

INDIAN BUREAU OF MINES

Mine file No. TN/ALR/LST-15.MDS

Mine code 38TMN24040

(i)	Name of the inspecting officer, designation	Shri Matiul Islam, Asst. Controller of Mines
(ii)	Date of inspection:	20.07.2024
(iii)	Accompanied mine official and designation	G.Magesh & Mr.P.Senthamilselvan
		Mine Manager & Geologist

Mine file No.

S.N.	Particulars	
1	Name of the Mine	Reddipalayam Limestone Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	63.60.0 Ha (Non forest Land)
3	Mine code	38TMN24040
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/638/2011
5	Name of the lessee, Address, phone, email and fax number	Reddipalayam Limestone Mine, M/s. The Ramco Cements Limited, Govindapuram Works, Sendurai Road, Ariyalur District. Phone No: 044-28477504 Fax No: 28478676 Email id: magesh@ramcocements.co.in
6	Village	Reddipalayam
7	Taluka/Mandal	Ariyalur
8	District	Ariyalur
9	Pin code	621713
10	State	TamilNadu
11	Post office	V.Kaikatti
12	Nearest police station	Kairulabad
13	Nearest Railway station	Ariyalur
14	Date of Grant of Mining Lease	09-10-1998
15	Date of Execution	05-10-2001
16	Date of opening of Mine	11-01-2008
17	Date of first Renewal, if applicable and its period & expiry	Nil
18	Date of second Renewal, if applicable and its period & expiry	Nil
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Nil
20	Name of the Nominated Owner with Address, phone, email, fax number and Date of appointment	Shri.P.R. Venketrama Raja, The Ramco Cements Limited, Auras Corporate Centre, No:98A, 5 th Floor, Mylapore, Chennai. Telephone No: 044-28478666 Fax No: 28478676
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri.Madhusudan Kulkarni, VP (Works) M/s. The Ramco Cements Limited, Govindapuram Works, Sendurai Road, Ariyalur. Phone No: 044-28477504 Fax No: 28478676 madhusudan.k@ramcocements.co.in Date of Appointment: 16/09/2019
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri.G.Magesh, M/s. The Ramco Cements Limited, Govindapuram Works, Sendurai Road, Ariyalur. Phone No: 044-28477504

	Appointment in mines	Fax No: 28478676 mageshg@ramcocements.co.in Date of Appointment: 11/01/2008
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri.S.Suresh, Mining Engineer, M/s. The Ramco Cements Limited, Govindapuram Works, Sendurai Road, Ariyalur. Phone No: 044-28477504 minesary@ramcocements.co.in Date of Appointment:25/08/2023
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri.V.Mohan (Geologist) M/s. The Ramco Cements Limited, Govindapuram Works, Sendurai Road, Ariyalur. Mobile No: 9788859706 mohan@ramcocements.co.in Date of Appointment: 01/10/2016
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan Approval date: 16/05/2005 Modification of Mining Plan : 01/09/2006 & 10/08/2011 Scheme of Mining : 13/05/2015
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Modification to the Approved Mining Plan: 07/12/2023 (Period - 2023-24 to 2024-25)
27	Mineral(s) granted in lease and proved for mines	Limestone
28	Method of Mining(Open cast,Underground)	Open cast
29	Category (Fully Mechanised, Others or Manual)	"A" category Fully Mechanised
30	Captive/Non Captive	Captive Purpose

II - OBSERVATION AND COMMENTS OF INSPECTING OFFICER

Exploration

S.No	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	1 BH drilled during the year 2023-24 for a meterage of 32mts	To ascertain depth persistence & address quality issues.
1b	Exploration over lease area for Geological axis 1 or 2.	G-1	G-1	A total of 28 exploratory boreholes for a total meterage of 1370 metres have already been drilled so far.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Agency: Indrajith Core Drilling Expenditure: Rs	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Potentially Mineralised Area already fully explored
1e	Balance reserves as on 01.04.2024 (111+121 Category)	5.03 Mill.Tonnes	5.03 Mill.Tonnes	As proposed
1f	General comments of inspecting officer on geology, exploration etc.	-	-	Geology & Exploration of the mine were found satisfactory

Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area (Ref With Grid)	Between Section Line 7 to Section Line-8	Between Section Line 7 to Section Line-8	As per Mining Plan
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Topsoil-1 OB benches-3 L.st benches- 4	Topsoil-1 OB benches-3 L.st benches- 4	As per Mining Plan
2c	Stripping ratio or ore to OB ratio	1:0.68	1 : 0.67	Within proposed limit
2d	Quantity of topsoil generation in m ³	11280	10475	Within proposed limit
2e	Quantity of overburden generation in m ³	1244745	1231400	Within proposed limit

2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	-	-	The development of the pit w.r.t. type of deposit was found satisfactory.
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Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Single pit operation	Single pit operation	As per the proposal
3b	Quantity of ROM mineral production proposed	2999782 Tons	2999764.76 Tons	Within the limit
3c	Recovery of salable/usable mineral from ROM production	100 % mineral recovered from ROM (2999782 Tons)	100 % mineral recovered from ROM (2999764.76 Tons)	Nil
3d	Quantity of mineral reject generation	No Proposal	Nil	As proposed
3e	Grade of mineral reject generation and threshold value declared	Not Applicable	Not Applicable	Not Applicable
3f	Quantity of sub-grade mineral generation	No Proposal	Nil	As proposed
3g	Grade of sub-grade mineral generation	Not Applicable	Not Applicable	Not Applicable
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	As proposed
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	Non-conventional mining proposed with Xcentric Ripper-Dozer. Controlled Blasting proposed as contingency measure.	Non-conventional mining practiced with Xcentric Ripper-Dozer. Controlled Blasting carried out as contingency measure.	As proposed
3k	Provision of mining machineries in mineral benches	Excavator - 4 No's Xcentric Ripper - 4 No Dozer - 2 No Tipper - 44 No's Water Tanker - 2 No	Excavator - 4 No's Xcentric Ripper - 4 No Dozer - 2 No Tipper - 44 No's Water Tanker - 2 No	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8 m bench height proposed	8 m bench height maintained	As proposed
3m	Total area covered under excavation/pits	20.16.0 Ha	20.13.0 Ha	Within proposed limits
3n	Ore to OB ratio for the pit/mine during the year	1:0.68	1 : 0.67	Within proposed limits
3o	Total area put in use under different heads at the end of year	Area under mining 20.16.0 Infrastructure (workshop, administrative building) 0.20.0 Roads 0.56.0 Others to be specified (Backfilled, green belt etc.,) 42.68.0 Total 63.60.0	Area under mining 20.13.0 Infrastructure (workshop, administrative building) 0.20.0 Roads 0.56.0 Others to be specified (Backfilled, green belt etc.,) 42.71.0 Total 63.60.0	Within proposed limits
3p	Production of ROM mineral during last five-year period, as applicable	2019-20 - 2999800 Tons 2020-21 - 2999860 Tons 2021-22 - 2995660 Tons 2022-23 - 2999680 Tons 2023-24 - 2999782 Tons	2019-20 - 1659895.39 Tons 2020-21 - 1401925.46 Tons 2021-22 - 1557838.26 Tons 2022-23 - 2394315.46 Tons 2023-24 - 2999764.76 Tons	Within proposed limits
3q	General Remarks of inspecting officer on method of mining etc.			

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Entire OB proposed to be backfilled into mined out benches and top soil proposed to be spread over backfilled areas.	Entire OB generated backfilled into mined out benches and topsoil spread over backfilled areas.	As proposed

4b	Location of topsoil, OB & mineral reject dumps (Ref to Grids)	No dump proposed	No dump maintained	Entire OB backfilled & TS spread over backfilled areas as proposed.
4c	Number of dumps within lease area and outside lease area	Nil	Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not Applicable	Not Applicable	Nil
4e	Number of active & alive dumps	Not Applicable	Not Applicable	Nil
4f	Number of dead dumps	Not Applicable	Not Applicable	Nil
4g	Number of dumps stabilised	Not Applicable	Not Applicable	Nil
4h	Whether Retaining wall or garland drain all along dumps are there	Garland Drain proposed	Garland Drain constructed	As proposed
4i	Length of Retaining wall or garland drain all along dump	100 mt proposed for the year	100 mt constructed during the year	Total 3544m long garland drainage provided all along the peripheral bund
4j	Number of settling ponds	No Proposal	Maintained 2 No's of settling pond on the eastern side of the mining lease boundary	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory.

Solid Waste Management – Backfilling

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Backfilling proposed between Section Line 4 to Section Line-7	Backfilling carried out between Section Line 4 to Section Line-7	As per plan
5b	Area under backfilling of mined out area	6.38.0 Hectares	6.41.0 Hectares	As per plan
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent use of topsoil proposed	Topsoil has been used for green belt development on the backfilled area.	As per plan
5d	Total area fully reclaimed & rehabilitated	1.00.0 Ha	1.00.0 Ha	As per plan
5e	General Remarks of inspecting officer on backfilling, reclamation etc	-	-	Backfilling & Reclamation operations were found satisfactory.

Progressive Mine Closure Plan

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly – Rule 23E(2)	Nil	Submitted along with Annual Return	Nil
6b	Area available for rehabilitation (ha)	1.00.0 Ha	1.00.0 Ha	As proposed
6c	Afforestation done (ha)	1.00.0 Ha	1.00.0 Ha	As proposed
6d	No. of saplings planted during the year	1500 No's	5000 No's	Miyawaki Afforestation in close intervals
6e	Cumulative no. of plants	47000 No's	108150 No's	Nil
6f	Any other specific method of rehabilitation	Not applicable	Not applicable	Nil
6g	Cost incurred on watch & care during the year	1.50 Lakhs	3.50 Lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Void available for backfilling	6.38.0 Hectares	6.41.0 Hectares	As proposed
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings	6.38.0 Hectares	6.41.0 Hectares	As proposed
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area	1500 No's	5000 No's	Miyawaki Afforestation in close intervals
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Proposed after exhaustion of mineral	Proposed after exhaustion of mineral	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	No waste land available	Not applicable	Nil
6n	Compliance of Rehabilitation of waste land within lease ii) Area rehabilitated (ha)	Not applicable	Not applicable	Nil
6o	Compliance of Rehabilitation of waste land within lease iii) Method of rehabilitation	Not applicable	Not applicable	Nil
6p	Compliance of Environmental monitoring (core zone & buffer zone)	Periodic monitoring proposed	Periodic monitoring carried out	All parameters within norms
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	-	-	Only afforestation was proposed and carried out satisfactorily as PMCP Compliance & Closure operations.

Mineral Conservation :

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No sorting proposed	No sorting carried out	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not applicable	Not applicable	Nil
7c	Different grade of mineral sorted out at mines	Not applicable	Not applicable	Nil
7d	Any beneficiation process at mines	Nil	Nil	Nil
7e	General Remarks of inspecting officer on Mineral conservation & beneficiation issues	-	-	No beneficiation was proposed or carried out in the lease. Entire ROM generated was consumed.

Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal & utilisation of top soil proposed	Separate removal & utilisation of top soil carried out	As proposed
8b	Concurrent use or storage of topsoil	Concurrent use of Topsoil proposed for green belt development on the backfilled area.	Concurrent use of Topsoil carried out for green belt development on the backfilled area.	As proposed
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No dumping proposed	No dump maintained	Entire waste backfilled into mined out benches as proposed
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling proposed	Backfilling carried out	As proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Phased restoration proposed by backfilling & afforestation	Phased restoration carried out by backfilling & afforestation	As proposed
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	47,000 nos of saplings cumulatively proposed to be planted.	1,08,150 nos of saplings cumulatively planted.	As proposed
8g	Survival rate	90%	90%	As proposed
8h	Water sprinkling on roads to control airborne dust	Proposed	10000 Liter capacity water sprinkler engaged	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

S.N.	Item	Comments		Remarks
9a	Status of submission of Monthly and Annual returns	Nil	Submitted in time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Shri G Magesh Mining Engineer: Shri S Suresh Geologist: Shri V Mohan	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.	Area under mining 20.13.0 Infrastructure (workshop, administrative building) 0.20.0 Roads 0.56.0 Others to be specified (green belt etc.) 42.71.0 Total 63.60.0	Given in Part I, Sl 12	Nil
9d	Scrutiny of Annual return on afforestation	5000 No's planted	Given in Part V, Sl 5	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No reject	Given in Part VI, 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 - Rs.312.67	Given in Part VI, Sl 3 (ii) & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Fixed assets: Rs.92762751	Given in Part II A	Nil
9i	Scrutiny of Annual return on mining machineries Name of the Machinery Capacity	Back Hoe 1.6 Cum 3 Nos, Back Hoe 1.2 Cum 1 Nos, Air Compressor 450 cum/min 1 nos, Rock Drill 115 mm 1 nos, Tipper 10 cum 12 nos, Dozer 90 hp 1 no, Water Tanker 10000 litres 1 nos, Other Machinery 226 4 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	Issued on	Compliance on	Issued on
			Compliance on

Date:

(Matiul Islam)
Indian Bureau of Mines