

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/PBRLST-56.MDS

Mine code : 38TMN24056

- (i) Name of the Inspecting : **J103**) **V. Jaya Krishna Babu**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : **M.R.Venkatesan,GM(Mines),J.Ravi,Sr Manager(Geology)**
Official with
Designation
- (iv) Date of Inspection : 04/03/2020
- (v) Prev.inspection date : 17/08/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MANAKUDIYAN MINE(GO.76)**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : TAMIL NADU
District : PERAMBALUR
Village :
Taluka :
Post office :
Pin Code :
FAX No. : 04329-248303
E-mail : minesalr@madrascements.co.:
Phone : 04329-248305, 248306
- (f) Police Station : SENDURAI
- (g) First opening date : 30/12/2008
- (h) Weekly day of rest : SUN
2. Address for : AURAS CORPORATE CENTRE,
correspondance : 5 TH FLOOR,98-A,DR RADHA KRISHNAN ROAD,
MYLAPORE,CHENNAI-600004
3. (a) Lease Number : TMN1045
- (b) Lease area : 44.8
- (c) Period of lease : 20
- (d) Date of Expiry : 29/11/2028
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.RAMA SUBRAMANYA RAJA
 AURAS CORPORATE CENTRE
 VFLOOR,98A,RADAKRISHNAN R
 MYLAPORE,CHENNAI CHENNAI
 CITY TAMIL NADU
 Phone: 044-8555815
 FAX : 044-830248

Agent : S SHANMUGAM
 Madras Cements Ltd, TALUKA-
 Sendurai ARIYALUR TAMIL
 NADU
 Phone: 04329-248305248306
 FAX : 04329-248303

Geologist

Name : J.Ravi,Full Time
 Qualification : M.Sc Geology
 Appointment/ : 01/04/2019
 Termination date

Manager

Name : A.Santhosh
 Qualification : B.E Mining
 Appointment/ : 10/07/2015
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	21/04/2006
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	06/06/2013
		Modif.approved Mining Scheme	09/07/2015
		MP review under 17(1) MCR 2016	06/11/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Exploration completed for entire lease.
1b	Exploration over lease area for geological axis 1 or 2	Nil	Mine fully explored under G-1 Level	Nil.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil.	Nil	Exploration already completed.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Not applicable.	Entire has been explored.
1e	Balance reserve as on 01/04/20		8,117,141tonnes(111) 5,460,000(221) 3,390,000(333)	Nil.
1f	General remarks of inspecting officers on geology, exploration etc			Satisfactory.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ML 1-6 0 to 500	ML 1-6 0 to 500	As per approved proposal.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil - 1, OB - 2, Mineral - 3	Topsoil - 1, OB - 2, Mineral - 3	Satisfactory.
2c	Stripping ratio or ore to OB ratio	1 : 0.96	1 : 0.95	Proposed production qty not archived for due to quality problem.
2d	Quantity of topsoil generation in m3	51,000	40,937	-
2e	Quantity of overburden generation in m3	80000		

2f General remarks of inspecting officers on development of pit w.r.t. type of deposit etc

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	As per proposal.
3b	Quantity of ROM mineral production proposed	9,98,000Ts.	9,32,424.32Ts	Within approved limits.
3c	Recovery of sailable/usable mineral from ROM production	9,98,000Ts	932424.32Ts	Nil.
3d	Quantity of mineral reject generation	Nil	Nil	No mineral reject generation.
3e	Grade of mineral rejects generation and threshold value declared.	Nil	Not applicable.	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil	No Subgrade Mineral generation.
3g	Grade of sub grade mineral generation	Nil.	Not applicable.	No generation of sub grade mineral.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised.	Mechanised.	Environment friendly equipment ,Surface miner technology is in practice.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Not applicable.	Beneficiation Study is required.
3j	Provision of drilling and blasting in mineral benches	Surface Minor is proposed.	Surface Minor is Deployed.	Nil.

3k	Provision of mining machineries in mineral benches	Surface Miner-1, Dumper-2, Shovel-2, Tipper-8, Water Tanker-1	Surface Miner-1, Dumper-2, Shovel-2, Tipper-8, Water Tanker-1	Surface Minor operation is in practice for production.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height - 5m, Width - 6m	Height - 5m, Width - 6m	Benches suitable for the method of mining.
3m	Total area covered under excavation/pits	14.725hect	14.725hect	As per proposal.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.96	1 : 0.95	-
3o	Total area put in use under different heads at the end of year	Minedout land - 14.725 Ha Road & Infra - 0.50 Ha Greenbelt - 9.610 Ha	Minedout land - 14.725 Ha Road & Infra - 0.50 Ha Greenbelt - 9.610 Ha	As per proposal.
3p	Production of ROM mineral during the last five year period as applicable	2015-16;9,98,371Ts 2016-17;9,98,205Ts 2017-18;9,90,508Ts 2018-19;9,87,000Ts 2019-20 :998000Ts	2015-16;104605Ts 2016-16;67152Ts 2017-18;109,328Ts 2018-19;729,787Ts 2019-20 :932424.32Ts	with in approved limits.
3q	General remarks of inspecting officers on method of mining etc.			Method of mining is satisfactory.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Topsoil dumped separately.	Topsoil dumped separately.	Separately stacked.

