INDIAN BUREAU OF MINES MINERAL DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

	MCI	OR INSPECTION REPORT
	Cl	nennai Regional Office
Mine f	ile No.ALR/LST-5.MDS Vol-V	Mine code - 38TMN14020
(i)	Name of the inspecting officer &	KUMERESH A
	Designation	Senior Assistant Controller of Mines
(ii)	Accompanied mine official and	Shri. M.R.Raja Ranjith Singh (General Manager - Mines)
	designation	Shri.T.C Gopirajeshkumar(Sr Manager – Mines)
(iii)	Date of inspection	24.09.2024
(iv)	Date of previous inspection	30.12.2023
		T-I: General Information
1.	Mine Name	Periyanagalur Limestone Mines
(b)	Registration Number	IBM/929/2011
(c)	Category	A
(d)	Type of Working	Opencast (Pl) It is a
	Postal Address	M/s. Dalmia Cement (Bharat) Limited
	State District	Dalmiapuram, Trichy district, Tamilnadu - 621651
	Village	Phone - 04329235123
	Taluka	Fax - 04329235111
(e)	Post Office	1 ux 01327233111
	Pin Code	
	FAX No.	
	E-mail	
	Phone	
(f)	Police Station	Astinapuram
(g)	First opening date	08.09.1965
(h)	Weekly day of rest	Sunday
2.	Address for correspondence	T. Venkatesan 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 Date of Appointment - 09.08.2012
3.	Lease Number	TMN0109
	Lease Area	70.01 Ha
	Period of lease	50years
	Date of expiry	31.03.2030

4.	Mineral worked	Limestone
5.	Name and address of the Lessee:	
	Owner:	M/s. Dalmia Cement (Bharat) Limited
	Agent:	T. Venkatesan 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 Date of Appointment - 09.08.2012 Name: K.Vinayagamurthi Executive Director Mob: 9750963784 Email: k.vinayagamurthi@dalmiacement.com Date of Appointment - 06.01.2023
	Manager:	Name: T.C.Gopi Rajesh kumar Mob: 98651 70056 Email: tc.gopirajeskumar@dalmiacement.com
	Engineer:	Name: C.Manikandan Mob: 8695296052 Email: c.manikandan1@dalmiacement.com Date of Appointment: 16.05.2021
	Geologist:	K.Jayanthan _ Geologist Qualification: M.Sc (Applied Geology) and C.Manikandan – Mining Engineer Qualification: BE Mining
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.	Mining Scheme rule 12 MCDR 1988: 04.02.1998 Renewal under rule 22 MCR 1960: 09.09.2003 Modification of approved mining plan: 31.12.2003 Mining Scheme rule 12 MCDR 1988: 18.05.2011 Mining Scheme rule 12 MCDR 1988: 09.02.2015 Mining plan modification under rule 17(3) MCR 2016: 04.05.2018 Mp review under 17(1) MCR 2016: 11.12.2019

PART-II: OBSERVATION / COMMENTS OF INSPECTING OFFICER $\underline{\textbf{EXPLORATION}}$

S. No.	Item	Proposals	Actual Work	Remarks

		1	1	1
1a	Backlog of previous year	Nil	Nil	Entire area have been explored
1b	Exploration over lease area for Geological axis 1 or 2.	Area G1-70.01.0	Area G1-70.01.0	The entire lease hold area falls under 111, 211 & 221 Classification.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NA	No Exploration proposed during the FY 23 -24
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 Category)	Proved Mineral Reserve (111) - 5732078 Tons Feasible Mineral Resources (211) - 3404785 Tons Inferred Mineral Resources (221) - 2480964 Tons		
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	N 4400 - 4680 E 5440-5820	N 4400 - 4680 E 5440-5820	
2b	Separate benches in topsoil, overburden and minerals (Rule 13 of MCDR-2017)	Separate Benches to be made	Operated as separate benches	No Top Soil is present, mineral outcrop area
2c	Stripping ratio or ore to OB ratio	1:0	1:0	Due to non existence of OB, strippiing ratio is 1:0
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	Nil	193081	
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	1	-
3b	Quantity of ROM mineral production proposed	1200400 MT	799800 MT	As proposal for EC enhancement

