

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/TCL/LST-9

Mine code : 38TMN38018

- (i) Name of the Inspecting : **M017**) **Matiul Islam**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : K S Kumar-Mgr, R R Kumar-Asst Mgr, S Prasad-Geologist
Official with
Designation
- (iv) Date of Inspection : 20/09/2023
- (v) Prev.inspection date : 02/08/2014

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KALLANKURICHI-(GO.456)194**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : TAMIL NADU
- District : ARIYALUR
- Village : KALLANKURICHI
- Taluka : ARIYALUR
- Post office : KALLANKURICHI
- Pin Code : 621705
- FAX No. : 04428523991
- E-mail : gri@tancem.com
- Phone : 04428525461
- (f) Police Station : KAIRLABAD,ARIYALUR
- (g) First opening date : 01/06/1978
- (h) Weekly day of rest : SUN
2. Address for : NO:735,ANNA SALAI,
correspondance PB NO:5205,
CHENNAI- 600 002.
3. (a) Lease Number : TMN0132
- (b) Lease area : 194.17
- (c) Period of lease : 20
- (d) Date of Expiry : 12/11/2005
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : M/S TAMILNADU CEMENTS CORPN LTD.
 735 , ANNA SALAI LLA
 BUILDINGS, II FLOOR CHENNAI
 CHENNAI CITY TAMIL NADU
 Phone:
 FAX :

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

Geologist

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

Manager

Name : S SABHARATHINAM
 Qualification : MSC(GEO0, FMCC
 Appointment/ : 13/02/2012
 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 11/11/2015
 Plan/Scheme of Mining : MP review under 17(1) MCR 2016 15/09/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	9 Boreholes proposed for the year 2021-22	19 boreholes were drilled during the year 2022-23	Form I submitted to IBM. Form J maintained at mines.
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	As proposed
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	Rs 14,28,000/-	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Nil
1e	Balance reserve as on 01/04/20	19.00 Million Tonnes	19.33 Million Tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Geology & Exploration of the lease was found satisfactory.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Blocks 1 & 3	Block 1 & 3	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate Benches Proposed for topsoil & Mineral	Separate Benches maintained as proposed	No OB removal proposed or carried out
2c	Stripping ratio or ore to OB ratio	1:00	1:00	-do-
2d	Quantity of topsoil generation in m3	97,011 cu.m.	Nil	Operations were restricted within non-virgin area due to reduced production requirements than proposed.

2e	Quantity of overburden generation in m3	Nil	Nil	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	The lease is devoid of overburden. No issues were observed with the development of the pit w.r.t type of deposit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two pit working proposed	Two pits worked during the year	As proposed
3b	Quantity of ROM mineral production proposed	13,42,912 Metric Tonnes	10,15,588.93 Metric Tonnes	Less production due to less requirement.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	As proposed.
3d	Quantity of mineral reject generation	No proposal	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	Nil
3f	Quantity of sub grade mineral generation.	No proposal	Nil	Nil
3g	Grade of sub grade mineral generation	NA	NA	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized Method	Mechanized Method	Nil

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	Non-conventional mining without drilling & blasting proposed	Non-conventional mining using Excavator & Rock-Breaker practiced	As proposed
3k	Provision of mining machineries in mineral benches	Excavator, Rock Breaker, Dozer, Tipper, Water Tanker	Excavator, Rock Breaker, Dozer, Tipper, Water Tanker	-do-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Limestone Bench height 6 m & Width 6m	Limestone Bench height 6 m & Width 6m	-do-
3m	Total area covered under excavation/pits	82.2.0 Ha (Till 2024-25)	75.57 Ha (Till 2022-23)	-do-
3n	Ore to OB ratio for the pit/mine during the year.	1:00	1:00	-do-
3o	Total area put in use under different heads at the end of year	90.93.5 Ha (till 2024-25)	87.15.5 Ha (Till 2022-23)	-do-
3p	Production of ROM mineral during the last five year period as applicable	2020-2021 7,85,452 2021-2022 13,37,568 2022-2023 13,42,912	2020-2021 NIL 2021-2022 NIL 2022-2023 10,00,588.74 2023-2024 5,03,631.260 (Till August)	Within limits
3q	General remarks of inspecting officers on method of mining etc.	-	-	Method of mining was found satisfactory.

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of top soil proposed	Separate dumping of top soil carried out	No OB or MR generation envisaged
4b	Location of topsoil, OB and mineral reject dumps	Topsoil dump - Northern side of Blocks-1 & 3	Topsoil dump -Northern side of Block-1	Block 3 not worked due to less production requirement
4c	Number of dumps within lease area and outside of lease area	Two dumps proposed inside the lease area (One each in Blocks 1 & 3)	One dump maintained in Block 1	-do-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	-do-
4e	Number of active and alive dumps.	Two dumps proposed	Only one dump	-do-
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.	No proposal	Nil	Top soil dumps are of temporary nature
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	Nil
4j	Number of settling ponds	Nil	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	No OB is generated in the lease area. Only temporary top soil dumps are maintained.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	Nil	Backfilling will be proposed after complete extraction of mineral from benches
5b	Area under backfilling of mined out area	Nil	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NA	NA	Nil
5d	Total area fully reclaimed and rehabilitated	NA	NA	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Backfilling & Reclamation have not been proposed or carried out during the plan period.

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).	Yes	Submitted	Along with AR
6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	0.30 Ha	5.85 Ha	As proposed
6d	No. of saplings planted during the year	330 nos saplings proposed	4,050 nos saplings planted	-do-
6e	Cumulative no .of plants	1,650 nos (proposed during current plan period)	4,050 nos	No afforestation carried out in previous years of plan period.
6f	Any other method of rehabilitation	Nil	Nil	Nil

6g	Cost incurred on watch and care during the year	Rs 33,000/-	Rs 1,41,750/-	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	NA	NA	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Nil	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Nil	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NA	NA	Nil

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodic Monitoring proposed	Periodic monitoring being carried out	As proposed
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	Only afforestation was proposed & carried out as progressive closure operation. PCMP Compliance was found satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No sorting proposed	No sorting carried out	Entire ROM generated is consumed by Captive Cement Plant
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	Nil
7c	Different grade of mineral sorted out at mines.	NA	NA	Nil
7d	Any beneficiation process at mines	No proposal	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	No issues were observed with mineral conservation. No beneficiation was proposed or carried out.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal of top soil proposed	Separate removal of top soil carried out	Nil
8b	Concurrent use or storage of topsoil	Concurrent use of top soil proposed	Concurrent use of top soil carried out	Used in afforestation activities
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No OB/Waste/Rejects/Fines generation envisaged in plan period.	No OB/Waste/Rejects/Fines generated in plan period.	Lease is devoid of OB/Waste/Rejects/Fines
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	Rehabilitation will be carried out over mined out benches upon complete exhaustion of mineral
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1,650 nos saplings proposed to be planted cumulatively during current plan period	4,050 nos sapling planted cumulatively during current plan period	Nil
8g	Survival rate	80%	80%	As proposed
8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out regularly	-do-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	The aesthetic beauty in and around mines area was found satisfactory

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Given	Submitted in time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	K.Senthil Kumar Mines Manager R. RajKumar Mining Engineer S. Prasad Geologist	Given in Part I, Sl 7-9	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(i) Already exploited and abandoned by opencast (O-C) mining 0.000 3.540 3.540 (ii) Covered under current (O-C) Workings 0.000 75.570 75.570 (iii) Reclaimed-rehabilitated 0.000 3.540 3.540 (iv) Used for waste disposal 0.000 0.000 0.000 (v) Occupied by plant, buildings, residential, welfare buildings and roads 0.000 11.740 11.740	Given in Part I, Sl 12	Nil
9d	Scrutiny of Annual return on afforestation	i) Number of trees planted during the year 4050 0 ii) Survival rate in percentage 80 0 iii) Total no. of trees at the end of the year 3240 0	Given in Part V, Sl 5	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Given in Part V, Sl 3	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Grades Opening stock at mine-head Production Despatches from mine-head Closing stock at mine-head Cement 8518.180 1015588.930 1000589.010 23518.100	Given in Part VI, Sl 3(ii)	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price & Cost of production - Rs 220.86/- per tonne	Given in Part VI, Sl 3 & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets Rs 15,37,66,981/-	Given in Part II A Capital Structure	Nil

9k	Scrutiny of Annual return on mining machineries	Type of machinery Capacity of each type of machinery Unit (in which capacity is reported) No. of machinery Electrical Non-electrical (specify) Used in opencast underground (specify) SHOVEL (HYDRAULIC) 0.900 CUM 2 Non Electrical Opencast OTHER HEM MACHINERY 30.000 2 Non Electrical Opencast TIPPER 25.000 CUM 8 Non Electrical Opencast DOZER 90.000 HP 1 Non Electrical Opencast WATER TANKER 130.000 LITRE 1 Non Electrical Opencast	Given in Part V, Sl 6	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

Date :

(Matiul Islam)

Indian Bureau of Mines