4b	Location of topsoil, OB and mineral reject dumps	Top Soil-1 Grid 700 to 900 ML -2 - 4	Top Soil-1 Grid 700 to 900 ML -1 -5	Deviation to the approved proposals. Violation of rule 11(2) of MCDR-2017 has been communicated to lessee on 11.3.2020.
4c	Number of dumps within lease area and outside of lease area	Top soil - 1 OB - 2	Top soil - 1 OB - 2	Dumped within lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	700'-900' ML-02 to 04 RL - 67	700'-900' ML-01 to 05 RL - 67	Violation of rule 11(2) of MCDR-2017 has been communicated to lessee on 11.3.2020.
4e	Number of active and alive dumps.	2dumps.	2dumps.	1 - Top Soil. 1 - OB.
4f	Number of dead dumps.	Nil.	Nil.	Nil.
4g	Number of dumps established.	Nil	Nil	Not Stabilished.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	garland drain all along dump	As per proposal.
4i	Length of Retaining wall or garland drain all along dumps	2000 x2x 2.5 mtr 420 x 2 x 2.5 mtr	2000 x2x 2.5 mtr 420 x 2 x 2.5 mtr	Garland drain all along dump.
4j	Number of settling ponds	1	1	Settling pond construction cost Rs. 15,000/-.
4k	Specific comments of inspecting officer on waste dump management			Satisfactory.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Nil	Not applicable.	Mine has not reached ultimate level.
5b	Area under backfilling of mined out area	Nil	Not applicable.	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil.	Not applicable.	Top soil stocked for future use of afforestation and reclamation.
5d	Total area fully reclaimed and rehabilitated	Nil.	Not applicable.	No backfilling proposal during the year.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Mine has not reached ultimate level.

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.
6b	Area available for rehabilitation (ha) .	No proposal for the year.	Not applicable.	Mineral not Excavated completely.
6c	afforestation done (ha).	0.30	2.13	-
6d	No. of saplings planted during the year	875	5,327	Plantation carried out as per the proposal.
6e	Cumulative no .of plants	19,575	28,027	For entire mine area.
6f	Any other method of rehabilitation	Nil.	Not applicable.	-
6g	Cost incurred on watch and care during the year	65,625	99,525	-

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil.	Not applicable.	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil.	Not applicable.	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Nil.	Not applicable.	Mineral not Excavated completely.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil.	Not applicable.	-
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal .	Not applicable.	Used as water reservoir, after complete extraction of mineral.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	Nil	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil.	Not applicable	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not applicable	Not applicable	-

6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes.	Quarterly monitoring reports for Air, Water and Noise are submitted.	Monitoring report outputs are within limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	9,98,000Ts	932424.32Ts	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Nil.	Not applicable.	Entire ROM is being dispatched to the plant for captive consumption.
7c	Different grade of mineral sorted out at mines.	Nil.	Not applicable.	-
7d	Any beneficiation process at mines	Nil.	Not applicable	No beneficiation method is in practice.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Entire ROM is being used for captive consumption.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes.	Yes.	Top soil is separately removed and stacked.

8b	Concurrent use or storage of topsoil	Nil.	Not applicable.	storage for future use.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	700'-900' ML-02 to 04.	Separate dumps are maintained as per proposal.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	The OB & IB are stocked at dumps.	As per the proposal.	OB stocked for future use. (backfilling).
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil.	Not applicable.	Mineral not excavated completely.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	19,575	28,027	-
8g	Survival rate	80 %	80 %	-
8h	Water sprinkling on roads to control airborne dust	Yes	Yes.10000Lts tankar is being engaged for the purpose.	Water sprinkling is being done.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Yes.	Monthly &AR returns are submitted regularly.	Monthly returns are submitted regularly. Annual return for the year 2018-19&2019-2020 have been submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Appointed.	Provided in part -I of para 7,8&9 found correct.	Satisfactory.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Information furnished under Part-Iof para 12	Information furnished is found to be correct.	Satisfactory.
9d	Scrutiny of Annual return on afforestation	Information furnished under Part-Vof para 4.4.	Information furnished is found to be correct.	Satisfactory.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Information furnished under Part-VI of section 4.	Provided in part-V and para 4.5.	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Information furnished under Part-VI of para 1.2.	Provided in Part-VI of para 1&2.Entire ROM is ceemnt grade.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Information furnished under Part-VI of para 5 and part -VII.	The ex-mine price furnished in H8, i.e. Annual Return for the year 2018-19 is not matching with the ex-mine price furnished in the monthly returns submitted in the year 2018-19.	Violation of rule 45(7)(a) of MCDR-2017 has been communicated to lessee.
9h	Scrutiny of Annual return on fixed assets	Information furnished under part-IIA.	Provided under part-IIA and 1.	-
9k	Scrutiny of Annual return on mining machineries	Furnished under part-V of section 5.	Surface Miner-1, Dumper-2, Shovel-2, Tipper-8, Water Tanker-1	Satisfactory.

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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(2)	11/03/2020			
MCDR17	Rule 45(7)(a)	11/03/2020			

Date :

(V. Jaya Krishna Babu)

Indian Bureau of Mines