

INDIAN BUREAU OF MINES

MINERAL DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Chennai Regional Office

Mine file No. TN/KRR/LST-42.MDS		Mine code - 38TMN28002
	Name of the inspecting officer designation	Shri.Matiul Islam Assistant Controller of Mines
	Date of inspection:	08.11.2024
	Accompanied mine official and designation	Mr.M.M.Ramesh, DGM (Mines) Mr.M.Kalishkumar, Sr.Manager (Mines) Mr.V.Sasikumar, Sr.Manager (Geology) Mr.M.Senthil Kumar, Manager (Survey)
PART-I: General Information		
S.N.	Particulars	Details
1	Name of the Mine	Devarmalai Limestone Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	166.53.5Ha (Non Forest Land)
3	Mine code	38TMN28002
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/170/2011
5	Name of the lessee, Address, phone, email and fax number	Chettinad Cement Corpn. Private Ltd., Meyyammai Building ,17/35, Gandhi Nagar, 2 nd Main Road, Adyar, Chennai - 600 020. Phone - 044-28292727,42149955
6	Villages	Devarmalai & Melapaguthi
7	Taluka/Mandal	Kadavur
8	District	Karur
9	Pin code	621301
10	State	Tamilnadu
11	Post office	Kurunikulathupatti
12	Nearest police station	Chinthamanipatti
13	Nearest Railway station	Palayam
14	Date of Grant of Mining Lease	10.01.1989
15	Date of Execution	03.02.1989
16	Date of opening of Mine	03.02.1989
17	Date of first Renewal, if applicable and its period & expiry	-
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	Tamil Nadu Government has granted mining lease in the year 1989 vide G.O.No.25 industries (M2) Dept dated 10.01.1989 over an extent of 166.53.5 hectares in Devarmalai and Melapaguthi villages of Kadavur Taluk, Karur District for a period of 20 years from 03.02.1989 to 02.02.2009. However as per the MM(DR) Amendment Act 2015 the period of the lease is valid upto 02.02.2039.
20	Name of the Nominated Owner with Address, phone, email, fax number and Date of appointment	Shri. Mohan Muthukaruppan Chettinad Cement Corpn. Private Ltd., Meyyammai Building ,17/35, Gandhi Nagar, 2 nd Main Road, Adyar, Chennai - 600 020. Phone - 044-28292727,42149955 Date of Appointment - 01.04.2022
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri.V.Krishnan Agent (Mines) / Joint President (Works) Chettinad Cement Corpn Private Ltd

		Karikkali (P.O),Guziliamparai(Tk.), Dindigul(Dist.)-624703, Phone-9788858216 Email-krishnan.v@chettinadcement.com Date of Appointment - 06.10.2020
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. M. Kalishkumar, Manager-Mines, Devarmalai Limestone Mines, Kadavur Taluk, Karur District-621301 Phone: 9788858244 Date of Appointment-15.10.2016
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. M. Kalishkumar, B.E. Mining and 15 years Kadavur Taluk, Karur District-621301 Phone: 9788858244 Date of Appointment-15.10.2016
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Mr. V.Sasikumar Geologist (Mines), Devarmalai Limestone Mines, Kadavur Taluk, Karur District-621301 Date of Appointment- 02.04.2008
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan: (2009-10 to 2013-14) TN/KRR/MP/LST-1680-/SZ Dated 11/03/2008
26	Date of Approval of Review of Mining/Modified Review of Mining with five-year period and specific condition in approval letter, if any.	Review of Mining Plan: (2019-20 to 2023-24) TN/KRR/LST/ROMP-1550-MDS Dated:25.04.2019 Modified ROMP: (2022-23 to 2023-24) TN/KRR/MMP/LST-2089.MDS Dated: 19.01.2023.
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
30	Captive/Non Captive	Captive

PART-II : OBSERVATION / COMMENTS OF INSPECTING OFFICER

Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year (2022-23)	2022-23: 8 Bore holes 2023-24: 9 Bore holes Total 17 Nos Total 1700M	24 Nos of Bore holes for a total meterage of 1703 Meters completed in July 2024.	As proposed
1b	Exploration over lease area for Geological axis 1 or 2.	G1	G1	As proposed
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Rs.3746600/- M/s. Global Environment and Mining Services.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Potentially Mineralised area fully explored upto G1 level
1e	Balance reserves as on 01.04.2024	-	48.09 Million Tons	Nil
1f	General remarks of inspecting officer on geology, exploration etc.	-	-	Geology and exploration of the lease were found satisfactory.

Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area(Ref With Grid)	East A pit N1189060 to 1189265 E 191577 to 191780 East B pit N1188809 to 1188922 E 191426 to 192038 West pit N1188672 to 1188801 E 189480 to 189703	East A pit N1189060 to 1189265 E 191577 to 191780 East B pit N1188809 to 1188922 E 191426 to 192038 West pit N1188672 to 1188801 E 189480 to 189703	As per Approved Modified ROMP
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	West Pit No.of Benches -1 East Pit A pit No.of Benches -3 East Pit B pit No.of Benches -2	West Pit No.of Benches -1 East Pit A pit No.of Benches -3 East Pit B pit No.of Benches -2	As per Approved Modified ROMP
2c	Stripping ratio or ore to OB ratio	1:1.34	1:1.04	Within limit
2d	Quantity of topsoil generation in M ³	Nil	Nil	There is no top soil generation at Devarmalai mines.
2e	Quantity of overburden generation in M ³	412600 M ³	287606.31 M ³	Violation pointed out
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	-	-	Violations pointed out for deviation from development proposals.

Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	3 Pit	3 Pit	As proposed
3b	Quantity of ROM mineral production proposed	799760Ts	779063.90Ts	As proposed
3c	Recovery of salable/usable mineral from ROM production	719784 Ts	708948.15 Ts	As proposed
3d	Quantity of mineral reject generation	79976 Ts	70115.75 Ts	Blended and consumed along with imported Limestone.
3e	Grade of mineral reject generation and threshold value declared	Cao-+ 34%	Cao-+ 34%	Nil
3f	Quantity of sub-grade mineral generation	Nil	Nil	Nil
3g	Grade of sub-grade mineral generation	NA	NA	Nil
3h	Manual / Mechanized 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	Yes, Hydraulic Drill with 11 m depth, 3.5m x 2.5m Pattern Proposed	Yes, Hydraulic Drill with 11 m depth, 3.5m x 2.5m Pattern used	As proposed
3k	Provision of mining machineries in mineral benches	Yes, Excavator, Dumper, Dozer, & Drill proposed	Yes, Excavator, Dumper, Dozer, & Drill deployed	As proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height-10 m, Bench Width- 12 m	Bench Height-10 m, Bench Width- 12 m	As proposed
3m	Total area covered under excavation/pits	46.12 Ha	44.930 Ha	Within limit
3n	Ore to OB ratio for the pit/mine during the year	1:1.34	1:1.04	Within limit
3o	Total area put in use under different heads at the end of year	Area under Excavation- 46.12Ha Waste Disposal-21.89 Ha Road, Buildings etc- 6.78 Ha Others- 19.47 Ha Total area in use- 94.26 Ha	Area under Excavation- 44.930Ha Waste Disposal-19.090 Ha Road, Buildings etc- 6.78 Ha Green Belt- 19.47 Ha Total area in use- 90.27 Ha	Within limits
3p	Production of ROM mineral during last five-year period, as applicable	2019-20-8,87,774 Ts 2020-21-16,61,401 Ts 2021-22-16,63,476 Ts 2022-23-7,99,942 Ts 2023-24-7,99,760 Ts	2019-20-7,36,619 Ts 2020-21-5,28,781Ts 2021-22-6,33,602 Ts 2021-22- 6,47,896.50 Ts 2023-24-7,79,063.90 Ts	Within limits
3q	General Remarks of inspecting officer on method of mining etc.	-	-	Method of mining was found satisfactory.

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	OB dump only proposed Dump No 1,6 &7	Only OB dump carried out : Dump No 1,6 &7	No top soil generation
4b	Location of topsoil, OB & mineral reject dumps(Ref to	Dump No 1 N1188128 to N	Dump No 1 N1188200 to N	As proposed

	Grids)	1188290 E 188750 to E 189000 Dump No 6 N1188698 to N18880 E189995 to E 190265 Dump No 7 N1188771 to N 1189026 E 190740 to E 191008	1188290 E 188856 to E 189000 Dump No 6 N1188710 to N188830 E190000 to E 190265 Dump No 7 N1188853 to N 1188960 E 190794 to E 190891	
4c	Number of dumps within lease area and outside lease area	Within Lease-4 Outside Lease- 2	Within Lease-4 Outside Lease- 2	As proposed
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump No 1 N1188128 to N 1188290 E 188750 to E 189000 Dump No 6 N1188698 to N18880 E189995 to E 190265 Dump No 7 N1188771 to N 1189026 E 190740 to E 191008	Dump No 1 N1188200 to N 1188290 E 188856 to E 189000 Dump No 6 N1188710 to N188830 E190000 to E 190265 Dump No 7 N1188853 to N 1188960 E 190794 to E 190891	As proposed
4e	Number of active & alive dumps	Active- 3Nos Alive- Nil	Active- 3Nos Alive- Nil	As proposed
4f	Number of dead dumps	1	1	As proposed
4g	Number of dumps stabilized	1	1	As proposed
4h	Whether Retaining wall or garland drain all along dumps are there	No Proposal	Nil	Garland Drain and Protective Bund already provided all along the dumps
4i	Length of Retaining wall or garland drain all along dump	NIL	Nil	2850 Meters Length of garland drain and bund existing
4j	Number of settling ponds	Nil	Nil	2 settling ponds existing
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory

Solid Waste Management – Backfilling

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	Mineral not extracted completely.
5b	Area under backfilling of mined out area	Nil	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Nil	Nil	Nil
5d	Total area fully reclaimed & rehabilitated	NA	NA	Nil
5e	General Remarks of inspecting officer on backfilling, reclamation etc	-	-	No backfilling or reclamation proposed or carried out.

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)	YES	Submitted on	Nil

			13.06.2024	
6b	i) Area available for rehabilitation (ha)	Nil	Nil	Nil
6c	Afforestation done (ha)	2.0Ha	2.0Ha	As proposed
6d	No. of saplings planted during the year	2000	2050	As proposed
6e	Cumulative no. of plants	14500	15280	As proposed
6f	Any other specific method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch & care during the year	Rs.150000	Rs.150000	As proposed
6h	Compliance on reclamation and rehabilitation by backfilling Voids available for backfilling(LxBxD)	Nil	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii)Void filled by waste/tailings	Nil	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on the backfilled area	Nil	Nil	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 i) Afforestation	Nil	Nil	Nil
6n	Compliance of Rehabilitation of waste land within lease ii) Area rehabilitated (ha)	Nil	Nil	Nil
6o	Compliance of Rehabilitation of waste land within lease iii) Method of rehabilitation	Nil	Nil	Nil
6p	Compliance of Environmental monitoring (core zone & buffer zone)	No proposal	Periodically Monitored	All parameters within norms
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	-	-	PMCP Compliance and Progressive Closure Operations found satisfactory.

Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Nil	Nil	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	Nil	Nil	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 observed with mineral conservation.

Environment(2023-24)

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	No topsoil
8b	Concurrent use or storage of topsoil	NA	NA	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Only OB dumps Proposed	Only OB dumps maintained	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	Nil
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Cumulative 14,500 nos saplings proposed	Cumulative 15,280 nos saplings planted	Nil
8g	Survival rate	75%	88%	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on haul roads.	Water sprinkling carried out on haul roads.	As proposed
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 of Rule 45(2023-24)

S.N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Returns- 06.11.2024	Annual Returns- 13.06.2024	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri.M.Kalishkumar -Manager & Mining Engineer V.Sasikumar - Geologist	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 Excavation- 44.930Ha Waste Disposal-19.090 Ha Road, Buildings etc- 6.78 Ha Green Belt and others - 95.735 Ha	Given in Part I, Sl 12.	Nil
9d	Scrutiny of Annual return on afforestation	Afforestation- 2050 Saplings	Given in Part V, Sl 5	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Mineral Reject-70115.75 Tonnes Cao-34% to 37%	Given in Part V, Sl 3	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	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 & Production cost-375.68	Given in Part VI, Sl 3(ii) & Part VII.	Nil
9h	Scrutiny of Annual return on fixed assets	GFA- Rs.73262070	Given in Part II A	Nil
9i	Scrutiny of Annual return on mining machineries Name of the Machinery Capacity	Hydraulic Excavator- Hitachi 1.90CUM2	Given in Part V, Sl 6	Nil

		Hydraulic Excavator- Breaker) 1.1CUM 2 Tipper 10 CUM 10 Rock Drill (Non Electric) 115.0MM 1 Pumps (Elec) 500 L/MN 1 Explosive Van 5Tones 1 Wheel Loader 2.0CUM 1 Water Tanker 8000 liters 1		
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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)	25/11/2024				

Date:

(Matiul Islam)

Indian Bureau of Mines