineer

Name : J.Iyyappan,Full Time  
 Qualification : BE Mining  
 Appointment/ : 21/03/2019  
 Termination date

## Geologist

Name : R.Balamurugan,Full Time  
 Qualification : MSC(GEO)  
 Appointment/ : 31/03/2019  
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	06/10/1999
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	28/08/2009
		Modif.approved Mining Scheme	08/10/2012
		Mining Scheme rule 12 MCDR1988	30/06/2014
		MP review under 17(1) MCR 2016	05/12/2018
		MP modif under 17(3) MCR 2016	29/11/2021

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Boreholes has been proposed during 2022-2023.	No Boreholes has drilled during 2022-2023.	No Boreholes has drilled during 2022-2023.
1b	Exploration over lease area for geological axis 1 or 2	No additional exploration was proposed during 2022-2023 in the lease area.	No additional exploration was carried out in the lease area during 2022-2023	Entire lease area 89.875 hectares are under G-1 category.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal for exploration during 2022-2023	No Exploration during 2022-2023	So far 22 boreholes have been drilled with 1746 meterage in the lease. Spend about 10 lakhs for exploration.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Exploration was not proposed during 2022-2023.	No Exploration has been carried out during 2022-2023.	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) = 3878131 tons Pre-Feasibility Mineral Resources (211) = 4490000 tons	Limestone as on 01.04.2023 Proved Mineral Reserves (111) = 4657734 tons Pre-Feasibility Mineral Resources (211) = 4490000 tons	The available grade of Limestone in this lease area is CaO=40% Grade.
1f	General remarks of inspecting officers on geology, exploration etc	It is part of Cretaceous formations	The formation is belongs to Niniyur stage. The deposit is un-conformably overlain by Cuddalore sandstone.	Limestone beds carry inclusions of marl, clay & sand stone.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Development proposed in Central & East Pit during 2022-2023	Development not carried out as per proposal in Central & East pit during 2022-2023	Violation has pointed out under Rule 11(1)
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil - 1 Bench Overburden - 2 Benches Minerals - 4 Benches	Topsoil - 1 Bench Overburden - 2 Benches Minerals - 4 Benches	Nil
2c	Stripping ratio or ore to OB ratio	1 : 1.28	1 : 1.38	Stripping Ratio Zero is due to less development.
2d	Quantity of topsoil generation in m3	No Proposal during 2022-2023	Nil	Nil
2e	Quantity of overburden generation in m3	440077 cu.m of Overburden Proposed during 2022-2023	278512 cu.m is achieved	Violation has pointed out under Rule 11(1)
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development proposed in Central & East Pit during 2022-2023	Stripping Ratio Zero is due to less development.	Already existing Topsoil - 1 Bench Overburden - 2 Benches Minerals - 4 Benches are present

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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Production was proposed in Central & East pit of lease area.	Working was not carried out in Central & East pit of lease area.	Violation has pointed out under Rule 11(1)
3b	Quantity of ROM mineral production proposed	The total target of Limestone ROM Production proposed was 619762 tons during 2022-2023.	Achieved Limestone ROM Production is 364545 tons during 2022- 2023.	Violation has pointed out 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	No Drilling & Blasting are proposal.	Drilling & Blasting are not done.	Surface miner & Rock breakers are used for production.
3k	Provision of mining machineries in mineral benches	Surface Miner Excavators Rock Breakers Tippers Shovel 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 5m was proposed in Mineral.	As per proposal benches are formed.	Nil
3m	Total area covered under excavation/pits	52.33 hect area is proposed for Pit during 2022-2023	37.759 hect areas are under Pit only.	Area covered is lesser due to less production.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.28	1 : 1.38	Stripping Ratio Zero is due to less development.

