INDIAN BUREAU OF MINES MINERAL DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

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	Chennai Regio	
Mine fi	le No. TN/ALR/LST-62.MDS	Mine Code: 38TMN38021
	Name of the inspection officer designation	Matiul Islam
		Assistant Controller of Mines, IBM, Chennai
	Date of inspection	10.11.2024
	Accompanied Mine official & Designation	M.R.Raja Ranjith Singh
		General Manager
	PART-I: General	
1	Name of the Mine	Periathirukonam Limestone Mines ML -2
2	Total Lease Area (Ha) with breakup of Non-forest	Non-Forest - 44.705 Ha
	and forest land	Forest - Nil
	1	Total - 44.705 H.a
3	Mine code	38TMN38021
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/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
		Email Id:
		m.mayilrajan@dalmiacement.com &
		mr.rajaranjithsingh@dalmiacement.com
		Fax - 04329235111
6	Village	Periathirukonam & Alanthuriyarkattalai
7	Taluk/Mandal	Ariyalur
8	District	Ariyalur
9	Pin code	621707
10	State	Tamilnadu
11	Post office	Edayathankudi
12	Nearest police station	Keelapular
13	Nearest Railway station	Ariyalur
14	Date of Grant of Mining Lease	25.05.2005
15	Date of Execution	27.01.2011
16	Date of opening of Mine	27.01.2011
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone,	T.Venkatesan
	email, fax number and date of appointment	Nominated Mine Owner
		M/s. Dalmia Cement (Bharat) Limited
		Fagun Mansion, 26,Ethiraj Salai, Egmore, Chennai -
		600008.
		Phone - 044 28279933
		Fax - 044 28276508
		t.venkatesan@dalmiacement.com
21	Name of the Mine Agent with Address shore are it	Date of Appointment - 09.08.2012 Name: K. Vinayagamurthi
41	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Executive Director
	Tax number and date of appointment	Mob: 9865165326
		Email: k.vinayakamurthi@dalmiacement.com
		Date of Appointment – 05.01.2023
22	Name of the Mines Manager with Address, phone,	C.P.Hariprasad
	email, fax number	Mine Manager
	and date of appointment in mines	M/s. Dalmia Cement (Bharat) Limited
		Dalmiapuram, Trichy district,
		Tamilnadu - 621651
		Mobile - 9750963738
		hariprasad@dalmiacement.com
		-

		Date of Appointment - 01.07.2024
23	Name of the Mining Engineer, Qualification and total	S.Santhosh Kumar
	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 - 8678928274
		s.santhosh@dalmiacement.com
		Date of Appointment – 01.07.2023
24	Whether Geologist and Mining Engineer appointed in	Yes. Sarath Babu P (Geologist) and S.Santhosh Kumar
	mines satisfy the rule 42 & carrying out their duties	(Mining engineer) appointed as per the rule 42 & carrying
	as per rule 43 & 44.	out their duties as per rule 43 & 44.
25	Date of Approval of Mining Plan/Modified Mining Plan	TN/PBR/MP/Lst-1553-SZ dt:20.07.2004
	with five-year period and specific condition in	2010-11 to 2014-15
	approval letter, if any.	
<u>26</u>	Date of Approval of Scheme of Mining/Modified	1. TN/ALR/LST/MS-1181.MDS, dt:25.02.2015
	Scheme of Mining with five-year period and specific	2015-16 to 2019-20
	condition in approval letter, if any.	2. TN/ALR/LST/ROMP-1575.MDS dt:29.11.2019
		2020-21 to 2024-25
		3.TN/ALR/LST/MMP-2086.MDS dt: 07.02.2022
		2021-22 to 2024-25
		4. TN/ALR/LST/MMP-2105.MDS dt: 14.02.2024
		2023-24 to 2024-25
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 Mechanised
30	Captive/ Non captive	Captive

PART-II: OBSERVATION / COMMENTS OF INSPECTING OFFICER

Exploration

S.N.	ltem	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Lease area fully explored upto G1 level
1b	Exploration over lease area for Geological axis 1 or 2.	G1	G1	-do-
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	4,49,992 tonnes	5,90,284 tonnes	UNFC – 111 Category
1f	General remarks of inspecting officer on geology, exploration etc.	-	-	Geology & Exploration of the lease were found satisfactory.

