

INDIAN BUREAU OF MINES

MINERAL DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Chennai Regional Office

Mine file No. TN/TKD/LST-4-MDS		Mine Code: 38TMN31008
	Name of the inspecting officer designation	Shri. Matiul Islam Assistant Controller of Mines
	Date of inspection:	07-12-2024
	Accompanied mine official and designation	Mr. K.Saravanan (SDGM-Mines) – Mine Manager Mr. Godavarthy Umasankar – Mining Engineer Mr.R.Rengaraj – AGM Geology
<b>PART-I: General Information</b>		
S.N.	Particulars	Details
1	Name of the Mine	SIVALARPATTI LIMESTONE MINE - LEASE IV
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	7.34.0
3	Minecode	38TMN31008
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/638/2011
5	Name of the lessee, Address, phone, email and fax number	The Ramco Cements Limited, Ramasamy Raja Nagar, Virudhunagar District, Tamilnadu Phone: 04562-256201, 202 and 203 Email: saravanankmtd@ramcocements.co.in
6	Village	Sivalarpatti
7	Taluka/Mandal	Vilathikulam
8	District	Thoothukudi
9	Pin code	626113
10	State	Tamilnadu
11	Post office	Pudur
12	Nearest police station	Pudur
13	Nearest Railway station	Aruppukottai
14	Date of Grant of Mining Lease	20.09.1993
15	Date of Execution	07-02-1994
16	Date of opening of Mine	06.02.1999
17	Date of first Renewal, if applicable and its period & expiry	G.O.Ms.No.4795 dt. 22.08.2014 / 20 Years from 07.02.1999 to 06.02.2019
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	As per the section 8-A (5) of New MMDR Act-2015, The Lease period is extended upto 06.02.2044 vide GO.No.106 dated 18.09.2018.  Transfer of Mining Lease granted vide G.O.Ms.No.145 dt. 19.07.2019 from M/s Lovely Chemicals to M/s. The Ramco Cements Limited
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri. P.R.VENKETRAMA RAJA, Chairman & Managing Director, The Ramco Cements Limited, Auras Corporate Centre, 98-A, Dr.Radhakrishnan Salai, Mylapore, Chennai-600004. Phone:044 28478666 Date of Appointment: 01-12-2020
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri. S.LAKSHMANAN, Assistant Vice President (Mfg), The Ramco Cements Limited, Ramasamy Raja Nagar, Virudhunagar District. Phone: 04562-256201, 202and 203 Email: sln@ramcocements.co.in Date of Appointment: 18.05.2024
22	Name of the Mines Manager with Address, phone,	Shri. K.SARAVANAN,

	email, fax number and date of appointment in mines	Sr.DGM-Mines, The Ramco Cements Limited, Ramasamy Raja Nagar, Virudhunagar District. Phone: 04562-256201, 202 and 203 Email: saravanankmtd@ramcocements.co.in Date of Appointment: 04-07-2022
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri. GODAVARTHY UMASANKAR, Assistant Manager-Mines, The Ramco Cements Limited, Ramasamy Raja Nagar, Virudhunagar District. Phone: 04562-256201, 202 and 203 Email: saravanankmtd@ramcocements.co.in Date of Appointment: 04-07-2022
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	M.ASWIN, Geologist The Ramco Cements Limited, Ramasamy Raja Nagar, Virudhunagar District. Phone: 04562-256201, 202 and 203 Email: rengarajb@ramcocements.co.in Date of Appointment: 22-04-2024
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	TN/VOC/MP/LST -1028.MDS Dt. 14-10-1997
26	Date of Approval Review of Mining Plan/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	TN/TKD/LST/ROMP-1693-MDS Dt: 21-12-2022 Period 2023-24 to 2027-28
27	Mineral(s) granted in lease and proved for mining	LIMESTONE
28	Method of Mining(Open cast,Underground)	OPENCAST
29	Category (Fully Mechanised, Others or Manual)	Category "A" Fully Mechanised
30	Captive/Non Captive	CAPTIVE

Exploration (2023 to 2024)

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Potentially mineralized area already fully explored.
1b	Exploration over lease area for Geological axis 1 or 2.	G-1	G-1	Nil
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Nil
1e	Balance reserves as on 01.04.2024 (111+121 Category)	74558 Tons	74558 Tons	Reserves as on 01.04.2024
1f	General comments of inspecting officer on geology, exploration etc.	-	-	Geology & Exploration of the lease were found satisfactory

Development (2023 to 2024)

