

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/TKD/LST-19.Mds

Mine code : 38TMN31011

- (i) Name of the Inspecting : **M017**) **Matiul Islam**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Mr. K.SARAVANAN, (DGM-Mines)
Official with
Designation
- (iv) Date of Inspection : 08/07/2023
- (v) Prev.inspection date : 23/08/2022

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SIVALARPATTI129.72 HA**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : TAMIL NADU
- District : THOOTHUKUDI (TUTICORIN)
- Village : SIVALARPATTI
- Taluka : VILATHIKULAM
- Post office : SIVALARPATTI
- Pin Code : 628905
- FAX No. : 04562-256268
- E-mail : vssm@ramcocements.co.in
- Phone : 04562-256268
- (f) Police Station : Pudur
- (g) First opening date : 18/02/2022
- (h) Weekly day of rest : SUN
2. Address for : Sivalarpatti,
correspondance Pudur post,
Virudhunagar district
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 LTD
 AURAS CORPORATE CENTRE 98-
 A,RADHAKRISHNAN ROAD
 MYLAPORE,CHENNAI CHENNAI
 CITY TAMIL NADU
 Phone:
 FAX :

Owner : P.R.Venketrama Raja
 Ramasamiraja
 Nagar,Virudhnagar, Chennai-
 626204 VIRUDHUNAGAR TAMIL
 NADU
 Phone: 04562 256201 -
 FAX : 04562 256268

Agent : S.Ramalingam
 Ramasamiraja Nagar,
 Virudhnagar Pin:626204
 VIRUDHUNAGAR TAMIL NADU
 Phone: 04562 256201 - 203
 FAX : 04562 256268

Mining Engineer
 Name : V.MAHESHA,Full Time
 Qualification : Dip in MINING
 Appointment/ : 13/05/2022
 Termination date

Geologist
 Name : R.SENTHILKUMARAN,Full Time
 Qualification : MSc GEOLOGY
 Appointment/ : 18/02/2022
 Termination date

Manager
 Name : K.SARAVANAN
 Qualification : BE MINING
 Appointment/ : 18/02/2022
 Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 23/05/2016
 Plan/Scheme of Mining : MP review under 17(1) MCR 2016 19/11/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Potentially mineralised area already fully explored upto G1 Level.
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	-do-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	-do-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	-do-
1e	Balance reserve as on 01/04/20	2.281 Mil.Tons	2.281 Mil.Tons	-do-
1f	General remarks of inspecting officers on geology, exploration etc	-	-	The geology & exploration of the lease were found satisfactory.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ML-1.5 to 4 Above + 53 RL	ML-1.5 to 4 Above + 53 RL	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed	Separate benches maintained	-do-
2c	Stripping ratio or ore to OB ratio	1 : 0.93	1 : 0.93	-do-
2d	Quantity of topsoil generation in m3	19,206 cu.m.	13,556 cu.m.	Partially stacked & partially utilised for afforestation
2e	Quantity of overburden generation in m3	71,009 cu.m.	51,841 cu.m.	Violation pointed out

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Violation pointed out for deviation from development proposal.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	ML-1.5 to 4	ML-1.5 to 4	As proposed
3b	Quantity of ROM mineral production proposed	2,29,050 tonnes	1,59,423.78 tonnes	Violation pointed out
3c	Recovery of sailable/usable mineral from ROM production	90%	100%	Entire ROM consumed by blending
3d	Quantity of mineral reject generation	10%	Nil	-do-
3e	Grade of mineral rejects generation and threshold value declared.	<35 CaO	Nil	-do-
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	NA	NA	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	Nil

