

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

**MCDR INSPECTION REPORT**

**Chennai regional office**

**Mine file No :** TN/PT/LST-18.MDS

**Mine code :** 38TMN38002

- (i) Name of the Inspecting : **T003** ) **S.THIRUNAVUKKARASU**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : **MR.SENTHIL KUMAR -MINES MANAGER**  
Official with  
Designation
- (iv) Date of Inspection : 25/06/2019
- (v) Prev.inspection date : 17/06/2018

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **ANANDAVADI**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address  
State : TAMIL NADU  
District : ARIYALUR  
Village : ANADAVADI  
Taluka : SENDURAI  
Post office : CHINNA ANANDAVADE  
Pin Code : 621718  
FAX No. :  
E-mail :  
Phone :
- (f) Police Station :
- (g) First opening date : 01/09/2001
- (h) Weekly day of rest : SUN
2. Address for : M/S TAMILNADU CEMENT CORPORATION LTD  
correspondance
3. (a) Lease Number : TMN0772  
(b) Lease area : 110.68  
(c) Period of lease : 30  
(d) Date of Expiry : 13/07/2030
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : TAMILNADU CEMENT CORPORATION LTD.  
 735, ANNA SALAI, P.B.No:  
 5205, LLA BUILDING,  
 CHENNAI CITY TAMIL NADU  
 Phone:044-28525461, 28526321, 28571426  
 FAX :044-28523991

Owner : M/S TAMILNADU CEMENT CORPORATION LTD  
 PERAMBALUR TAMIL NADU  
 Phone:  
 FAX :

Agent : K.VEERAPPAN  
 PERAMBALUR TAMIL NADU  
 Phone:  
 FAX :

## Mining Engineer

Name : R. jayaprakash Narayanan,Part Time  
 Qualification : BE-Mining  
 Appointment/ : 13/08/2014  
 Termination date

## Geologist

Name : S.Prasad,Full Time  
 Qualification : Msc (Geology)  
 Appointment/ : 21/07/2011  
 Termination date

## Geologist

Name : R.MUTHAIYAN,Full Time  
 Qualification : M.SC GEOLOGY  
 Appointment/ :  
 Termination date

## Manager

Name : TSantha kumar  
 Qualification : B E (Mining)  
 Appointment/ : 23/08/2007  
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	06/10/2006
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	25/04/2012
	:	Mining Scheme rule 12 MCDR1988	22/01/2016
	:	MP modif under 17(3) MCR 2016	24/07/2018

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	5 Nos od BH	Nil	Violation issued
1b	Exploration over lease area for geological axis 1 or 2	NIL	NA	MINE IS FULLY EXPLORED UNDER G1 LEVEL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NA	MINE IS FULLY EXPLORED UNDER G1 LEVEL
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NOT APPLICABLE	MINE IS FULLY EXPLORED UNDER G1 LEVEL
1e	Balance reserve as on 01/04/20	--	13.04 Million Tons	nil
1f	General remarks of inspecting officers on geology, exploration etc	NIL	NIL	The mine is fully exlord in G1 level

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	SL-6 RL- 43.00m to 20.00m	SL-5 to SL-6 RL- 43.00m to 20.00m	As per thr proposal
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches for Topsoil and Overburden	Maintained separate benches in Topsoil and Overburden	NIL
2c	Stripping ratio or ore to OB ratio	1 : 0.36	1 : 0.36	NIL
2d	Quantity of topsoil generation in m3	33500 m3	34558 m3	NIL
2e	Quantity of overburden generation in m3	351745 m3	406324 m3	NIL

