	MINERAL DEVE	NDIAN BUREAU OF MINES ELOPMENT AND REGULATION DIVISION CDR INSPECTION REPORT
Minof	ile No.TKD/LST-38-MDS-VOL-II	Chennai Regional Office Mine code - 38TMN29002
(i)	Name of the inspecting officer &	KUMERESH A
(1)	Designation	Senior Assistant Controller of Mines
(ii)	Accompanied mine official and	Shri. K.Saravanan, (DGM-Mines)
()	designation	Shri N.Arimavalavan, Dy.Manager - Mine Manager
		Shri C.Karunakaran, AGM - Geologist
(iii)	Date of inspection	17-12-2024
	PA	RT-I: General Information
1.	Mine Name	Melvenkateswarapuram Limestone Mine
(b)	Registration Number	IBM/638/2011
(c)	Category	A
(d)	Type of Working	Opencast
	Postal Address	The Ramco Cements Limited,
	State	Ramasamy Raja Nagar,
	District	Virudhunagar District,
	Village	Tamilnadu
(e)	Taluka Post Office	Phone: 04562-256201, 202 and 203 Email: saravanankmtd@ramcocements
	Post Office Pin Code	Email: saravanankmtu@ramcocements
	FAX No.	
	E-mail	
	Phone	
(f)	Police Station	Vilathikulam
(g)	First opening date	27.06.1985
(h)	Weekly day of rest	Sunday
()		The Ramco Cements Limited,
		Ramasamy Raja Nagar,
2.		Virudhunagar District,
	Address for correspondence	Tamilnadu
		Phone: 04562-256201, 202 and 203
		Email: saravanankmtd@ramcocements.co.in
3.		TMN1199
	Lease Number	
		103.54 Ha
		105.54 IId
	Lease Area	
		20 years
	Period of lease	
		28.07.2003
	Date of expiry	20.07.2003

4.	Mineral worked	Limestone
5.	Name and address of the	
	Lessee:	The Ramco Cements Limited
	Owner:	Shri. P.R.VENKETRAMA RAJA,
	owner.	Chairman & Managing Director,
		The Ramco Cements Limited,
		Auras Corporate Centre,
		98-A, Dr.Radhakrishnan Salai,
		Mylapore, Chennai-600004.
		Phone:044 28478666
		Date of Appointment: 18.02.2022
		Shri. S.LAKSHMANAN,
	Agent:	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
		Shri. N.ARIMAVALAVAN,
	Managan	Dy.Manager (Mines)
	Manager:	The Ramco Cements Limited,
		Ramasamy Raja Nagar, Virudhunagar District.
		Phone: 04562-256201, 202 and 203
		Email: saravanankmtd@ramcocements.co.in
		Date of Appointment: 01.04.2023
		Shri. N.ARIMAVALAVAN,
	Engineer:	Dy.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: 01.04.2023
		C.KARUNAKARAN,
	Geologist:	Sr.Manager (Geology)
	Ŭ	The Ramco Cements Limited,
		Ramasamy Raja Nagar,
		Virudhunagar District.
		Phone: 04562-256201, 202 and 203
		Email: ckk@ramcocements.co.in

		Date of Appointment: 16-08-2019
6	Date of Approval of Mining Plan/Modified Mining Plan with five – year period and specific condition in approval letter, if any. Date of Approval of Scheme of Mining/Modified Scheme of Mining with five – year period and specific condition in approval letter, if any.	Fresh under Rule 22 MCR 1960: 25.09.1990 Renewal under rule 22 MCR 1960: 18.02.2003 Mining Scheme rule 12 MCDR 1988: 26.09.2008 Mining Scheme rule 12 MCDR 1988: 06.06.2013 Mp modification under MCR 1960:18.05.2015 Mp review under 17(1) MCR 2016: 03.11.2017 Mp review under 17(1) MCR 2016: 18.01.2023

