

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

MCDR INSPECTION REPORT

Chennai regional office

Mine file No : TN/PBR/LST-49.MDS

Mine code : 38TMN24041

- (i) Name of the Inspecting : **T003**) **S.THIRUNAVUKKARASU**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Mr.J.Ravi (Sr.Manager) and Mr.K.Elansurian (Sr.Manage
Official with
Designation
- (iv) Date of Inspection : 02/01/2020
- (v) Prev.inspection date : 24/06/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MANAKUDAYAN(14.685HA)**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : TAMIL NADU
District : PERAMBALUR
Village :
Taluka :
Post office :
Pin Code :
FAX No. : 044-28478676
E-mail :
Phone : 044-28478666
- (f) Police Station :
- (g) First opening date : 09/12/2004
- (h) Weekly day of rest : SUN
2. Address for : AURAS CORPORATE CENTRE, V FLOOR
correspondance 98-A, RADHAKRISHNAN ROAD
MYLAPORE CHENNAI- 4
3. (a) Lease Number : TMN0935
- (b) Lease area : 14.69
- (c) Period of lease : 20
- (d) Date of Expiry : 18/10/2024
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

Mining Engineer

Name : M.SURESH BABU,Full Time
 Qualification : B.E Mining Engineeing
 Appointment/ : 01/01/2012
 Termination date

Geologist

Name : J.RAVI,Full Time
 Qualification : M.Sc Geology
 Appointment/ : 16/03/2007
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	06/01/1999
Plan/Scheme of Mining		Modif.of approved Mining Plan	12/08/2005
		Mining Scheme rule 12 MCDR1988	28/08/2009
		Mining Scheme rule 12 MCDR1988	22/04/2014
		MP review under 17(1) MCR 2016	05/12/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	Mine fully explored G-1 Level	6 borehole drilled with total meterage of 180 m
1b	Exploration over lease area for geological axis 1 or 2	NIL	NA	Mine fully explored G-1 Level
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NA	Mine fully explored G-1 Level
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NA	Mine fully explored G-1 Level
1e	Balance reserve as on 01/04/20	---	2,50,000	NIL
1f	General remarks of inspecting officers on geology, exploration etc	---	----	The geology, exploration is found satisfactory

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	NIL	production only	NIL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	proposed	Topsoil - 1, Overburden - 1, Mineral - 2	Formed as per rule
2c	Stripping ratio or ore to OB ratio	1 : 0.12	1 : 0.12	As per proposal
2d	Quantity of topsoil generation in m3	NIL	NA	No topsoil generation
2e	Quantity of overburden generation in m3	NIL	NA	No overburden generation

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	----	----	development of pit id found as per the proposal
----	---	------	------	---

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2	2	As per proposal
3b	Quantity of ROM mineral production proposed	49,930	44,689	Total ROM is Used.
3c	Recovery of sailable/usable mineral from ROM production	49,930	44,689	nil
3d	Quantity of mineral reject generation	NIL	NA	No Mined Reject Generation
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NA	No Mined Reject Generation
3f	Quantity of sub grade mineral generation.	NIL	NA	No Subgrade Mineral Generation
3g	Grade of sub grade mineral generation	NIL	NA	No Subgrade Mineral Generation
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NA	Beneficiation Study is Not Required
3j	Provision of drilling and blasting in mineral benches	NIL	NA	NIL

3k	Provision of mining machineries in mineral benches	Shovel (Hydraulic)-1, Tipper-4	Shovel (Hydraulic)-1, Tipper-4	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	9.10	9.10	As per proposal
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.12	1 : 0.12	As per proposal
3o	Total area put in use under different heads at the end of year	Minedout land - 9.10 Ha Top Soil - 0.91 Ha Road - 0.30 Ha Other & Greenbelt - 4.375 Ha	Minedout land - 9.10 Ha Top Soil - 0.91 Ha Road - 0.30 Ha Other & Greenbelt - 4.375 Ha	As per proposal
3p	Production of ROM mineral during the last five year period as applicable	2015-16 29,400 2016-17 29,400 2017-18 29,400 2018-19 29,400 2019-20 Up to Dec-19 49,930	2015-16 12,315 2016-17 5,966 2017-18 16,765 2018-19 26,084 2019-20 Up to Dec-19 44,689	nil
3q	General remarks of inspecting officers on method of mining etc.	-----	----	Method of mining is found 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 are dumped separately	Topsoil are dumped separately	NIL

