

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/VOC/LST-7.MDS

Mine code : 38TMN15045

- (i) Name of the Inspecting : **G039**) **G.C.Sethi**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : **SARAVANAN** dgm MINES
Official with
Designation
- (iv) Date of Inspection : 07/09/2023
- (v) Prev.inspection date : 01/09/2022

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SIVALARPATTI**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : TAMIL NADU
District : THOOTHUKUDI (TUTICORIN)
Village : SIVALARPATTI
Taluka : VILATHIKULAM
Post office : PUDUR
Pin Code :
FAX No. : 04562-256268
E-mail : adminrn@madrascements.co.in
Phone : 04562-256201, 201 & 203
- (f) Police Station : R R NAGAR
- (g) First opening date : 01/06/1995
- (h) Weekly day of rest : SUN
2. Address for : SIVALARPATTI LST MINE
correspondance : PUDUR POST
VIRUDUNAGAR
3. (a) Lease Number : TMN1203
- (b) Lease area : 150.11
- (c) Period of lease : 50
- (d) Date of Expiry : 21/05/2045
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : MADRAS CEMENTS LIMITED
 Auras Corporate Center Vth
 Floor, 98 A Dr.Radha
 Krishnan salai, Mylapore
 CHENNAI CITY TAMIL NADU
 Phone:044-28478666
 FAX :044-28478676

Owner : P.R.Venketrama Raja
 Ramasamiraja
 Nagar, Virudhnagar, Chennai-
 626204 VIRUDHUNAGAR TAMIL
 NADU
 Phone: 04562 256201 -
 FAX : 04562 256268

Agent : S.Ramalingam
 Ramasamiraja Nagar,
 Virudhnagar Pin:626204
 VIRUDHUNAGAR TAMIL NADU
 Phone: 04562 256201 - 203
 FAX : 04562 256268

Mining Engineer

Name : M.D.Massom Basha, Full Time
 Qualification : B.E(Mining)
 Appointment/ : 09/09/2012
 Termination date

Geologist

Name : E.SURESH, Full Time
 Qualification : MSC(GEO)
 Appointment/ : 01/02/2023
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	23/09/1989
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	22/01/2003
		Modif.approved Mining Scheme	05/08/2004
		Mining Scheme rule 12 MCDR1988	31/01/2007
		Mining Scheme rule 12 MCDR1988	29/11/2011
		Modif.approved Mining Scheme	28/02/2014
		MP modif under MCR 1960	02/07/2015
		MP modif under MCR 1960	16/12/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Backlog	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	Geological axis - 1.	Geological axis - 1.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Lessee	Area was fully explored
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	The entire lease area already explored.
1e	Balance reserve as on 01/04/20	4.36 million tons as per approved mining plan on 30.07.2020.	2.57 million tons as per the 2022-23 annual return.	As on 01.04.2023
1f	General remarks of inspecting officers on geology, exploration etc	Nil	Entire lease area has been explored upto G-1 level.	Entire ML area has been drilled and proved upto 144m depth with 100m grid interval

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Pit-1A (ML-31.5 to 36.5), Pit-1B (ML-26 to 28.5) & Pit-2 (ML-4.5 to 13.5)	Pit-1A (ML-31.5 to 36.5), Pit-1B (ML-26 to 28.5) & Pit-2 (ML-4.5 to 13.5)	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches in OB-9 and Mineral-9	Benches in OB-9 and Mineral-9	Separate benches in OB and ore maintain
2c	Stripping ratio or ore to OB ratio	1 : 2.65	1 : 2.60	Nil
2d	Quantity of topsoil generation in m3	No Proposal	No generation of Topsoil	Nil

2e	Quantity of overburden generation in m3	639300 cum	554020 cum	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Nil	Worked as per proposal.	Nil

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Pit-1A (ML-31.5 to 36.5), Pit-1B (ML-26 to 28.5) & Pit-2 (ML-4.5 to 13.5)	Pit-1A (ML-31.5 to 36.5), Pit-1B (ML-26 to 28.5) & Pit-2 (ML-4.5 to 13.5)	Nil
3b	Quantity of ROM mineral production proposed	689960 tons	609421 tons	Nil
3c	Recovery of sailable/usable mineral from ROM production	100% Recovery	100% Recovery	Nil
3d	Quantity of mineral reject generation	Nil	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	< 34CaO	< 34CaO	Threshold value maintain
3f	Quantity of sub grade mineral generation.	Nil	No Subgrade mineral generation	Nil
3g	Grade of sub grade mineral generation	Nil	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised method	Nil

