

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

**Mining Plan Modification REPORT**

**Chennai regional office**

**Mine file No :** TN/ALR/LST-35.MDS

**Mine code :** 38TMN38053

- (i) Name of the Inspecting : **K08** ) **G.SORNADURAI KANNAN**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Thiru. Elansuriyan, QP & Durai Murugan, GM-Mines  
Official with  
Designation
- (iv) Date of Inspection : 07/10/2023
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **ADANAKURICHI&MANAK 49.285**
- (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 : ADHANAKURUCHI & MANA
- Taluka : SENDURAI
- Post office : DALAVOI
- Pin Code : 621730
- FAX No. : 04329-248303
- E-mail : vssm@ramcocements.co.in
- Phone : 04329-248305
- (f) Police Station :
- (g) First opening date : 14/02/2022
- (h) Weekly day of rest : SUN
2. Address for :  
correspondance
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : THE RAMCO CEMENTS LIMITED  
 Govindapuram works,  
 sendurai Rd Ariyalur Dist.  
 mob.044-28477504.  
 magesh@ramcocements.co.in  
 ARIYALUR TAMIL NADU  
 Phone:  
 FAX :

Owner : THE RAMCO CEMENTS LIMITED  
 98-A, AURAS TOWERS  
 RADHAKRISHNAN SALAI,  
 MYLAPORE CHENNAI CHENNAI  
 CITY TAMIL NADU  
 Phone:  
 FAX :

Agent : A K SHRIVASTAVA, DIRECTOR  
 ACC Ltd., Madukkarai Cement  
 Works, MADUKARAI COIMBATORE  
 TAMIL NADU  
 Phone: 0422-2912202  
 FAX : 0422-2622286

## Mining Engineer

Name : Mooli Madhu Mohan Reddy, Full Time  
 Qualification : B.TECH-MINING  
 Appointment/ : 21/03/2022  
 Termination date

## Geologist

Name : K.Elansuriyan, Full Time  
 Qualification : M Sc Geology  
 Appointment/ : 21/03/2022  
 Termination date