Development

S.N.	ltem	Proposals	Actual	Remarks
			work	
2a	Location of development w.r.t. lease	N - 7500 to	N - 7500 to	
	area	7828	7828	
		E - 7802 to	E - 7802 to	
		8392	8392	
		N - 7122 to	N - 7122 to	
		7286	7286	
		E - 8229 to	E - 8229 to	
		8422	8422	
				As proposed
		N - 6961 to	N - 6961 to	
		7074	7074	
		E - 7616 to	E - 7616 to	
		7734	7734	
		&	&	
		N - 6968 to N - 6968 to 7050		
		E - 7341 to	E - 7341 to	
		7551	7551	
2b	Separate benches in topsoil,	Over	Over	
	overburden and mineral (Rule 15)	Burden - 3	Burden - 3	
		benches	benches	As proposed
		Lst - 4	Lst - 4	
		benches	benches	
2c	Stripping ratio or ore to OB ratio in m3	1:0.11	1:0.24	Violation already pointed out by previous inspecting officer.
2d	Quantity of topsoil generation in m3	6,370	6,370	As proposed
2e	Quantity of overburden generation in m3	52,706.00	1,73,764	Violation already pointed out by previous inspecting officer.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	-	-	Violations already pointed by previous inspecting officer for deviation from development proposal.

Exploitation

S.N.	ltem	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	As proposed
3b	Quantity of ROM mineral production proposed	4,76,992 te	6,98,200 te	Violation already pointed out by previous inspecting officer.

3с	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 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 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 Type Drill proposed with 8 m deep, 3.5m x 3m B x S	Mechanical Type Drill used with 8 m deep, 3.5m x 3m B x S	As proposed
3k	Provision of mining machineries in mineral benches	Excavator, Breaker, Tipper, Water Tanker & Pumps Proposed	Excavator, Breaker, Tipper, Water Tanker & Pumps deployed	As proposed
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/MP	Bench Height - 6M Bench Width - 10m	Bench Height - 6M Bench Width - 10m	As proposed
3m	Total area covered under excavation/pits(including backfilling)	26.34 Ha	26.45 Ha	As proposed
3n	Ore to OB ratio for the pit/mine during the year	1:0.11	1:0.24	Violation already pointed out by previous inspecting officer for deviations from development & exploitation proposals.
30	Total area put in use under different heads at the end of year	27.05 Ha	18.91 Ha	Within proposed limits
3р	Production of ROM mineral during last five-year period, as applicable	2019-20: 471492 2020-21: 884605 2021-22: 746241 2022-23: 992436	2019-20:382800 2020-21:432300 2021-22:698800 2022-23:974600	Within limits
3q	General remarks of inspecting officer on method of mining etc.	-	-	Violation already pointed out by previous inspecting officer for deviation from exploitation proposal.

Solid Waste Management-Dumping

S.N.	ltem	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Only backfilling proposed.	Only backfilling carried out.	As proposed
4b	Location of topsoil, OB & mineral reject dumps	NA	NA	Nil
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 ultimate pit limit	Outside ultimate pit limit	As proposed
4e	Number of active & alive dumps	Nil	Nil	Nil
4f	Number of dead dumps	1	1	Stabilized
4g	Number of dumps stabilized	1	1	Afforested
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drain proposed	Garland drain Provided	All along the overburden dump
4i	Length of Retaining wall or garland drain all along dump	100 Mts (Garland Drain)	100 Mts (Garland Drain)	As proposed
4j	Number of settling ponds	1	1	As proposed
4k	Specific comments of inspecting officer on waste dump management.	-	-	Waste dump management was found satisfactory.

