### INDIAN BUREAU OF MINES

## MINERAL DEVELOPMENT AND REGULATION DIVISION

### MCDR INSPECTION REPORT

Chennai Re	lanoir	Office
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Mine	file No. TN/PT/LST-13.MDS	Mine Code: 38TMN38001
	Name of the inspecting officer	Matiul Islam
	designation	Assistant Controller of Mines (IBM)
	Date of inspection:	09.12.2024
	Accompanied mine official and designation	Mr. Raja Ranjith Singh, (GM-Mines)
	PART-I: Gene	eral Information
S.N.	Particulars	Details
1	Name of the Mine	M/s.Periathirukonam Limestone Mine (ML-1)
2	Total Lease Area (Ha) with breakup of Non-forest	Non-Forest - 61.365 Ha
	and forest land	Forest - Nil
		Total - 61.365 Ha
3	Minecode	38TMN38001
4	IBM Registration Number under rule 45 of MCDR, 1988	929/2011
5	Name of the lessee, Address, phone, email and fax	M/s. Dalmia Cement (Bharat) Limited
	number	Dalmiapuram, Trichy district,
		Tamilnadu - 621651
		Phone - 04329235123
		Fax - 04329235111
6	Village	Periathirukonam
7	Taluka/Mandal	Ariyalur
8	District	Ariyalur
9	Pin code	621707
10	State	Tamilnadu
11	Post office	Edayathankudi
12	Nearest police station	Keelapalur
13	Nearest Railway station	Ariyalur
14	Date of Grant of Mining Lease	27.08.1998
14a	Lease deed Execution Date	26.03.2001
15	Date of Lease Registration	30.03.2001
16	Date of opening of Mine	04.06.2001
17	Date of first Renewal, if applicable and its period &	NA
18	expiry  Date of second Renewal, if applicable and its period	NA
10	& expiry	
19	Date of submission of renewal application if Mining	Nil
.,	Operations are continuing under deemed extension	
20	Name of the Nominated Owner with Address, phone,	T.Venkatesan
20	email, fax number and date of appointment	Nominated Mine Owner
	email, tax number and date of appointment	M/s. Dalmia Cement (Bharat) Limited
		Fagun Mansion, 26,Ethiraj Salai, Egmore, Chennai - 600008.
		Phone - 044 28279933
		Fax - 044 28276508
		t.venkatesan@dalmiacement.com Date of Appointment - 09.08.2012
21	Name of the Mine Agent with Address, phone, email,	Name: K. Vinayagamurthi
-1	fax number and date of appointment	Executive Director
	Tax number and date of appointment	Mob: 9750963784
		Email: k.vinayakamurthi@dalmiacement.com

		Date of Appointment - 05.01.2023
22	Name of the Mines Manager with Address, phone,	Hariprasad C.P
	email, fax number and date of appointment in mines	Mine Manager
	, , , , , , , , , , , , , , , , , , , ,	M/s. Dalmia Cement (Bharat) Limited
		Dalmiapuram, Trichy district,
		Tamilnadu - 621651
		Mobile - 9750963738
		hariprasad@dalmiacement.com
	N (11 M2 : 5 : 0 12 : 1	Date of Appointment - 22.07.2024
23	Name of the Mining Engineer, Qualification and total	Eniyan T
	experience with Address, phone, email, fax number	M/s. Dalmia Cement (Bharat) Limited
	and date of appointment in mine	Dalmiapuram, Trichy district, Tamilnadu - 621651
		Mobile - 7305045684
		T.Eniyan@dalmiacement.com
		Date of Appointment -20/03/2024
24	Whether Geologist and Mining Engineer appointed in	Yes. Mr. Kaliyamoorthy J (Geologist) appointed as per the
	mines satisfy the rule 42 & carrying out their duties	rule 42 & carrying out their duties as per rule 43 & 44
	as per rule 43 & 44.	, , , , , , , , , , , , , , , , , , , ,
25	Date of Approval of Mining Plan/Modified Mining Plan	1. TN/TCR/MP/LST-892 Mds dt:08.01.1996
	with five-year period and specific condition in	2. TN/ALR/MP/Lst-1363-SZ dt:28.12.2001 (2001-02 to 2005-
	approval letter, if any.	06)
	•••	3. TN/ALR/MP/Lst-1363-SZ dt:03.12.2002 (2002-03 to 2005-
		06)
		4.TN/ALR/MP/Lst-1363/SZ dt:31.12.2003 (2003-04 to 2005-
		06)
26	Date of Approval of Scheme of Mining/Modified	1. TN/PBR/LST/MS/363-SZ dt:07.03.2006 (2006-07 to 2010-11)
	Scheme of Mining with five-year period and specific	2. TN/ALR/LSt/MS-569-SZ dt:27.10.2011 (2011-12 to 2015-16)
	condition in approval letter, if any.	3. TN/ALR/LST/MS-1325.MDS dt:04.03.2016
	,	(2016-17 to 2020-21)
		4. TN/ALR/LSt/ROMP - 1613.MDS dt: 02.12.2020 (2021 - 22 to
		2025 -26)
		5. TN/ALR/LST/MMP - 2092.MDS dt:17.04.2023 (2023 -24 to
		2025 – 26)
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
30	Captive/Non Captive	Captive

# Exploration (2023-2024)

S.N.	ltem	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Entire potentially mineralized area fully explored
1b	Exploration over lease area for Geological axis 1 or 2.	G1	G1	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)	3,86,298 Tons	6,66,898 Tons	More reserve balance than proposed due to less depletion
1f	General comments of inspecting officer on geology, exploration etc.	-	-	Geology & Exploration of the lease were found satisfactory.