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

## 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 49.285 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 and 19 boreholes were drilled during 2015 by State Govt.	So far 19 boreholes have been drilled with 1605 meterage in the lease.
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 200m grid interval.
1e	Balance reserve as on 01/04/20	Limestone & Marl as on 01.04.2023 Proved Mineral Reserves (111) = 6.304 million tons Feasibility Mineral Resources (211) = 9.26 million tons Inferred Mineral Resources (333) = 8.82 million tons	Limestone & Marl as on 01.04.2023 Proved Mineral Reserves (111) = 6.332 million tons Feasibility Mineral Resources (211) = 9.26 million tons Inferred Mineral Resources (333) = 8.82 million tons	The available grade of Limestone & Marl 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 unconformably 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	During 2022-2023, working proposal was in ML-1 to 3.	Working was not carried out as per proposal. Working depth has not reached as per the proposal	Violation has been issued under Rule 11(1)
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil - 1 Bench Overburden - 3 Benches Minerals - 3 Benches	Topsoil - 1 Bench Overburden - 3 Benches Minerals - 3 Benches	Nil
2c	Stripping ratio or ore to OB ratio	1 : 4.65	1 : 1.58	Stripping Ratio deviation is due to less development.
2d	Quantity of topsoil generation in m3	73721 m3 of topsoil has proposed during 2022-2023	69448 m3 of topsoil has generated.	Topsoil has dumped separately.
2e	Quantity of overburden generation in m3	During 2022-2023 it is proposed to remove 633398 m3.	626157 m3 of waste generation in 2022-2023	OB is used for Dumping.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	69448 m3 of Topsoil has generated against 73721 m3 tons of proposal during 2022-2023	626157 m3 of waste has generated against 633398 m3 of proposal during 2022-2023	Ore to OB ratio has reduced due to less development has excavated.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Production was proposed in between ML-1 to 3 of lease area.	Productions are not carried out as per proposal.	Violation has pointed out under Rule 11(1)
3b	Quantity of ROM mineral production proposed	The total target of ROM Production proposed was 273614 tons during 2022-2023.	Achieved ROM Production is 273441 tons during 2022- 2023.	Nil
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 6m was proposed in Mineral.	As per proposal benches are formed.	Nil
3m	Total area covered under excavation/pits	14.58 hect area is proposed for Pit during 2022-2023	9.452 hect areas are under Pit only.	Due to delay in opening of mines.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 4.65	1 : 1.58	Stripping Ratio deviation 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 = 14.58 hect Dump = 10.63 hect Road = 0.66 hect	Land use Pattern as on 01.04.2023. Mines = 9.45 hect Dump = 6.65 hect Road = 0.66 hect	Due to delay in opening of mines.
3p	Production of ROM mineral during the last five year period as applicable	2022-2023 = 273614 tons 2021-2022 = Nil	2022-2023 = 273441 tons 2021-2022 = Nil	Mines operation commenced on 14.02.2022
3q	General remarks of inspecting officers on method of mining etc.	Production was proposed in between ML-1 to 3 of lease area.	Achieved ROM Production is 273441 tons during 2022- 2023 against proposal of 273614 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 Topsoil, 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 to dump topsoil from ML-2 to 4 and OB dump from ML-1 to 5 during 2022-2023.	As per proposal dumping is carried out during 2022-2023.	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.	One Topsoil dump and one OB dump.
4e	Number of active and alive dumps.	Active Dump = 2 Alive Dump = Nil	As per proposal 2 active dumps are present within lease area.	1 Topsoil dump and 1 OB dumps
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.	Garland drainage is proposed.	As per proposal Garland drain are constructed.	Garland drainage has made along the dump toe & safety barrier.
4i	Length of Retaining wall or garland drain all along dumps	500m of Garland drainage is proposed.	540m 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	It is proposed to dump topsoil from ML-2 to 4 and OB dump from ML-1 to 5 during 2022-2023.	Existing settling ponds are desilted.	540m 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	1000 saplings proposed in safety zone and waste land for 2022-2023	Total 4100 saplings has achieved during 2022-2023 along safety zone and waste area.	Cumulatively 4750 saplings have been planted upto 2022-2023.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Proposed 0.40 hect in safety zone and waste land for 2022-2023	1.64 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	Green Belt development along 7.5m safety barrier.	Plantation has been done as per proposal 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.	1000 saplings have proposed during 2022-2023 along dump and waste area.	Total 4100 saplings has achieved during 2022-2023 along dump and waste area.	Plantation has been done as per proposal along the safety barrier and waste area.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	The total target of ROM Production proposed was 273614 tons during 2022-2023.	Achieved ROM Production is 273441 tons during 2022- 2023.	Nil
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.	273441 tons of ROM has been achieved during 2022- 2023 against 273614 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)	73721 m3 of topsoil has proposed during 2022-2023	69448 m3 of topsoil has generated.	Separate topsoil dump is there for storage only.
8b	Concurrent use or storage of topsoil	Storage of topsoil	Storage of topsoil	69448 m3 of topsoil has been removed and separately store during 2022-2023.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There is proposal for dumping of Topsoil, 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)	1000 saplings have proposed during 2022-2023 along dump and waste area.	Total 4100 saplings has achieved during 2022-2023 along dump and waste area.	Plantation has been done as per proposal 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 = 9.45 hect Dump = 6.65 hect Road = 0.66 hect	Landuse Pattern is filled as per approved Mining Plan	Nil
9d	Scrutiny of Annual return on afforestation	Lessee has planted 4100 saplings during 2022-2023.	Plantation has been done as per proposal along the safety zone and waste area.	Cumulatively 4750 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 273441 tons of ROM and same 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 not given	It is advice to fill the fixed assets.	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)	12/10/2023			

**Date :**

**(G.SORNADURAI KANNAN)**

Indian Bureau of Mines