PART-II : OBSERVATION / COMMENTS OF INSPECTING OFFICER EXPLORATION

S. No.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year	15 nos. of Core Boreholes proposed for 750mtrs depth during the year 2023-24	A total of 34 Core Boreholes have been drilled to a depth of 1523.80 meters, and 89 DTH holes have been drilled to a depth of 1130.50 meters during the year 2023-24.	Exploration carried out as per proposal and additional holes have also been drilled.
1b	Exploration over lease area for Geological axis 1 or 2.	Not specified	Exploration Agency - The Ramco Cements Limited. Expenditure - Rs.29.97 Lakhs	_
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No Proposal	Nil	Entire Lease Area has already been Explored.
1d	Balance area to be explored to bring Geological axis in 1 or 2	8.347 Mil.Tons	8.347 Mil.Tons	Nil
1e	Balance reserves as on 01.04.2024 (111 Category)	15 nos. of Core Boreholes proposed for 750mtrs depth during the year 2023-24	A total of 34 Core Boreholes have been drilled to a depth of 1523.80 meters, and 89 DTH holes have been drilled to a depth of 1130.50 meters during the year 2023-24.	Exploration carried out as per proposal and additional holes have also been drilled.
1f	General comments of inspecting officer on geology, exploration etc.	-	-	Geology & Exploration of the mine were found satisfactory.

DEVELOPMENT

S. No.	Item	Proposals	Actual Work	Remarks
2a	Location of development w.r.t. lease area	ML – 13 to 19	ML – 13 to 19	As per Proposal

2b	Separate benches in topsoil, overburden and minerals (Rule 13 of MCDR-2017)	OB-7, Limestone-1 Topsoil- Nil	OB-7, Limestone-1 Topsoil- Nil	Separate benches are maintained in OB and Mineral.
2c	Stripping ratio or ore to OB ratio	1:0.13	1:0.13	Less Production due to Plant Requirement
2d	Quantity of topsoil generation in m3	No Proposal	-	-
2e	Quantity of overburden generation in m3	80000	77572	Nearer to the proposal
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc.			

EXPLOITATION

S. No.	Item	Proposals	Actual Work	Remarks
3a	Number of Pit proposed for production	1 No. of Pit ML – 13 to 19 (Western Block)	1 No. of Pit ML – 13 to 19 (Western Block)	As per proposal
3b	Quantity of ROM mineral production proposed	600,000 Tonnes	599,874.12 Tonnes	Proposed production nearly achieved.
3c	Recovery of salable/usable mineral from ROM production	83%	100%	Entire ROM generated was consumed.
3d	Quantity of mineral reject generation	100,000 Tonnes	Nil	Entire ROM generated was consumed. Produced ROM transported to Common Crushing Plant situated at Pandalgudi. No mineral processing activities involved within MLB.
3e	Grade of mineral rejects generation and threshold value declared.	Grade of mineral reject: CaO - 35 to 34 & Threshold Value Declared: CaO- 34% (Min.) and MgO-5% (Max.)	Threshold Value achieved: CaO- 34% (Min.) and MgO- 5% (Max.)	No Mineral Reject generation.
3f	Quantity of sub grade mineral generation.	No Proposal	NA	No subgrade mineral generation.
3g	Grade of sub grade mineral generation	No Proposal	NA	No subgrade mineral generation.

3h	Manual / Mechanized method adopted for segregating from ROM	Nil	Nil	No beneficiation within ML
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal given.	No proposal during the plan period.	This mine is in operation since 1995 and deposit is well established for it's quality and grades.
3j	Provision of drilling and blasting in mineral benches	Spacing – 3.5 m Burden – 2.5 m Depth – 10 m Dia – 115 mm	Deep hole drilling and blasting is practiced. Holes are drilled upto 10 m depth with a spacing of 3.5m. Burden – 2.5 m Hole dia 115 mm.	Controlled blasting by using Slurry Cartridge, NONEL & Electronic Detonators.
3k	Provision of mining machineries in mineral benches	Back Hoe Loader– 4, Tipper-7, Blast Hole Drill 115 Mm -1, Air Compressor 400 Cum/Min-1 Others (Non electrical) 100 -1	Front End Loader 3.0Cum -1, Back Hoe 0.900 Cum – 2, Tipper - 7 Blast Hole Drill 115 Mm - 1, Air Compressor 400 Cum/Min-1 Others (Non electrical) 100 -1	As reported by lessee in AR 2023-24.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in RoMP	Height – 9 m Width – 9 m Ramp – 12 m	Bench h=eight - 9m Width - 9m Ramp - 12 m.	Maintained as per the proposal
3m	Total area covered under excavation/pits	23.17 Ha	24.10 Ha	Approved ROMP has been modified.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.13	1:0.13	As per the proposal
30	Total area put in use under different heads at the end of year	54.13 Ha	56.50 Ha	Approved ROMP has been modified.
	Production of ROM mineral during the last five-year period as applicable	2019-20=7,14,544 2020-21=7,13,000 2021-22=7,14,781 2022-23=7,13,876 2023-24=6,00,000	2019-20=4,98,845 2020-21=2,18,632 2021-22=4,60,932 2022-23=4,02,174.12 2023-24=5,99,874.12	As per Proposal
3q	General remarks of inspecting officers on method of mining etc.	-	-	The method of mining was found satisfactory.