# Development (2023-2024)

S.N.	ltem	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease			
	area	11° 2'47.28"N-	11° 2'47.28"N-	
		11° 3'11.78"N	11° 3'11.78"N	As proposed
		&		As proposed
		79° 9'35.71"E -	79° 9'35.71"E –	
		79°10'20.53"E	79°10'20.53"E	
2b	Separate benches in topsoil,	Top Soil - 1	Top Soil - 1	
	overburden and mineral (Rule 15)	Bench	Bench	
		Over Burden - 3	Over Burden - 3	As proposed
		benches	benches	
		Lst - 4 benches	Lst - 4 benches	
2c	Stripping ratio or ore to OB ratio			Violation pointed for deviations
		1:0.025	1:0.064	from development & exploitation
				proposals
2d	Quantity of topsoil generation in m <sup>3</sup>			Topsoil produced and spread over
		8,163	8,163	the backfilled area for
				Afforestation
2e	Quantity of overburden generation in m³			Violation pointed for deviations
		29,596 cu.m	58,959 cu.m	from development & exploitation
				proposals
2f	General remarks of inspecting officer			Violation pointed for deviations
	on development of pit w.r.t. type of	-	-	from development & exploitation
	deposit etc.			proposals

# Exploitation (2023-2024)

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	As proposed
3b	Quantity of ROM mineral production proposed	12,00,000 MT	9,19,400 MT	Violation pointed for deviations from exploitation proposals
3c	Recovery of salable/usable mineral from ROM production	100%	100%	As proposed
3d	Quantity of mineral reject generation	Nil	Nil	Nil
3e	Grade of mineral reject generation and threshold	Nil	Nil	Nil

	value declared			
3f	Quantity of sub-grade mineral generation	Nil	Nil	Nil
3g	Grade of sub-grade mineral generation	Nil	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Nil	Nil	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	Mechanical Wagon Drill proposed with 3.5 m spacing, 3 m burden & 8.5 m depth. Permitted slurry explosives (Small diameter) proposed.	Mechanical Wagon Drill used with 3.5 m spacing, 3 m burden & 8.5 m depth. Permitted slurry explosives (Small diameter) used.	As proposed
3k	Provision of mining machineries in mineral benches	Tippers, Excavators, Breaker, Water Tanker proposed	Tippers, Excavators, Breaker, Water Tanker deployed	As proposed
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height – 6m Bench Width – 8m	Bench Height – 6m Bench Width – 8m	Suitable
3m	Total area covered under excavation/pits	20.95 H.a	19.020 H.a	Within limit
3n	Ore to OB ratio for the pit/mine during the year	1:0.025	1:0.064	Violation pointed for deviations from development & exploitation proposals
30	Total area put in use under different heads at the end of year	28.03 Ha	25.6 Ha	Within limit
3р	Production of ROM mineral during last five-year period, as applicable (2017-23)	2019-20: 8,63,949 2020-21: 4,65,520 2021-22: 8,50,713 2022-23: 6,49,750 2023-24: 12,00,000	2019-20: 5,68,600 2020-21: 3,60,900 2021-22: 8,00,378 2022-23:6,23,500 2023-24:9,19,400	Within limit
3q	General Remarks of inspecting officer on method of mining etc.	-	-	Violation pointed for deviations from development & exploitation proposals

Solid Waste Management-Dumping (2023-2024)

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB &	Only OB proposed	OB backfilled over	Top soil spread over
	mineral reject (Rule 32, 33)	to be dumped	mined out area	backfilled area
4b	Location of topsoil, OB & mineral reject dumps	11° 3'5.70"N to 11° 2'53.21"N & 79° 9'44.70"E to 79° 9'31.77"E	11° 3'5.70"N to 11° 2'53.21"N & 79° 9'44.70"E to 79° 9'31.77"E	OB Dump
4c	Number of dumps within lease area and outside lease area	1 (within lease area)	1 (within lease area)	As proposed
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	As proposed

4e	Number of active & alive dumps	Nil	Nil	Nil
4f	Number of dead dumps	1	1	Nil
4g	Number of dumps stabilized	1	1	Nil
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	300 Mts	300 Mts	As proposed
4j	Number of settling ponds	Nil	1	Existing settling pond desilted
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory

Solid Waste Management - Back filling (2023-2024)