4b	Location of topsoil, OB and mineral reject dumps	Topsoil ML 3 - 5 Grid A to -A	Topsoil ML 3 - 5 Grid A to -A	NIL
4c	Number of dumps within lease area and outside of lease area	Top Soil - 1	Top Soil - 1	Within Lease Area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NIL	NA	NIL
4e	Number of active and alive dumps.	NIL	NA	No alive dumps are there
4f	Number of dead dumps.	1	1	Old dumps
4g	Number of dumps established.	1	1	Old dumps are stabilized.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	As per proposal
4i	Length of Retaining wall or garland drain all along dumps	NIL	420 x 2 x 1.5	NIL
4j	Number of settling ponds	1	1	Existing settling pond de-silted.
4k	Specific comments of inspecting officer on waste dump management	-----	-----	Waste dump management is found satisfactory

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	NA	Mineral is not full extraction
5b	Area under backfilling of mined out area	NIL	NA	Mineral is not full extraction

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	YES	YES	Top soil stock for future use of afforestation and reclamation
5d	Total area fully reclaimed and rehabilitated	NIL	NA	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	----	---	No backfilling, reclamation at this stage

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	Yes	Submitted to IBM in time
6b	Area available for rehabilitation (ha) .	Backfilling proposed	Backfilling started	As per Proposal
6c	afforestation done (ha).	0.20 ha	0.28 ha	NIL
6d	No. of saplings planted during the year	300 nos	450 nos	Plantation carried out as per the proposal.
6e	Cumulative no .of plants	13,605 nos	14,055 nos	For entire mine area
6f	Any other method of rehabilitation	NIL	Na	No other method Rehabilitation
6g	Cost incurred on watch and care during the year	Rs.10,20,375	Rs.10,54,125	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	Not applicable	NIL

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	Not applicable	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	NIL	Not applicable	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	Not applicable	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NIL	Not applicable	NIL
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	NIL	Not applicable	NIL
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NIL	Not applicable	NIL
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	NIL	Not applicable	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	YES	NIL	All the monitored values are within limit. Quarterly Reports submitted to IBM regularly

6q General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NIL	Not applicable	No sorting at mine head, .
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NIL	Not applicable	No sorting
7c	Different grade of mineral sorted out at mines.	NIL	Not applicable	NIL
7d	Any beneficiation process at mines .	NIL	Not applicable	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-----	-----	Mineral conservation and beneficiation found satisfactory

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	proposed	carried out	As per the proposal
8b	Concurrent use or storage of topsoil	yes	yes	use for plantation

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Only backfilling is done	Only backfilling is done	As per proposal
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	yes	yes	OB is being used for reclamation of mined out area.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	yes	yes	Reclamation is being practiced in a phased manner
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	13,605	14,055	NIL
8g	Survival rate	75 %	75 %	NIL
8h	Water sprinkling on roads to control airborne dust	YES	YES	Water sprinkling is being done
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-----	-----	aesthetic beauty in and around mines area is found good

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	submitted	Submitted for the year 2018-19	MR &AR Submitted in time

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Shri.J.Iyyappan -Mining Engineer, Shri,S. Durai Murugan - Mines Manager	Given in part-II Employed & Wages(I)
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given in the format	Given in Part - i. Sl no.12	NIL
9d	Scrutiny of Annual return on afforestation	Given	450 Nos carried out	Given in Part - V. Sl no.4.4
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given	No reject	Given in Part - V. Sl no.4.2
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given in the format	No stock reported	Given in Part - VI. Sl no.1
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given in the format	Given in the format	Given in Part - VI. Sl no.5 &Part-VII
9h	Scrutiny of Annual return on fixed assets	Given in the format	Not furnished	Given in Part - IIA. Sl no.1
9k	Scrutiny of Annual return on mining machineries	Given in the format	shovel-1 Tipper-4	nil

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

Date :

(S. THIRUNAVUKKARASU)

Indian Bureau of Mines