				was dropped, Production was restricted.
3c	Recovery of salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	0	0	
3e	Grade of mineral rejects generation and threshold value declared.	> 6% of Fe in limestone	Nil	
3f	Quantity of sub grade mineral generation.	0	0	
3g	Grade of sub grade mineral generation	Nil	Nil	
3h	Manual / Mechanized method adopted for segregating from ROM	Mechanized	Mechanized	As proposed in ROMP
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	
3j	Provision of drilling and blasting in mineral benches	i)Drilling - ICM260 drill machine is proposed to be used. ii)Blasting- Magazine for Explosives Storage, & E-Van for Explosives Transport from Magazine to Blasting Site to be available	i)Drilling - ICM260 drill machine is used. ii)Blasting- Approved Magazine for Explosives Storage & E-Van for Explosive Transport from Magazine to Blasting Site is used.	As proposed in ROMP
3k	Provision of mining machineries in mineral benches	i)For Loading- 30T Class Excavator and ii)for Transportation 31 ton carrying capacity Taurus tippers is proposed	i)For Loading 30T Class Excavator is used. ii)For Transportation 31 ton carrying capacity Taurus tippers are used	As proposed in ROMP
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in RoMP	Ht – 5 m Width - 15 m	Ht – 5 m Width - 15 m	Nil
3m	Total area covered under excavation/pits	53.23 Н.а	49.95 H.a	
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0.24	
30	Total area put in use under different heads at the end of year	70.01 H.a	70.01 H.a	As per proposed in ROMP
3р	Production of ROM mineral during the last five-year period as applicable	2019-20 1249154 2020-21 800930 2021-22 1000202	2019-20 796153 2020-21 797777 2021-22 798542	

		2022-23 1152180 2023-24 1200400	2022-23 797168 2023-24 799800	
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)	-	-	
4b	Location of topsoil, OB and mineral reject dumps	N 4800 -5080 E 5240- 5520	N 4800 -5080 E 5240- 5520	Old existing dump exists within the lease area
4c	Number of dumps within lease area and outside of lease area	1 (within lease area)	1 (within lease area)	As per proposed in ROMP
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	South Western part of the lease	South Western part of the lease	As per proposed in ROMP
4e	Number of active and alive dumps.	1	1	As per proposed in ROMP
4f	Number of dead dumps.	Nil	Nil	-
4g	Number of dumps established.	1	1	South Western part of the lease
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil	Nil	
4i	Length of Retaining wall or garland drain all along dumps	NA	NA	-
4j	Number of settling ponds	0	0	-
4k	Specific comments of inspecting officer on waste dump management			

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	Nill	
5b	Area under backfilling of mined out area	No proposal	Nill	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposal	Nill	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nill	
5e	General remarks of inspecting officers on backfilling and reclamation etc	The mine was not worked depth and no backfilling		No backfilling done

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)	YES	Submitted	Submitted within the due date
6b	Area available for rehabilitation (ha).	Nil	Nil	No waste material is available for backfilling- reclaimation & Rehabilitation
6c	Afforestation done (ha).	0.10	0.30	As per proposed in ROMP
6d	No. of saplings planted during the year	150	250	As per proposed in ROMP
6e	Cumulative no. of plants		8482 saplings planted till date	within the lease area
6f	Any other method of rehabilitation	NA	NA	-
6g	Cost incurred on watch and care during the year	Nil	Nil	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D)	No backfilling proposed	No backfilling proposed	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation backfilled area	YES	Submitted	For the year PMCP submitted on 28.06.2024
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	The excavated area could be used as reservoir at the end of the mine	The mine is in operation and reclamation and rehabilitation is not started	As per proposed in ROMP
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No waste land available within the lease area	No waste land available within the lease area	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No waste land available within the lease area	No waste land available within the lease area	
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No waste land available within the lease area	No waste land available within the lease area	
6p	Compliance of environmental monitoring (core zone and buffer zone)	To be carried out every Quarter	M/s. ITC Lab, Chennai is engaged for monitoring Environmental data on a Quarterly basis	As proposed in ROMP