SOLID WASTE MANAGEMENT-DUMPING

S. No.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 36,37)	Separate dump for OB	Dumping carried out separately for OB.	No topsoil generation proposed and no mineral reject generated during 2023-24.
4b	Location of topsoil, OB and mineral reject dumps	Dump-1: 09°17'49.39" 09°17'52.18" 78°09'55.77" 78°10'15.86" Dump-2: 09°17'37.97" 09°17'41.79" 78°10'32.94" 78°10'43.82" Top Soil Dump-1: 09°17'54.79" 09°17'57.74" 78°10'19.59" 78°10'25.09" Top Soil Dump-2: 09°18'04.25" 09°18'05.22" 78°09'54.53" 78°09'55.68"	Dump-1: 09°17'49.39" 09°17'52.18" 78°09'55.77" 78°10'15.86" Dump-2: 09°17'37.97" 09°17'41.79" 78°10'32.94" 78°10'32.94" 78°10'43.82" Top Soil Dump-1: 09°17'54.79" 09°17'57.74" 78°10'19.59" 78°10'25.09" Top Soil Dump-2: 09°18'04.25" 09°18'05.22" 78°09'54.53" 78°09'55.68"	No mineral reject generated during 2023- 24
4c	Number of dumps within lease area and outside of lease area	4 Nos Within ML	4 Nos Within ML	As per proposal.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of Ultimate Pit Limit	Outside of Ultimate Pit Limit	Nil
4e	Number of active and alive dumps.	2	2	Nil
4f	Number of dead dumps.	2	2	Nil
4g	Number of dumps established.	Nil	Nil	No Proposal for dump stabilization
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain proposed	Garland drain provided	So far about 2400 m length garland drainage has been made. Inactive Sides of the Dump area covered by Garland Drain with earthen bunds.
4i	Length of Retaining wall or garland drain all along dumps	Garland Drainage along dump - 580 m Length	Garland Drainage along dump - 1200 m Length	So far about 2400 m length garland drainage has been made. Inactive Sides of the Dump area covered by Garland Drain with earthen bunds.
4j	Number of settling ponds	No Proposal	Nil	No proposal made for during 2023-24 period. There are already three Settling Ponds present within the leased area.
4k	Specific comments of inspecting officer on waste dump management			Waste dump management was found satisfactory.

SOLID WASTE MANAGEMENT-BACKFILLING

S. No.	Item	Proposals	Actual Work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal for backfilling during 2023-24	No backfilling proposal during the plan period 2023-24.	
5b	Area under backfilling of mined out area	No Proposal	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposal	NA	
5d	Total area fully reclaimed and rehabilitated	No Proposal	NA	
5e	General remarks of inspecting officers on backfilling and reclamation etc			All Benches are Still Active. No scope for Backfilling at this stage

PROGRESSIVE MINE CLOSURE PLAN

S. No.	Item	Proposals	Actual Work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 26 (2)	Periodically Submitted	Yes Submitted	Nil
6b	Area available for rehabilitation (ha).	No Proposal	NA	
6c	Afforestation done (ha).	No Proposal	NA	
6d	No. of saplings planted during the year	No Proposal	NA	
6e	Cumulative no. of plants	No Proposal	NA	
6f	Any other method of rehabilitation	No Proposal	NA	
6g	Cost incurred on watch and care during the year	No Proposal	NA	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D)	No Proposal	NA	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	NA	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation backfilled area	No Proposal	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	NA	