S.N.	ltem	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting back filling	Backfilling proposed on mined out area	Backfilling carried on mined out area	As proposed
5b	Area under back filling of mined out area	0.29 ha	0.86. ha	Violation pointed out for deviation from PMCP proposal
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposal	Topsoil used concurrently	As proposed
5d	Total area fully reclaimed & rehabilitated	26.21 ha	28.590 ha	As proposed
5e	General Remarks of inspecting officer on back filling, reclamation etc	-	-	Violation pointed out for deviation from PMCP proposal

## Progressive Mine Closure Plan (2023-2024)

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.	Nil	Submitted	In time
6b	i) Area available for rehabilitation (ha)	1 ha	1 Ha	As proposed
6c	(ii) Afforestation done (ha)	1 ha	1 ha	As proposed
6d	(iii) No. of saplings planted during the year	1200 saplings	1500 Saplings	As proposed
6e	(iv) Cumulative no. of plants	52500 Saplings	53822 saplings	As proposed
6f	(v) Any other specific method of rehabilitation	Nil	Nil	Nil
6g	(vi)Cost incurred on watch & care during the year	Not Specified	Rs.539425	Afforestation cost
6i	Compliance on reclamation and rehabilitation by backfilling Void filled by waste/tailings	0.29 Ha	0.86 Ha	Violation pointed out for deviation from PMCP proposal
6j	Compliance on reclamation and rehabilitation by backfilling Afforestation on the backfilled area	1 Ha 1200 Saplings	1 Ha - 1500 saplings	As proposed
6k	Compliance on reclamation and rehabilitation by backfilling iv) Rehabilitation by making water reservoir	Nil	Nil	Nil
61	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	Nil	Nil	Nil

6n	Compliance of Rehabilitation of waste land within lease ii) Area rehabilitated (ha)	Nil	Nil	Nil
60	Compliance of Rehabilitation of waste land within lease iii) Method of rehabilitation	Nil	Nil	Nil
6р	Compliance of Environmental monitoring (core zone & buffer zone)	Nil	Periodic monitoring carried out	All parameters within norms
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	-	-	Violation pointed out for deviation from PMCP proposal

## Mineral Conservation (2023-2024)

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	Nil	Nil	Nil
7c	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	-	-	No issued observed with mineral conservation or beneficiation. Entire ROM generated is consumed.

## Environment (2023-2024)

S.N.	ltem	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal & utilisation of topsoil proposed	Separate removal & utilisation of topsoil carried out	As proposed
8b	Concurrent use or storage of topsoil	No proposal	Top soil utilized concurrently	Spread over backfilled area
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB dumping & backfilling proposed	OB backfilled over mined out area	As proposed
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling of OB proposed over mined out area	Backfilling of OB carried over mined out area	As proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling of OB proposed over mined out area	Backfilling of OB carried over mined out area	As proposed
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	The Area is devoid of any large trees. It contains thorny bushes, natural vegetation like grasses, wild shrubs grown during the monsoon.	Planted varieties of Trees like Neem, Pungan, Accacia etc and other trees in the backfilled area.	Plantations carried out in the Backfilled area
8g	Survival rate	85%	85%	As proposed
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed	Water sprinkling carried out	As proposed
8i	General Remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Aesthetic beauty in and around mines area found satisfactory

### Compliance of Rule 45 (2023-2024)

S.N.	ltem	Details Given in AR	Comments 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	Mines Manager – D.Johnson Mining Engineer – Eniyan T Geologist In-charge – Kaliyamoorthi.J	Mr. C.P. Hariprasad appointed as Mines Manager	Form H received
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current Workings - 19.020 ha Reclaimed / Rehabilitated - 28.590ha Used for Waste Disposal - 6.340 ha Occupied by plant, buildings, residential, welfare buildings & Roads - 0.240 ha Other Purpose (Green belt, Road, area, non- mineralised Bearing Land for future dumps, Afforestation, Infrastructure) - 7.175 ha	Given in Part I, Sl 12.	Nil
9d	Scrutiny of Annual return on afforestation	No.of Trees planted 1500. Survival Rate - 85%	Given in Part V, Sl 5	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Mineral Reject Generated - 0 tons Grade - High Ferruginous(Medium Grade)	Given in Part V, Sl 3	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock - 3434.000 T	Given in Part VI, Sl 2 & 3(ii).	Nil Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex.Mine Price - Rs.291.52 Cost of production - Rs.291.52	Given in Part VI, SI 3(ii) & Part VII.	
9h	Scrutiny of Annual return on fixed assets	Rs.30597047	Given in Part II A	Nil
9i	Scrutiny of Annual return on mining machineryy	Back Hoe with bucket 2 Cu.m - 2nos Back Hoe with 1.2cu m- 1no Tipper - 18Cu.m - 15 no Diesel Generator - 82.5KVA /100kwh - 1no Pump - Diesel Driven - 1 no Pump - Electrical Driven - 1 no Water Tanker - 12KL - 1 no Explosive Van 3T	Given in Part V, Sl 6	Nil

	Violation ob	served		Show cau	ise position
Rule No.	Issued on	Compliance on	Rule No.	Issued on	Compliance or

Date:	(Matiul Islam)
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