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	Drilling & Blasting are proposed.	Deep hole drilling and blasting with delay Detonators in practice.	Nil
3k	Provision of mining machineries in mineral benches	Proposed	Deployed	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height - 9m	Bench height -9m	Bench height and width is facilitating for moving of Mining machinery
3m	Total area covered under excavation/pits	50.13 ha	50.13 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1 : 2.65	1 : 2.60	Nil
3o	Total area put in use under different heads at the end of year	81.54 ha	81.54 ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	2022-2023 = 689960 tons 2021-2022 = 689400 tons 2020-2021 = 689725 tons 2019-2020 = 689995 tons 2018-2019 = 689998 tons	2022-2023 = 609421 tons 2021-2022 = 523033 tons 2020-2021 = 595304 tons 2019-2020 = 686378 tons 2018-2019 = 688805 tons	Less limestone production due to less plant requirement.
3q	General remarks of inspecting officers on method of mining etc.	Nil	Mine development in mechanised method	Nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate Dumping proposed	Dumping carried out separately on existing OB dump	Nil
4b	Location of topsoil, OB and mineral reject dumps	South side of existing dump-1	Western side of Dump-1	Violation issued under Rule 11(1) of MCDR 2017
4c	Number of dumps within lease area and outside of lease area	3 Nos	4 nos	Violation issued under Rule 11(1) of MCDR 2017
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	Nil
4e	Number of active and alive dumps.	3 No	4 No	Violation issued under Rule 11(1) of MCDR 2017
4f	Number of dead dumps.	No Proposal	Nil	Nil
4g	Number of dumps established.	No Proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	Nil	Nil
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	Nil	Nil
4j	Number of settling ponds	No Proposal	5 No of settling tank is constructed	Nil
4k	Specific comments of inspecting officer on waste dump management	Nil	Dumping carried out separately on existing OB dump	Nil

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Nil	No Proposal	Nil

5b	Area under backfilling of mined out area	Nil	Nil	No Proposal
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	No topsoil generation
5d	Total area fully reclaimed and rehabilitated	No Proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Nil	No backfill done	Nil

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Submitted	PMCP report for the year 2022-23 has been submitted
6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	No Proposal	Nil	Nil
6d	No. of saplings planted during the year	No Proposal	Nil	Nil
6e	Cumulative no .of plants	No Proposal	Nil	Nil
6f	Any other method of rehabilitation	No Proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	No Proposal	Nil	Nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No Proposal	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No Proposal	Nil	Nil
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.	No Proposal	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	4000 Nos saplings proposed	4075 Nos of saplings planted	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	3.50 ha	3.50 ha	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposal	Nil	Nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Quarterly report submitted	Environmental parameters are within limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	PMCP proposals have been complied.	Nil

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No sorting of ROM proposed	Entire ROM is transported for cement making	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised method	Mechanised method	Nil
7c	Different grade of mineral sorted out at mines.	Cement grade Limestone	Cement grade Limestone	Nil
7d	Any beneficiation process at mines	No Proposal	No processing of mineral is involved.	Not applicable
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Nil	ROM transported to crusher located outside ML, having color based sorting technology is being used for beneficiation of limestone.	Nil

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	No Topsoil generation	Nil

8b	Concurrent use or storage of topsoil	No Proposal	No Topsoil generation	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Dump proposed for OB	Dumping not carried out as per proposal	Violation issued under Rule 11(1) of MCDR 2017
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 and additional plantation done (Rule 41)	4000 saplings proposed every year	4075 saplings planted.	Nil
8g	Survival rate	No Such proposal in document	95%	Nil
8h	Water sprinkling on roads to control airborne dust	10 KL water tanker	water tanker is being used for dust suppression	As per proposal
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Nil	Planted local species of neem, pungai, vagai etc	Nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	Returns are submitted within time limit.	Nil

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager, Geologist & mining engineer are appointed.	Accompanied during Inspection.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings 50.13ha; Used for waste disposal 29.16ha; Occupied by plant, buildings, residential, welfare buildings & roads-2.25ha; Other Purpose (Green Belt, Safety Zone & Others)- 81.54ha;	Furnished under part- I.	Nil
9d	Scrutiny of Annual return on afforestation	4075 saplings	Furnished under part-V.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Furnished in part- V, of 4	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	609421 tons	Furnished in part- VI	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production is Rs.566/-	Furnished in part- VII	Nil
9h	Scrutiny of Annual return on fixed assets	Rs.31288590/-	Furnished in part- II-A	Nil
9k	Scrutiny of Annual return on mining machineries	Front End Loader, Backhoe, Tipper, Blast hole drill, Compressor	Furnished in part- V sec 6	Nil

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	15/09/2023			
MCDR17	Rule 33	15/09/2023			

Date :

(G.C.Sethi)

Indian Bureau of Mines