61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	1250 Nos	1300Nos	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.50 Ha	0.50 Ha	Plantation has been carried on the Inactive Sides of the waste Dump-1.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Plantation with 1250 Nos of Neem, Pungai & Vagai Saplings.	Plantation with 1300 Nos of Neem, Pungai & Vagai Saplings.	Plantation has been carried on the Inactive Sides of the waste Dump-1.
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation	Afforestation	So far about 31848 No. of Saplings Planted.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodic monitoring	Yes Submitted	Quarterly environment monitoring data submitted. All the parameters are under permissible limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP Compliance & progressive closure operations were found satisfactory.

MINERAL CONSERVATION

S. No.	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	No mineral sorting carried out at within Mining Lease.
7b	Method of grade wise mineral sorting i.e. manual or mechanical.	Nil	NA	Nil
7c	Different grade of mineral sorted out at mines.	Nil	NA	No segregation of mineral at mine head.
7d	Any beneficiation process at mines	Nil	NA	Entire ROM excavated is consumed. No beneficiation is proposed or carried out.
7e	General remarks of inspecting officer on Mineral Conservation & beneficiation issues	-	-	-

ENVIRONMENT

S. No.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal Made	Nil	There are two separate topsoil dumps already stored in the lease area which will be used for plantation in the future.
8b	Concurrent use or storage of topsoil	No Proposal Made	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump proposed for OB.	Dumping carried out in the proposed OB dump.	Separate dump is maintrained as per approved Review of Mining Plan.
8d	Use of overburden, waste rock, rejects and fines dump for restoring the land to its original use	No proposal	Nil	Not At this Stage
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	1250 nos. saplings	1300 nos. saplings	Plantation has been carried on the Inactive Sides of the waste Dump-1. Plantation with local species like Neem, Pungai & Vagai
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1250 Nos	1300 Nos	So far 31848 No. of Saplings Planted in the lease area.
8g	Survival rate	90%	90 %	Survival Rate is 90%
8h	Water sprinkling on roads to control airborne dust	10 KL Water Tanker used for water sprinkling on haul roads	Water tanker deployed for the purpose as proposed.	Nil
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 UNDER RULE-45

S. No.	Item	Proposals	Actual Work	Remarks
9a	Status of submission of Monthly and Annual returns	Su	lbmitted	Nil

	Scrutiny of	Shri. N.Arimavalavan (Mining	Shri. N.Arimavalavan	
	Annual return for	Engineer) &	(Mining Engineer) &	
9b	information on Mining Engineer,	Shri. C.Karunakaran Shri. C.Karunakaran		Nil
	Geologist and Manager	(Geologist)	(Geologist)	
	Scrutiny of Annual return on	Shri. N.Arimavalavan (Mining Engineer) &	Shri. N.Arimavalavan (Mining Engineer)&	
9c	land use pattern for area under pits, reclaimed area, dumps etc.	Shri. C.Karunakaran(Geologist)	Shri. C.Karunakaran(Geologist)	Nil
9d	Scrutiny of Annual return on afforestation	24.10 Ha. Under current workings, 18.12 Ha. for waste disposal, 0.44 Ha for Buildings etc,55.96 Ha for virgin and green belt area as per AR 2023-24.	Details are matching	As given in Annual Return
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	1300 No of Plants as per Annual Return-2023-24	Plantation covered in 0.50 Ha	Neem, Pungai & Vagai
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	No mineral reject generated during the period under review.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Nil Stock	599,874.12 tonnes of ROM production reported as per 2023-24	Nil
9h	Scrutiny of Annual return on fixed assets	Ex Mine Price @ Rs.513.75	It is captive mine, Ex. mine price and cost of production checked and found correct.	Nil
9i	Scrutiny of Annual return on mining machineries	Rs.8685488 was shown as fixed asset value in AR 2023-24.	Rs.8685488 was shown as value of Fixed assets.	Satisfactory.

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	

KUMERESH A SrAsst Controller of Mines Indian Bureau of Mines

Date: