INDIAN BUREAU OF MINES

MINERAL DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Chennai Regional Office

Mine file No. TN/TCR/LST-1.MDS	Mine Code: 38TMN14014	
Name of the inspecting officer	Matiul Islam	
designation	Assistant Controller of Mines, IBM, Chennai	
Date of inspection:	09.11.2024	
Accompanied mine official and designation	MR. Raja Ranjit Singh	
	General Manager(Mines)	
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PART-I: General Information

S. No	Particulars	Details		
1	Name of the Mine	Kallakudi and Kovandakurchi Limestone Mines (ML -1)		
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	166.005 Ha (Non-forest land)		
3	Mine code	38TMN14014		
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/929/2011		
5	Name of the lessee, Address, phone, email and fax	Dalmia Cement (Bharat) Limited,		
	number	Dalmiapuram.		
		Lalgudi Taluk.		
		Tiruchirapalli District.		
		Tamil Nadu.		
		Telephone No.: 04329 - 235459.		
6	Village	Kallakudi, Kovandakurichi & Venkatachalapuram		
7	Taluka/Mandal	Lalgudi		
8	District	richy		
9	Pincode	621 651		
10	State	Tamil Nadu		
11	Post office	Kallakudi		
12	Nearest police station	Kallakudi		
13	Nearest Railway station	Kallakudi Palanganatham		
14	Date of Grant of Mining Lease	3(D) No.1 / 08.01.2002		
15	Date of Execution	Amalgamated Lease		
16	Date of opening of Mine	01.09.1939		
17	Date of first Renewal, if applicable and its period & expiry	GO (Ms) 76 Ind (MMA.1) Dept Dated 26.07.2018 for the period from 01.09.2004 to 31.03.2030.		
18	Date of second Renewal, if applicable and its period & expiry	Not Applicable		
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	• •		
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. T. Venkatesan, Nominated Owner Dalmia Cement (Bharat) Limited Fagun Mansion, 4 th floor, 26, C in C Road, Chennai – 600 105. 044 – 28279933,		

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		FAX - 044 - 28276508,	
		t.venkatesan@dalmiacement.com	
		01.11.2007	
21	Name of the Mine Agent with Address, phone,	Mr. K.Vinayagamurthi	
	email, fax number and	Executive Director,	
		Dalmia Cement (Bharat) Limited,	
		Dalmiapuram	
		04329-235123	
		k.vinayagamurthi <u>@dalmiacement.com</u>	
		fax -04329 -235111	
	Date of appointment	06.01.2023	
22	Name of the Mines Manager with Address, phone,	Mr.M R Raja Ranjith Singh,	
	email, fax number and	Dalmia Cement (Bharat) Limited,	
		Dalmiapuram,	
		04329 - 235459,	
		mr.rajaranjithsingh@dalmiacement.com	
		Fax 04329-235111	
		11.03.2013	
	Date of appointment in mines		
23	Name of the Mining Engineer, Qualification and	Mr.M R Raja Ranjith Singh,	
	total experience with Address, phone, email, fax	Dalmia Cement (Bharat) Limited,	
	number and	Dalmiapuram,	
		04329 - 235459,	
		mr.rajaranjithsingh@dalmiacement.com	
		Fax 04329-235111	
	Date of appointment in mine	03.12.2012	
24	Whether Geologist and Mining Engineer appointed	Mr.N.Karthikeyan (Geologist) appointed as per the rule 42 &	
	in mines satisfy the rule 42 & carrying out their	carrying out their duties as per rule 43 & 44	
25	duties as per rule 43 & 44.	TN/TCD/ND/LCT/L//1 C7 D-1-1 0/ 02 2002	
25	Date of Approval of Mining Plan/Modified Mining	TN/TCR/MP/LST/1461-SZ, Dated 04.03.2003	
	Plan with five-year period and specific condition in	TN/TCR/MP/LST/1461-SZ, Dated 06.02.2004	
24	approval letter, if any. Date of Approval of Scheme of Mining/Modified	TN/TCR/MP/LST/1461-SZ, Dated 30.05.2007 TN/TCR/LST/MS-495-SZ, Dated 01.04.2009	
26	Scheme of Mining with five-year period	TN/TCR/LST/MS-495-52, Dated 01.04.2009 TN/TCR/LST/MS-1028.MDS, Dated 08.04.2014	
	Scheme of Milling with live-year period		
		TN/TCR/LST/ROMP.1539.MDS, Dated 18.12.2018 TN/TCR/LST/MMP-2057.MDS, Dated: 29/05/2019	
		TN/TCR/LST/MMP-2037.MDS, Dated: 29/03/2019 TN/TCR/LST/MMP-2088MDS, Dated: 19.08.2022	
		TN/TCR/LST/MMP-2006MDS, Dated: 17.06.2022 TN/TCR/LST/ROMP-1721.MDS, Dated: 03.10.2023	
	Specific condition in approval letter, if any.	NA	
27	Mineral(s) granted in lease and proved for mining	LIMESTONE & MARL	
28	Method of Mining(Opencast, Underground)	Opencast Mining	
29	Category (Fully Mechanized, Others or Manual)	Fully Mechanized	
30	Captive/Non Captive	Captive	
	p	I salamas	

PART-II: OBSERVATION / COMMENTS OF INSPECTING OFFICER

Exploration (2023 -2024)

S.N.	ltem	Proposals	Actual Work	Remarks
1a	Backlog of previous year(2021-2022)	Nil	Nil	Nil
1b	Exploration over lease area for Geological axis 1 or 2.	G1 – 126.580 Ha Non Mineralized Area – 39.425 Ha	G1 – 126.580 Ha Non Mineralized Area – 39.425 Ha	Potentially mineralized area fully explored upto G1 level.
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	Potentially mineralized area fully explored upto G1 level.
1e	Balance reserves as on 01.04.2024 in tons	-	Limestone 30,361,590 tonnes; Marl 29,395,969 tonnes; Total 59,757,559 tonnes.	UNFC-111 Category
1f	General remarks of inspecting officer on geology, exploration etc.	-	-	Geology & Exploration of the lease were found satisfactory.

Development (2023-2024)

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease	N - 10°57'27.60" to	N - 10°57'27.60" to	As proposed
	area	N - 10°59'36.21"	N - 10°59'36.21"	
		&	&	
		E - 78°55'45.49" to	E - 78°55'45.49" to	
		E - 78° 56'57.23"	E - 78° 56'57.23"	
2b	Separate benches in topsoil,	Separate OB	Separate OB benches	No topsoil available
	overburden and mineral (Rule 15)	Benches are	are Maintained.	
		proposed		
2c	Stripping ratio or ore to OB ratio	1:0.03	1: 0.07	Within acceptable limit
2d	Quantity of topsoil generation in m ³	Nil	Nil	No topsoil available
2e	Quantity of overburden generation in	2,62,516 m ³	2,04,664 m ³	Violation pointed out
	m ³			
2f	General remarks of inspecting officer	-	-	Violation pointed out for
	on development of pit w.r.t. type of			deviation from development
	deposit etc.			proposal.

Exploitation(2023-2024)

S.N.	ltem	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	3 pits	3 pits operated	As proposed
3b	Quantity of ROM mineral production proposed year 2023-24	69,69,997 tonnes	27,47,100 Tonnes	Violation pointed out
3с	Recovery of salable/usable mineral from ROM production	100% Recovery	100% Recovery	Nil
		(69,69,997 Tonnes)	(27,47,100 Tonnes)	
3d	Quantity of mineral reject generation	Nil	Nil	Nil
3e	Grade of mineral reject generation and threshold value declared	NA	NA	Nil
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	Nil	Nil	Nil
3i	segregating from ROM Any analysis or beneficiation study proposed &	Nil	Nil	Nil
	carried out for sub-grade mineral and reject			
3j	Provision of drilling & blasting in mineral benches	Nil	Nil	Nil
3k	Provision of mining machineries in mineral benches	Rock Breakers Hydraulic Excavator Dozer Water Pump Dump Trucks	BACK HOE 2.400 CUM 4 DOZER 165.000 HP 1 BACK HOE 2.700 CUM 10 TIPPER 14.000 CUM 25 SURFACE MINER 1200.000 HP 2 WHEEL LOADER 2.400 CUM 3 PUMPS (ELEC.) 1000.000 L/MN 1 PUMPS (ELEC.) 400.000 L/MN 1 MOTOR GRADER 140.000 HP 1 WATER TANKER 12000.000 LITRE	As proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height - 9 m & Width - 10 m	Height - 9 m & Width - 10 m	As proposed
3m	Total area covered under excavation/ pits	107.509 ha	105.480 ha	Within limits
3n	Ore to OB ratio for the pit/mine during the year	1:0.03	1:0.07	Within acceptable limit
30	Total area put in use under different heads at the end of year	Area under Mining - 107.509 Ha Used for Waste Dump- 18.66 Ha Plant, Buildings &Road - 2.120Ha Green Belt & safety Area - 37.716 Ha	Area under Mining - 105.480 Ha Used for Waste Dump - 7.160 Ha Plant, Buildings- 2.120 Ha Green Belt - 51.245 Ha	Within proposed limits
3р	Production of ROM mineral during last five-year period, as applicable	2019-20:1999995 2020-21:3510711 2021-22:4534748 2022-23:1997746 2023-24:6969998	2019-20:1565200 2020-21:1701700 2021-22:1798700 2022-23:1981000 2023-24:2747100	Within limits
3q	General remarks of inspecting officer on method of mining etc.	-	-	Violation pointed out for deviation from exploitation proposal.

