INDIAN BUREAU OF MINES MINERAL DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Chennai Regional Office

		Chennai Regional Office	
Mine	file No. TN/ALR/LST-28.MDS	Mine code 38TMN38046	
(i)	Name of the inspecting officer, designation	Matiul Islam, Asst. Controller of Mines	
(ii)	Date of inspection:	19.07.2024	
(iii)	Accompanied mine official and designation	Mr.I.Lakshmi Naranaya & Mr.P.Senthamilselvan	
(111)	Accompanied infine official and designation	Mine Manager & Geologist	
		PART-I: General Information	
1	Name of the Mine	Usenabad Limestone Mine	
2	Total Lease Area (Ha) with breakup of Non- forest and forest land	25.10.5 Ha (Non forest Land)	
3	Mine code	38TMN38046	
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/638/2011	
5	Name of the lessee, Address, phone, email and fax number	Phone No: 044-28477504 Fax No: 28478676 Email id: magesh@ramcocements.co.in	
6	Village	Kallankurichi	
7	Taluka/Mandal	Ariyalur	
8	District	Ariyalur	
9	Pin code	621713	
10	State	TamilNadu	
11	Post office	Kallankurichi	
12	Nearest police station	Kairlabad	
13	Nearest Railway station	Ariyalur	
14	Date of Grant of Mining Lease	23-12-2016	
15	Date of Execution	10-01-2017	
16	Date of opening of Mine	07-11-2018 / Presently under temporary Discontinuance since 08.04.2024	
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 Sr.Vice President (Manufacturing) / Unit Head 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 Shri.I.Lakshmi Naranaya,	

22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	M/s. The Ramco Cements Limited, Govindapuram Works, Sendurai Road, Ariyalur. Phone No: 044-28477504 Fax No: 28478676 iln@ramcocements.co.in Date of Appointment: 01/07/2019		
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri. K.Mahesh Kumar B.Tech Mining Engineer, M/s. The Ramco Cements Limited, Govindapuram Works, Sendurai Road, Ariyalur. Phone No: 044-28477504 minesary@ramcocements.co.in Date of Appointment:16/08/2021		
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri.S.Arun, M/s. The Ramco Cements Limited, Govindapuram Works, Sendurai Road, Ariyalur. Mobile No: 9994027051 sarun@ramcocements.co.in Date of Appointment:04/05/2023		
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: 23/05/2016		
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 approval date: 04/04/2018 Letter No. Modification to the Approved Mining Plan approval date: 07/02/2020 Letter No. 3.Review of Mining Plan approval date: 10/12/2020 Letter No. TN/ALR/LST/ROMP-4.Modification to the Approved Mining Plan approval date: 15/03/2023Letter		
27	Mineral(s) granted in lease and proved for mining	Liniestone & Mari		
28	Method of Mining(Opencast,Underground)	Opencast		
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
	Backlog of previous year	Nil	Nil	Nil
1b	Exploration over lease area for Geological axis 1 or 2.	G-1	G-1	A total of 11 exploratory boreholes for a total meterage of 355 metres have already been drilled in the past.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No Proposal	Nil	Nil
1 10	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal	Nil	Potentially Mineralised Area already fully explored.
i ie	Balance reserves as on 01.04.2024 (111+121 Category)	LST - 0.22 Mill Tons & Marl - 0.98 Mill.Tons - Total - 1.20 Million Tons	LST - 0.22 Mill Tons & Marl - 1.02 Mill.Tons - Total - 1.24 Million Tons	As proposed
1 11	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)	No Proposal	Nil	As per Mining Plan

2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Marl benches-3, Lst benches-2	Marl benches-3, Lst benches-2	As per Mining Plan
2c	Stripping ratio or ore to OB ratio	1:0	1:0	As per Mining Plan
2d	Quantity of topsoil generation in m ³	0	0	As per Mining Plan
2e	Quantity of overburden generation in m ³	0	0	As per Mining Plan
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	-	-	No development was required, proposed or carried out as per plan.