Ī		General remarks of inspecting officers	Plantation was done as per the proposal along the safety barrier
	6q	on PMCP compliance and progressive	
		closure operations etc.	

MINERAL CONSERVATION

S. No.	Item	Proposals	Actual Work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1200400 MT	799800 MT	Violation is issued
7b	Method of grade wise mineral sorting i.e. manual or mechanical.	No proposal for grade wise sorting within the Lease area	Entire ROM is usable	The available grade of Limestone in the Lease area is Cement grade
7c	Different grade of mineral sorted out at mines.	The Limestone within the lease area varies from 35% Cao	The Limestone within the lease area varies from 35% Cao	Grade of high ferruginous Limestone is Fe ₂ O ₃ is +6%
7d	Any beneficiation process at mines	Crushing and screening process outside the lease area	There is no beneficiation plant within the lease area	Entire ROM is usable
7e	General remarks of inspecting officer on Mineral Conservation & beneficiation issues	The available Limestone within the lease area is cement grade	The available Limestone within the lease area is cement grade	Entire ROM is usable and blended with high grade limestone to get the desired feed for the plant

ENVIRONMENT

S. No.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No topsoil is present	No topsoil is mined	Limestone occurred as outcrop
8b	Concurrent use or storage of topsoil	NA	NA	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	NA	NA	-
8d	Use of overburden, waste rock, rejects and fines dump for restoring the land to its original use	NA	NA	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	After mining is completed, the entire lease area will be converted into water reservoir.	The mine is in operation. After mining is completed, the entire lease area will be converted into water reservoir.	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	150 nos. per year	300 nos. per year	-
8g	Survival rate	85%	90%	-

8h	Water sprinkling on roads to control airborne dust	Provided	Provided	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			

COMPLIANCE UNDER RULE-45

S. No.	Item	Proposals	Actual Work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual returns are being submitted online		Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Full time Mining Engineer and Geologists	Full time Mining Engineer and Geologists were appointed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Lease Area Utilization at the end of FY23-24 Already Exploited & (i) Abandoned by Opencast Workings - 0 ha (ii) Covered under current Workings -49.95 ha (iii) Used for Waste Disposal - 0 ha (v) Occupied by plant, buildings, residential, welfare buildings & Roads - 1.32 ha (vi) Other Purpose (Green belt, Road, area, non Mineral Bearing Land for future dumps, Afforestation, Infrastructure) - 18.74 ha	Nil	
9d	Scrutiny of Annual return on afforestation	No.of Trees planted within the Lease Area during FY 23 - 24 250 Survival Rate - 90%	250	
9e	Scrutiny of Annual return on mineral reject generation (Grade and	Nil	Nil	

	quantity)			
9f	Scrutiny of Annual return on ROM stock and/or graded ore	(a) Opencast Working - Production - 799800 MT (b) Under ground Working - Production - Nil (c)Dump Working- Production - Nil	Limestone production is 799800 MT	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex.Mine Price - Rs.244.93 Cost of production - Rs. 244.93	It is Captive Mine of M/s Dalmia Cements (Bharat) Limited	-
9h	Scrutiny of Annual return on fixed assets	Fixed assets Provided are for group of Mines	Fixed assets Provided are for group of Mines	-
9i	Scrutiny of Annual return on mining machineries	Yes	As per proposal	-

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
11(1)	25.10.2024	03.12.2024			

Date:	KUMERESH A
	SrAsst Controller of Mines
	Indian Bureau of Mines