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	---	---	development of pit is found to be satisfactory
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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one	one	No deviation
3b	Quantity of ROM mineral production proposed	1699832 Tons	1605544.97 Tons	with in the limite
3c	Recovery of sailable/usable mineral from ROM production	100 % mineral to be recovered on ROM basis	100 % mineral to be recovered on ROM basis	NIL
3d	Quantity of mineral reject generation	NIL	Not Applicable	100 % ROM recoverd
3e	Grade of mineral rejects generation and threshold value declared.	NIL	Not Applicable	nil
3f	Quantity of sub grade mineral generation.	NIL	Not Applicable	consumed on ROM (Run of Mine) basis
3g	Grade of sub grade mineral generation	NIL	NA	consumed on ROM (Run of Mine) basis
3h	Manual / Mechanised method adopted for segregating from ROM	Not Applicable	Not Applicable	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Applicable	Not Applicable	NIL
3j	Provision of drilling and blasting in mineral benches	Yes, Proposed to carryout Drilling & Blasting on contingency condition	Drilling & Blasting on contingency condition	NIL

3k	Provision of mining machineries in mineral benches	Xcentric Ripper - 1Nos Excavator - 2 No's Tipper - 7 No's Water Tanker- 1 No Dozer -1 No.	Machineries as proposed is deployed for mining operation	As per the proposal
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	height of 8.0 meters	height of 8.0 meters	NIL
3m	Total area covered under excavation/pits	29.40.0 ha	29.40.0 ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.36	1 : 0.36	NIL
3o	Total area put in use under different heads at the end of year	Area under mining 28.75.0 Storage for top soil 1.44.0 Overburden / dump 9.10.0 Mineral storage 2.20.0 Infrastructure (workshop, administrative building) 0.05.0 Roads 2.50.0 Railways Nil Green belt 8.90.0 Tailing pond Nil Effluent treatment plant Nil Mineral separation plant Nil Township area Nil Area to be Backfilled 6.88.0 Others to be specified 3.78.0 Total 63.60.0	Area use at the end of year 2018-19 (in Ha) Area under mining 23.17.0 Storage for top soil 1.44.0 Overburden / dump 7.10.0 Mineral storage 0.35.0 Infrastructure Roads 2.50.0 Railways Nil Green belt 6.00.0 Tailing pond Nil Effluent treatment plant Nil Mineral separation plant Nil Township area Nil Area to be Backfilled 0.70.0 Others to be specified 22.14.0 Total 63.60.0	NIL

3p	Production of ROM mineral during the last five year period as applicable	2014-15 1701340 2015-16 1693520 2016-17 1699514 2017-18 1696123 2018-19 1699832	2014-15 855727 2015-16 1524982 2016-17 1278759 2017-18 996401 2018-19 1605545	with in the limite
3q	General remarks of inspecting officers on method of mining etc.	---	---	method of mining is found to be syatamatic

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	OB proposed as per rule 32 & 33	Topsoil removed has been stored on the Northern side. OB removed has been used for backfilling on the South Western side	NIL
4b	Location of topsoil, OB and mineral reject dumps	Top soil dump : North side of Mining lease OB dump: North side of Mining lease	Top soil dump : North side of Mining lease OB dump: North side of Mining lease .	as per the proposal
4c	Number of dumps within lease area and outside of lease area	Within the lease area - 2	Within the lease area - 2	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Northern side	Northern side	NIL
4e	Number of active and alive dumps.	2 nos. of active Dumps	2 nos. of active Dumps	nil
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	Nil	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain around periphery of dump	Done as per the proposal	nil

4i	Length of Retaining wall or garland drain all along dumps	Length of Garland drain all along dump : 1100 X 3 X 2 meters	1100m lengthy garland drainage has been done all along the dumps	nil
4j	Number of settling ponds	2 No's of settling pond has been proposed on the South eastern side of the mining lease boundary	2 No's of settling pond has been proposed on the South eastern side of the mining lease boundary	nil
4k	Specific comments of inspecting officer on waste dump management	---	---	waste dump management is 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.	Part of the area on the southern side is proposed to be excavated. After exhaustion, we propose to backfill the southern side pit	Part of the area on the southern side has been excavated and backfilling under progress on the south western side	As per the proposal
5b	Area under backfilling of mined out area	1.50.0 Hect.	0.90.0 Hect.	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	After exhaustion, we propose to use the Topsoil for green belt development on the backfilled area as a part of Restoration/Rehabilitation	Topsoil stored on the Northern side will be used for green belt development after backfilling.	NIL
5d	Total area fully reclaimed and rehabilitated	NIL	Not Applicable	NIL