Solid Waste Management-Backfilling

S.N.	ltem	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Full extraction of mineral from mined out area before backfilling proposed	Full extraction of mineral from mined out area before backfilling practiced	As proposed
5b	Area under backfilling of mined out area	0.3514 Ha	0.67 Ha	Top soil concurrently spread over backfilled areas.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent utilization of top soil proposed	Concurrent utilization of top soil carried out	As proposed
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc	-	-	Backfilling & reclamation activities 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). Details should be given in the format as given in Annexure-20.	YES	Submitted	Along with Annual Return
6b	Area available for rehabilitation (ha)	1 ha	1.5 ha	Backfilled & Afforested
6c	Afforestation done (ha)	1. Ha	1.5 Ha	As proposed
6d	No. of saplings planted during the year	1200 Saplings	3511 Saplings	As proposed
6e	Cumulative no. of plants	12850 Saplings	12850 Saplings	As proposed
6f	Any other specific method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch & care during the year	No proposal	Rs 3,57,117/-	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)	0.3514 Ha	0.668 Ha	Top soil concurrently spread over backfilled areas.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings	0.3514 Ha	0.668 Ha	-do-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area	1200 saplings proposed over 1 Ha	3511 saplings planted over 1.5 Ha	As proposed
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	Nil	Nil	No Waste Land within the lease area
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	NA	NA	No Waste Land within the lease area
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha)	NA	NA	No Waste Land within the lease area
60	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	NA	NA	Nil
6р	Compliance of Environmental monitoring (core zone & buffer zone)	No proposal	Periodic monitoring done	All parameters within norms
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	-	-	PMCP compliance & progressive closure operations were found satisdactory.

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 done	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 within the lease.

Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Carried out	As proposed
8b	Concurrent use or storage of topsoil	Concurrent use	Concurrent use	As proposed
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Only backfilling proposed	Only backfilling carried out	As proposed
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes, backfilling proposed	Backfilling carried out	As proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes, backfilling proposed	Backfilling carried out	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 over 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 found satisfactory.

Compliance of Rule 45

S.N.	Item	Details given in AR	Comments of I/Officer	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	In time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager : D.Johnson Mining Engineer in charge: S.Santhosh Kumar Geologist in charge : P.Sarath Babu	Given in Part I, Sl 7-9.	Nil
9c	Scrutiny of Annual return on	Covered under	Given in Part I, Sl 12.	Nil

	land use pattern for area under	current Workings -		
	pits, reclaimed area, dumps etc.	18.200 ha		
		Reclaimed /		
		Rehabiliated - 8.250		
		ha		
		Used for Waste		
		Disposal - 0.48 ha		
		Occupied by plant,		
		buildings, residential,		
		welfare buildings &		
		Roads - 0.23 ha		
		Other Purpose (Green		
		belt, Road, area, non		
		Mineral Bearing Land		
		for future dumps, Afforestation,		
		Infrastructure) –		
		17.545 ha		
9d	Scrutiny of Annual return on	No. of Trees planted		
, "	afforestation	within the Lease Area		
		during FY 23 - 24	Given in Part V, Sl 5	Nil
		3511		
		Survival Rate - 85%		
9e	Scrutiny of Annual return on	Mineral Reject		
	mineral reject generation	Generated - 0 tons	Given in Part V, Sl 3	Nil
	(Grade & quantity)			
9f	Scrutiny of Annual return on	(a) Opencast Working		
	ROM stock and/or graded ore	- Production - 698200		
		MT	Civen in Dent VI Cl 2 C	
		(b) Under ground	Given in Part VI, SI 2 &	Nil
		Working - Production - Nil	3(ii).	
		- Mit (c)Dump Workings -		
		Production - Nil		
9g	Scrutiny of Annual return on	Ex.Mine Price -		
, ,	sale value, Ex. Mine price &	Rs.291.52	Given in Part VI, Sl 3(ii)	
	production cost	Cost of production -	& Part VII.	Nil
<u> </u>	•	Rs. 291.52		
9i	Scrutiny of Annual return on	Rs. 3,05,97,047/-	Given in Part II A	Nil
	fixed assets		Oliven in Full II A	1416
9k	Scrutiny of Annual return on	Back Hoe- 2.0		
1	mining machineries	Cu.m - 2 no Back Hoe - 1.2 Cu.m -		
1				
1		1 no		
1		Tipper – 18.0 Cu.m - 5 no	Given in Part V, Sl 6	Nil
1		Diesel Generator –		
1		82.5KWH - 1no		
1		Pump – 200 lmn		
		2no		
L		2110	<u>L</u>	

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	

Date:	(Matiul Islam)
	Indian Bureau of Mines