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	ML-21 Above + 48 RL	ML-21 Above + 48 RL	As proposed
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches proposed	Separate benches maintained	OB -1 Limestone-2
2c	Stripping ratio or ore to OB ratio	1:1.07	1:0.93	Within limit
2d	Quantity of topsoil generation in m <sup>3</sup>	8,142	7,735	Within limit
2e	Quantity of overburden generation in m <sup>3</sup>	46,674	46,207	Within limit
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	-	-	Development of the pit was found satisfactory

Exploitation (2023 to 2024)

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1 No. of Pit ML-20 to 24	1 No. of Pit ML-20 to 24	As proposed
3b	Quantity of ROM mineral production proposed	50,000 Tonnes	49,906.74 Tonnes	Within limit
3c	Recovery of salable/usable mineral from ROM production	100 %	100 %	As proposed
3d	Quantity of mineral reject generation	Nil	NA	Nil
3e	Grade of mineral reject generation and threshold value declared	NA	NA	Nil
3f	Quantity of sub-grade mineral generation	Nil	NA	Nil
3g	Grade of sub-grade mineral generation	Nil	NA	Nil
3h	Manual / Mechanized method adopted for segregating from ROM	Nil	NA	Nil
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Nil	Nil	Nil

3j	Provision of drilling & blasting in mineral benches	Spacing – 3.5 m Burden – 2.5 m Depth – 10 m Dia – 115 mm	Spacing – 3.5 m Burden – 2.5 m Depth – 10 m Dia – 115 mm	Controlled blasting by using Slurry Cartridge, NONEL & Electronic Detonators.
3k	Provision of mining machineries in mineral benches	Excavator -2, Air Compressor-1, Drill-1, Tipper-10	Excavator -1, Tipper-2	Within proposal.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height – 9m Width – 9-12 m	Height – 9m Width – 9-12 m	As proposed
3m	Total area covered under excavation/pits	3.10 Ha	2.30 Ha	Within proposed limit for the plan period
3n	Ore to OB ratio for the pit/mine during the year	1:1.07	1:0.93	Within limit
3o	Total area put in use under different heads at the end of year	3.81 Ha	5.58 Ha	Nil
3p	Production of ROM mineral during last five-year period, as applicable	2020-21=21,616 2021-22=22,267 2022-23=23,449 2023-24=50,000	2020-21= Nil 2021-22=22,248.92 2022-23=23,437.24 2023-24=49,906.74	Within limits
3q	General Remarks of inspecting officer on method of mining etc.	-	-	Method of mining was found satisfactory.

#### Solid Waste Management-Dumping (2023 to 2024)

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dump for OB	Dumping carried out separately for OB.	Topsoil generated has been utilized for afforestation purpose and no mineral reject generated.
4b	Location of topsoil, OB & mineral reject dumps	Dump-1 09°19'18.40" to 09°19'21.70" and 78°08'57.20" to 78°08'59.60" Dump-2 09°19'12.50" to 09°19'14.30" and 78°08'54.70" to 78°08'56.20"	Dump-1 09°19'18.40" to 09°19'21.70" and 78°08'57.20" to 78°08'59.60" Dump-2 09°19'12.50" to 09°19'14.30" and 78°08'54.70" to 78°08'56.20"	As proposed
4c	Number of dumps within lease area and outside lease area	2 Nos (within ML)	2 Nos (within ML)	As proposed
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside Ultimate Pit Limit	Outside Ultimate Pit Limit	As proposed
4e	Number of active & alive dumps	1	1	As proposed
4f	Number of dead dumps	1	1	As proposed
4g	Number of dumps stabilized	1	1	As proposed
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drain proposed	Garland drain provided	Garland drainage maintained around inactive side of dump.
4i	Length of Retaining wall or garland drain all along dump	535 m	500 m	Marginal deviation
4j	Number of settling ponds	No Proposal	Nil	No Proposal
4k	Specific comments of inspecting officer on waste dump management	-	-	Dump management was found satisfactory

**Solid Waste Management – Backfilling (2023 to 2024)**

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No backfilling proposed	Nil	Nil
5b	Area under backfilling of mined out area	Nil	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent use proposed	Top soil used concurrently	Used for afforestation
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	Nil
5e	General Remarks of inspecting officer on backfilling, reclamation etc	-	-	No backfilling or reclamation was proposed or carried out.

**Progressive Mine Closure Plan (2023 to 2024)**

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E (2). Details should be given in the format as given in Annexure-20.	Yes.	Submitted for the year 2023-24	Along with AR
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha)	No Proposal	NA	Nil
6c	Management of worked/mined out benches Afforestation done (ha)	No Proposal	NA	Nil
6d	Management of worked/mined out benches No. of saplings planted during the year	No Proposal	NA	Nil
6e	Management of worked/mined out benches Cumulative no. of plants	No Proposal	NA	Nil
6f	Management of worked/mined out benches Any other specific method of rehabilitation	No Proposal	NA	Nil
6g	Management of worked/mined out benches Cost incurred on watch & care during the year	No Proposal	NA	Nil
6i	Compliance on reclamation and rehabilitation by backfilling Void filled by waste/tailings	No Proposal	NA	Nil
6j	Compliance on reclamation and rehabilitation by backfilling Afforestation on the backfilled area	No Proposal	NA	Nil
6k	Compliance on reclamation and rehabilitation by backfilling iv) Rehabilitation by making water reservoir	No Proposal	NA	Nil
6l	Compliance on reclamation and rehabilitation by backfilling v) Any other specific means	No Proposal	NA	Nil
6m	Compliance of Rehabilitation of waste land within lease i) Afforestation	520 Nos	520 Nos	As proposed
6n	Compliance of Rehabilitation of waste land within lease ii) Area rehabilitated (ha)	0.26 Ha	0.11 Ha	Proposed number of saplings planted in a marginally smaller area due to unavailability of afforestable area.

6o	Compliance of Rehabilitation of waste land within lease iii) Method of rehabilitation	Plantation proposed	Plantation of 520 Nos of Neem, Pungai & Vagai	Plantation of local species
6p	Compliance of Environmental monitoring (core zone & buffer zone)	No proposal	Periodic monitoring carried out	All parameters within norms
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	-	-	PMCP compliance & progressive closure operations were found satisfactory.

#### Mineral Conservation (2023 to 2024)

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No sorting proposed within Mining Lease	No sorting carried out within Mining Lease	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Nil	Nil	Nil
7c	Different grade of mineral sorted out at mines	Nil	Nil	Nil
7d	Any beneficiation process at mines	Nil	Nil	No beneficiation is proposed or carried out.
7e	General Remarks of inspecting officer on Mineral conservation & beneficiation issues	-	-	No issues observed with mineral conservation. Entire ROM excavated is consumed.

#### Environment (2023 to 2024)

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal proposed	Separate removal carried out	Removed topsoil utilized for plantation
8b	Concurrent use or storage of topsoil	Concurrent use proposed	Concurrent use carried out	Used in plantation
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump proposed for OB.	Separate dump maintained for OB.	No rejects of fines generated
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No backfilling proposed	No backfilling carried out	Nil
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	1,375 nos saplings existing at the beginning of the year	520 Nos saplings planted during the year	Total 1,895 nos saplings planted so far.
8g	Survival rate	90%	90 %	Nil
8h	Water sprinkling on roads to control airborne dust	Water Tanker proposed to be deployed	10 KL Water Tanker deployed	As proposed
8i	General Remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Aesthetic beauty in and around mines area was found satisfactory.

Compliance of Rule 45 (2023-2024)

S.N.	Item	Details Given in AR	Observation of I/Officer	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	In Time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri. K.Saravanan (Mine Manager), Shri. Godavarthy Umasankar (Mining Engineer) & Shri. M.Aswin (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.	Covered under current workings-2.30 Ha, Waste disposal-1.41 Ha, Others (Green belt & Undisturbed land)-3.63 Ha.	Given in Part I, Sl 12.	Nil
9d	Scrutiny of Annual return on afforestation	520 Nos Saplings planted	Given in Part V, Sl 5	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Given in Part V, Sl 3	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil Stock	Given in Part VI, Sl 2 & 3(ii).	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-mine price & Cost of Production - Rs 549.82/- per tonne	Given in Part VI, Sl 3(ii) & Part VII.	Nil
9h	Scrutiny of Annual return on fixed assets	Gross Fixed Asset - Rs 2,91,47,008/-	Given in Part II A	Nil
9i	Scrutiny of Annual return on mining machineries	Back hoe-0.9 Cu.M-1, Tipper-12 Cu.M-2 Nos	Given in Part V, Sl 6	Nil

Details of violations observed during current inspection and compliance position of violations pointed out					
Violation observed			Show cause position		
Rule No.	Issued on	Compliance on	Rule No.	Issued on	Compliance on

Date:

(Matiul Islam)

Indian Bureau of Mines