3j	Provision of drilling and blasting in mineral benches	YES. Deep hole drilling and blasting is proposed.	Deep hole drilling and blasting is practiced. Holes are drilled upto 10 m depth with a spacing of 3.5-4 m. Hole dia 115 mm.	Controlled blasting by using Slurry Cartridge, NONEL & Delay Detonators.
3k	Provision of mining machineries in mineral benches	Back Hoe 0.900 Cum - 1, Tipper 12 Cum -2	Back Hoe 0.900 Cum - 1, Tipper 12 Cum -2	As proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	9 m height benches proposed both in Ore and OB.	9 m height benches maintained both in Ore and OB.	-do-
3m	Total area covered under excavation/pits	5.72 Ha	3.55 Ha	Within limits
3n	Ore to OB ratio for the pit/mine during the year.	1:0.93	1:0.93	As proposed
3o	Total area put in use under different heads at the end of year	66.17 Ha	55.89 Ha	Afforested Area-5.37 Ha.
3p	Production of ROM mineral during the last five year period as applicable	2018-19=2,29,500 2019-20=2,31,750 2020-21=2,36,250 2021-22=2,29,500 2022-23=2,29,050 2023-24=2,29,500	2018-19= Nil 2019-20= Nil 2020-21= Nil 2021-22= 39,861.36 2022-23=1,59,423.78 2023-24=71,057.36 (upto Jun-23)	Within limits
3q	General remarks of inspecting officers on method of mining etc.	-	-	Violation pointed out for deviation from development & production proposals for the year 2022-23.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumps proposed	Separate dumping carried out	As proposed
4b	Location of topsoil, OB and mineral reject dumps	Topsoil Dump on the South Side of ML 3.0	Topsoil Dump on the South Side of ML 3.0	-do-
4c	Number of dumps within lease area and outside of lease area	Inside ML-6 Nos	Inside ML-6 Nos	-do-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of Ultimate Pit Limit	Outside of Ultimate Pit Limit	-do-
4e	Number of active and alive dumps.	2	2	-do-
4f	Number of dead dumps.	4	4	-do-
4g	Number of dumps established.	3	3	-do-
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil	Nil
4i	Length of Retaining wall or garland drain all along dumps	NA	Nil	Nil
4j	Number of settling ponds	No proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was 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.	No proposal	Nil	All benches active

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)	Nil	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	No backfilling or reclamation proposed or carried out.

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).	-	Submitted in time	Submitted along with AR
6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	Nil	Nil	Nil
6d	No. of saplings planted during the year	Nil	Nil	Nil
6e	Cumulative no .of plants	Nil	Nil	Nil
6f	Any other method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch and care during the year	Nil	Nil	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	Nil	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Nil	Nil	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	3800 nos	3900 nos	As proposed
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	4.65 ha	4.65 ha	-do-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation	Afforestation	-do-

6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical monitoring proposed	Periodic monitoring carried out	All parameters within norms
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	PMCP Compliance & Progressive Closure Operations were 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	As proposed
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Nil	Nil	Nil
7c	Different grade of mineral sorted out at mines.	NA	NA	Nil
7d	Any beneficiation process at mines	Nil	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	No issues were observed with mineral conservation or beneficiation. Entire ROM is consumed by blending.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal proposed	Separate removal carried out	As proposed

8b	Concurrent use or storage of topsoil	Concurrent use proposed	Topsoil used concurrently in afforestation	-do-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps proposed for OB and topsoil.	Separate dumps maintained for OB and topsoil.	-do-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	No backfilling proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	-do-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	3800 nos sapling plantation proposed for the year	3900 nos saplings planted during the year	So far 33400 No. of Neem, Pungai & Vagai Saplings Planted by covering 5.37 Ha.
8g	Survival rate	Not specified	90%	Nil
8h	Water sprinkling on roads to control airborne dust	Proposed	10 KL Water Tanker deployed	Water Tanker is being used for Dust Suppression
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
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	Shri.V.Mahesha (Mining Engineer), Shri.V.C.Shunmugam (Geologist)	Given in Part I, Sl no 7-9	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	3.55 Ha. Under workings, 50.88 Ha. for waste diposal, 1.46 Ha for Road, etc, 76.22 Ha virgin and green belt area as per AR 2022-23.	Given in Part I, Sl no 12	Nil
9d	Scrutiny of Annual return on afforestation	4.65 Ha (3800 Nos)	Given in Part V, Sl 5. Trees planted & Survival rate	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	159423.78 tonnes of ROM	Given in Part VI, Sl 1 & 2	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price @ Rs.566.60	Given in Part VI, Sl 2 & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Rs.8,97,71,512 /-	Given in Part II A Capital Structure	Nil
9k	Scrutiny of Annual return on mining machineries	Back Hoe 0.900 Cum - 1, Tipper 12 Cum -2	Given in Part V, Sl 6 Type of Machinery	Nil

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)	26/07/2023			

Date :

(Matiul Islam)

Indian Bureau of Mines