5e	General remarks of inspecting officers on backfilling and reclamation etc.	----	---	backfilling, reclamation is found satisfactory.
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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	NIL
6b	Area available for rehabilitation (ha) .	Nil	Not applicable	
6c	afforestation done (ha).	5000 Nos	5000 Nos	NIL
6d	No. of saplings planted during the year	500	500	nil
6e	Cumulative no .of plants	--	86000 No's	NIL
6f	Any other method of rehabilitation	NIL	not applicable	NIL
6g	Cost incurred on watch and care during the year	NIL	Rs.4.0 Lakhs	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	Not applicable	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	Not applicable	NIL



6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	NIL	Not applicable	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	Not applicable	nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NIL	Not applicable	nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation			
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	nil	Not applicable	Not Applicable
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	NIL	Not Applicable	Not Applicable
6p	Compliance of environmental monitoring (core zone and buffer zone)	Propose to carryout Environmental monitoring both Core and Buffer Zones	M/s Ensyscon Environmental laboratory, Chennai has been engaged for monitoring Environmental Data on Quarterly basis.	NIL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	---	----	PMCP compliance & progressive closure operations is found satisfactory

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Mineral Conservation:

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Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1699832 Tons	1605544.97 Tons	With in the limite
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NIL	Not Applicable	Not Applicable
7c	Different grade of mineral sorted out at mines.	NIL	Not Applicable	Not Applicable
7d	Any beneficiation process at mines	NIL	Not Applicable	Not Applicable
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	----	--	Mineral conservation & beneficiation is found satisfactory

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Propose to be used for green belt development	Used for green belt development	NIL
8b	Concurrent use or storage of topsoil	After exhaustion, we propose to use the Topsoil for green belt development on the backfilled area as a part of Restoration/Re habilitation.	Topsoil stored on the Northern side will be used for green belt development after backfilling	as per the proposal
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps of over burden is proposed	Separate dumps of over burden is being maintained on the North side	NIL

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed for backfilling	Backfilling under progress on the south western side	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	Not applicable	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	----	----	aesthetic beauty in and around mines area is found good
8g	Survival rate			
8h	Water sprinkling on roads to control airborne dust			
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			

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Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	submitted	A.R. submitted upto March- 2018	submitted in time
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Proposed	Shri.G.Magesh Mines manager.Kalluri Surrendar Mining Engineer,	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	The land use furnished in appropriate column/table	The information was found correct	The information was found correct
9d	Scrutiny of Annual return on afforestation	The information was furnished in appropriate column/table	The information was found correct	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	The information was furnished in appropriate column/table	The information was found correct	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	The information was furnished in appropriate column/table	The information was found correct	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The information was furnished in appropriate column/table	The information was found correct	
9h	Scrutiny of Annual return on fixed assets	Given	The information was found correct	
9k	Scrutiny of Annual return on mining machineries	---	Xcentric Ripper - 1Nos Excavator - 2 No's Tipper - 7 No's Water Tanker- 1 No Dozer -1 No.	

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**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
MCDR17 Rule 11(2)	17/07/2019		MCDR17 Rule 11(2)	17/07/2019	
MCDR17 Rule 37(2)	17/07/2019		MCDR17 Rule 37(2)	17/07/2019	
MCDR17 Rule 55(1)(3)	17/07/2019		MCDR17 Rule 55(1)	17/07/2019	

**Date :**

**(S. THIRUNAVUKKARASU)**

Indian Bureau of Mines