3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2023. Mines = 52.33 hect Dump = 3.16 hect	Land use Pattern as on 01.04.2023. Mines = 37.759 hect Dump = 3.98 hect	Due to less production landuse pattern differ
3p	Production of ROM mineral during the last five year period as applicable	2022-2023 = 619762 tons 2021-2022 = 591458 tons 2020-2021 = 445968 tons 2019-2020 = 445968 tons 2018-2019 = 883000 tons	2022-2023 = 364545 tons 2021-2022 = 244399 tons 2020-2021 = 314942 tons 2019-2020 = 244399 tons 2018-2019 = 339972 tons	Achieved Limestone ROM Production is 364545 tons during 2022-23.
3q	General remarks of inspecting officers on method of mining etc.	Production was proposed in Central & East pit of lease area.	Achieved ROM Production is 364545 tons during 2022- 2023 against proposal of 619762 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 proposal for dumping of OB in during 2022-2023	As per proposal the dumping are carried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	It is proposed in existing Dump-2	As per proposal dumping done	Nil
4c	Number of dumps within lease area and outside of lease area	Lease area = 2 Non Lease area = Nil	Lease area = 2 Non Lease area = Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	As per proposal dumps are outside UPL.	Nil
4e	Number of active and alive dumps.	Active Dump = 2 Alive Dump = Nil	As per proposal 2 active dumps are present within lease area.	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	1200m of Garland drainage has been constructed.	Garland drainage has made along the dump toe & safety barrier.
4j	Number of settling ponds	One proposal	1 No of settling tanks has made.	Existing settling ponds are desilted.
4k	Specific comments of inspecting officer on waste dump management	There is proposal for dumping of OB in during 2022-2023	Existing settling ponds are desilted.	1200m 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 has proposed in the mineral extracted area during 2022-2023	As per proposal backfilling has not done during 2022-2023	Nil
5b	Area under backfilling of mined out area	No Proposal	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	No Proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	There is no proposal for backfilling during 2022-2023	The mine was not worked upto the proved depth and no backfilling were proposed during 2022-2023.	No backfilling has done 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) .	No Proposal	Nil	Nil
6c	afforestation done (ha).	No Proposal	Nil	Nil
6d	No. of saplings planted during the year	No Proposal	Nil	Nil
6e	Cumulative no .of plants	No Proposal	Nil	Nil
6f	Any other method of rehabilitation	No Proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	No Proposal	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No Proposal	Nil	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	No Proposal	Nil	Nil
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	600 saplings proposed for 2022-2023	Total 600 saplings has achieved during 2022-2023 along safety zone and waste area.	Cumulatively 63937 saplings have been planted upto 2022-2023.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.38 hectares proposed for 2022-2023	0.38 hect achieved in safety zone and waste land area during 2022-2023	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal for 2022-2023	Plantation has been done along the safety barrier.	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Bi-Annually 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.	Total 600 saplings has achieved during 2022-2023 along safety zone and waste area.	Cumulatively 63937 saplings have been planted upto 2022-2023.	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 619762 tons during 2022-2023.	Achieved Limestone ROM Production is 364545 tons during 2022- 2023.	Violation has pointed out 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 40% CaO.
7c	Different grade of mineral sorted out at mines.	The Limestone of the lease area varies from 40% CaO.	The Limestone of the lease area is 40% 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.	364545 tons of ROM has been achieved during 2022- 2023 against 619762 tons of proposal.	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	Nil	No proposal for topsoil during 2022-2023
8b	Concurrent use or storage of topsoil	No Proposal	Nil	Storage of topsoil.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There is proposal for dumping of OB in during 2022-2023	As per proposal the dumping are carried out.	Nil
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)	There is no proposal for backfilling during 2022-2023	The mine was not worked upto the proved depth and no backfilling were proposed during 2022-2023.	No backfilling has done during 2022-2023
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	600 saplings proposed for 2022-2023	Total 600 saplings has achieved during 2022-2023 along safety zone and waste area.	Plantation has been done along the safety barrier and waste area
8g	Survival rate	No Proposal in the document.	85%	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	There is no prominent river or stream running in this 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

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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 = 37.759 hect Dump = 3.983 hect	Landuse Pattern is filled as per approved Mining Plan	Nil
9d	Scrutiny of Annual return on afforestation	Lessee has planted 600 saplings during 2022-2023.	Plantation has been done as along the safety zone and waste area.	Cumulatively 63937 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 364545 tons of ROM and 399890 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 for group of mines	It is advice to fill the fixed assets individually.	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