Solid Waste Management-Dumping (2023-2024)

S.N. Item Proposals Actual work Remarks

4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate OB dump was proposed	Separate OB dumps was maintained as proposed	No Top soil removal was proposed or carried out
4b	Location of topsoil, OB & mineral reject dumps	Dump - 2 10°59'37.93"N 78°56'40.49"E Dump - 3 10°59'26.34"N 78°57'0.34"E Dump - 5 10°59'20.36"N 78°56'50.34"E Dump - 6 10°57'36.50"N 78°56'9.28"E Dump - 7 10°57'37.18"N 78°56'14.78"E Dump - 8 10°57'34.31"N 78°56'16.13"E Dump - 9 10°57'22.00"N 78°56'5.08"E Dump - 10 10°57'34.76"N 78°56'6.39"E	Dump - 2 10°59'37.93"N 78°56'40.49"E Dump - 3 10°59'26.34"N 78°57'0.34"E Dump - 5 10°59'20.36"N 78°56'50.34"E Dump - 6 10°57'36.50"N 78°56'9.28"E Dump - 7 10°57'37.18"N 78°56'14.78"E Dump - 9 10°57'22.00"N 78°56'5.08"E	Within proposal
4c	Number of dumps within lease area and outside lease area	10 dumps proposed (within lease)	8 Dumps formed (within lease)	Less dumps formed than proposed due to less generation of OB than proposed during the plan period
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of the UPL	Outside of the UPL	As proposed
4e	Number of active & alive dumps	5 dumps	4 Dumps	Less dumps formed than proposed due to less generation of OB than proposed during the plan period
4f	Number of dead dumps	Nil	Nil	Nil
4g	Number of dumps stabilized	5	4	Less dumps formed than proposed due to less generation of OB than proposed during the plan period
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drain proposed	Garland drain maintained.	As proposed
4i	Length of Retaining wall or garland drain all along dump	Garland Land: 500 Mts	Garland Land: 500 Mts	As proposed
4 <u>j</u>	Number of settling ponds	Nil	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory

Solid Waste Management-Backfilling (2023 -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	NA	NA	Nil
5с	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	NA	NA	Nil
5d	Total area fully reclaimed & rehabilitated	NA	NA	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc	-	-	No backfilling or reclamation was proposed or carried out

Progressive Mine Closure Plan (2023-2024)

S.N.	ltem	Proposals	Actual work	
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2).	YES	Submitted:	Submitted along with AR
6b	Area available for rehabilitation (ha)	No proposal	Nil	Nil
6c	Afforestation done (ha)	2.5 Ha	4.5 Ha.	More than proposal
6d	No. of saplings planted during the year 2023- 24	2500 saplings	10450 Plantation done	More than proposal
6e	Cumulative no. of plants	-	57300 saplings	Cumulative
6f	Any other specific method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch & care during the year	Nil	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) void availability for backfilling(LXBXD)	No backfilling proposed	No Backfilling done	Nil
61	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filling by waste /Tailing	Nil	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on the backfilled area	NA	NA	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	Nil	Nil	No waste land is within lease area
	i) Afforestation			
6n	Compliance of Rehabilitation of waste land within lease	NA	NA	No waste land is within lease area
	ii) Area rehabilitated (ha)			
60	Compliance of Rehabilitation of waste land within lease	NA	NA	No waste land is within lease area
	iii) Method of rehabilitation			
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	-	-	PMCP Compliance & progressive closure operations were found satisfactory.

operations		

Mineral Conservation (2023 - 2024)

S.N.	ltem	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	NA	NA	Nil
7с	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 & beneficiation issues	-	-	Entire ROM generated is consumed. No issues were observed with mineral conservation. No beneficiation was proposed or carried out.

Environment (2023-2024)

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	Nil
8b	Concurrent use or storage of topsoil	Nil	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Nil	Nil	Nil
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)	Nil	Nil	Nil
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Nil	57300 saplings plated so far	Nil
8g	Survival rate	80%	80%	Nil
8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out	12KL capacity water tanker deployed
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.	ltem	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	Nil	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager : Shri M.R.Raja Ranjith Singh 8. Mining Engineer in charge: Shri M.R.Raja Ranjith Singh 9. Geologist in charge : Shri N.Karthikeyan	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 – 105.480Ha Area for Waste Dump – 7.160 Ha PlantBuildings &Roads- 2.120Ha Green Belt & safety Barrier – 51.245Ha	Given in Part I, Sl 12.	Nil
9d	Scrutiny of Annual return on afforestation	10450	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	a) Opencast Working - Production - 2747100 MT (b) Under ground Working - Production - Nil (c)Dump Workings - Production - Nil	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. Cost of production - Rs.332.24/-	Given in Part VI, Sl 3(ii) & Part VII.	Nil
9h	Scrutiny of Annual return on fixed assets	Rs. 254145669/-	Given in Part II A	Nil
9i	Scrutiny of Annual return on mining machineries	BACK HOE 2.400 CUM 4 DOZER 165.000 HP 1 BACK HOE 2.700 CUM 10 TIPPER 14.000 CUM 25 SURFACE MINER 1200.000 HP 2 WHEEL LOADER 2.400 CUM 3 PUMPS (ELEC.) 1000.000 L/MN 1 PUMPS (ELEC.) 400.000 L/MN 1 MOTOR GRADER 140.000 HP 1 WATER TANKER 12000.000 LITRE	Given in Part V, Sl 6	Nil

	Violation ob	served		Show cau	use position
Rule No.	Issued on	Compliance on	Rule No.	Issued on	Compliance or
11(1)	27/11/2024				

Date:	(Matiul Islam)
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Indian Bureau of Mines