Exploitation

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S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Single pit operation	Single pit operation	
3b	Quantity of ROM mineral production proposed	LST - 59328 Tons Marl - 242028 Tons - Total -301356 Tons	LST - 59255.30 Tons Marl -199159.16 Tons Total - 258414.46 Tons	Within proposed limits. Marl Production halted at 1,99,159 tons as state govt has paused issue of permits for the mineral.
3c	Recovery of salable/usable mineral from ROM production	100 % mineral recovered from ROM (301356 Tons)	100 % mineral recovered from ROM (258414.46 Tons)	Nil
3d	Quantity of mineral reject generation	No Proposal	Nil	Nil
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	Nil
3g	Grade of sub-grade mineral generation	Not Applicable	Not Applicable	Not Applicable
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	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	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	Xcentric Ripper - 1 No Excavator- 1 No Tipper – 10 No's Water Tanker – 1 No	Xcentric Ripper - 1 No Excavator- 1 No Tipper – 10 No's Water Tanker – 1No	As proposed
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 m bench height proposed	6 m bench height maintained	As proposed
3m	Total area covered under excavation/pits	13.50.0 Ha	12.10.0 Ha	Within proposed limits
3n	Ore to OB ratio for the pit/mine during the year	1:0	1:0	As proposed
30	Total area put in use under different heads at the end of year	Area under mining 13.50.0 Infrastructure (workshop, administrative building) 0.20.0 Roads 0.50.0 Others to be specified (green belt etc.,) 10.90.5 Total 25.10.5	Area under mining 12.10.0 Infrastructure (workshop, administrative building) 0.20.0 Roads 0.50.0 Others to be specified (green belt etc.,) 12.30.5 Total 25.10.5	Within proposed limits
3р	Production of ROM mineral during last five-year period, as applicable	2019-20 - 999909 Tons 2020-21 - 998070 Tons 2021-22 -923291 Tons 2022-23 -515265 Tons 2023-24 - 301356 Tons	2019-20 - 982613.94 Tons 2020-21 - 998064.22 Tons 2021-22 - 923287.22 Tons 2022-23 - 515051.14 Tons 2023-24 - 258414.46 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)	No proposal	Nil	No Top Soil/OB/Waste/Reject generated or dumped.
4b	Location of topsoil, OB & mineral reject dumps (Ref to Grids)	No proposal	Nil	No Top Soil/OB/Waste/Reject generated or dumped.
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 stabilished	Not Applicable	Not Applicable	Nil
4h	Whether Retaining wall or garland drain all along dumps are there	No Proposal	Garland drain	Garland drain existing around the pit
4i	Length of Retaining wall or garland drain all along dump	No Proposal	50m X 1.5m X 1.0m	Desilted during the plan period
4j	Number of settling ponds	No Proposal	1 No	Desilted during the plan period
4k	Specific comments of inspecting officer on waste dump management	-	-	No Top Soil/OB/Waste/Reject generated or dumped as planned.

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	No Proposal	Nil	There is no proposal of backfilling as the entire pit will be converted in to reservoir
5b	Area under backfilling of mined out area	Not applicable	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposal	Nil	Nil
5d	Total area fully reclaimed & rehabilitated	No Proposal	Nil	Nil
5e	General Remarks of inspecting officer on backfilling, reclamation etc	-	-	No backfilling proposed or carried out. Pit will be converted to water reservoir upon exhaustion of reserves.

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)	Nil	Nil	Nil
6c	Afforestation done (ha)	0.30.0	1.20.0	More than proposed
6d	No. of saplings planted during the year	750 No's	2400 No's	Miyawaki afforestation implemented
6e	Cumulative no. of plants	2350 No's	20150 No's	Nil
6f	Any other specific method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch & care during the year	1.50 Lakh	1.75 Lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D)	Nil	Nil	No backfilling envisaged.
6i	Compliance on reclamation and rehabilitation by backfilling (ii)Void filled by waste/tailings	Nil	Nil	Not Applicable

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on the backfilled area	Nil	Nil	Not Applicable
6k	Compliance on reclamation and rehabilitation by backfilling	Nil	Nil	Mined out area will be converted to water reservoir upon exhaustion of mineral.
	(iv) Rehabilitation by making water reservoir Compliance on reclamation and rehabilitation			upon exhaustion of mineral.
6l	by backfilling	Nil	Nil	Not Applicable
	(v) Any other specific means			
6m	Compliance of Rehabilitation of waste land within lease	750 No's	2400 No's	As per plan
OIII	i) Afforestation	, 50 110 3	21001103	713 per pian
	Compliance of Rehabilitation of waste land			
6n	within lease	0.30.0 Ha	1.20.0 Ha	As per plan
	ii) Area rehabilitated (ha)			
	Compliance of Rehabilitation of waste land			
60	within lease	Afforestation	Afforestation	As per plan
	iii) Method of rehabilitation			
6p	Compliance of Environmental monitoring (core zone & buffer zone)	Periodic monitoring proposed	Periodic monitring carried out	All parameters within norms
	aone a bane. Bone,	proposed		Only afforestaion was
	C l l C C DMCD			proposed and carried out
6q	General remarks of inspecting officer on PMCP	-	-	satisfactorily as PMCP
	compliance & progressive closure operations			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 of carried out in the lease. Entire ROM generated was consumed.

<u>Environment</u>

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	No Topsoil available in the lease
8b	Concurrent use or storage of topsoil	No proposal	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Nil	Nil	No OB/Waste/Rejects/Fines available
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)	No proposal	Nil	Water Reservoir wiil be developed upon exhaustion of mineral
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Within the lease area – 750 No's	Within the lease area – 2,400 No's	Miyawaki afforestation carried out during the year
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.
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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	Mine Manager: Shri I Lakshmi Narayana, Mining Engineer: Shri Kesamsetti Maheshkumar, Geologist: Shri S. Arun	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 12.10.0 Occupied by plants, buildings, residential, welfare buildings and roads 0.70.0 Used for any other purpose	Given in Part I, Sl 12	Nil
9d	Scrutiny of Annual return on afforestation	2400 No's planted	Given in Part V, Sl 5	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	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 Limestone- Rs.252.47 & Marl - Rs 217.46	Given in Part VI, Sl 3 (ii) & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Gross Fixed assets: Rs.4,22,49,277	Given in Part II A	Nil
9i	Scrutiny of Annual return on mining machineries Name of the Machinery Capacity	Back Hoe - 1.6 cu.m 1 No, Tipper - 10 cu.m 10 Nos, Water Sprinkler - 10000 L - 1 No, Pumps - 1200 L/m - 1 No, Other Machinery - 247 - 1 No	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