

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/PBR/LST-15.MDS

Mine code : 38TMN24040

- (i) Name of the Inspecting : **M017**) **Matiul Islam**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 09/02/2021
- (v) Prev.inspection date : 25/04/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **REDDIPALAYAM(63.60HA)**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : TAMIL NADU
District : ARIYALUR
Village : REDDIPALAYAM
Taluka : ARIYALUR
Post office : REDDIPALAYAM
Pin Code : 621714
FAX No. : 04329 - 226005
E-mail : magesh@ramcocements.co.in
Phone : 044-28478666 , 28478656, 0
- (f) Police Station : vikramangalam
- (g) First opening date : 05/10/2001
- (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 : TMN1031
- (b) Lease area : 63.6
- (c) Period of lease : 30
- (d) Date of Expiry : 22/07/2034
4. Mineral worked : LIMESTONE Associated

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
 98-A,AURAS CORPORATE CENTRE
 RADHAKRISHNAN
 SALAI,MYLAPORE CHENNAI
 CHENNAI CITY TAMIL NADU
 Phone:
 FAX :

Agent : C.RAVICHANDRAN
 98-A, AURAS CORPORATE
 CENTRE R.K.SALAI,MYLAPORE
 CHENNAI CHENNAI CITY TAMIL
 NADU
 Phone:
 FAX :

Mining Engineer

Name : KALLURI SURRENDRA,Full Time
 Qualification : BE(MINING)
 Appointment/ : 18/07/2018
 Termination date

Geologist

Name : V.MOHAN,Full Time
 Qualification : MSC (GEOLOGY)
 Appointment/ : 01/10/2016
 Termination date

Manager

Name : G.MAGESH
 Qualification : BE (MINING)
 Appointment/ : 11/01/2008
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	16/05/2005
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	01/09/2006
	:	Mining Scheme rule 12 MCDR1988	10/08/2011
	:	Mining Scheme rule 12 MCDR1988	14/05/2015
	:	MP modif under 17(3) MCR 2016	20/05/2019
	:	MP review under 17(1) MCR 2016	21/10/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Already the area has been explored under G1 category
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	Already the area has been explored under G1 category
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Nil
1e	Balance reserve as on 01/04/20	-	12.84 Million Tonnes	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	Between SL-6-6' to 7-7'	Between SL-6-6' to 7-7'	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Maintained	As proposed
2c	Stripping ratio or ore to OB ratio	1:1.45	1:2.50	Stripping Ratio high due to reduced production
2d	Quantity of topsoil generation in m3	1,96,830	1,96,340	As proposed
2e	Quantity of overburden generation in m3	19,78,950	18,80,003	Within limit

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

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	As proposed
3b	Quantity of ROM mineral production proposed	29,99,800 Tons	16,59,895.39 Tons	Within limit
3c	Recovery of sailable/usable mineral from ROM production	100 % (29,99,800 Tons)	100 % (16,59,895.39 Tons)	Percentage recovery as proposed
3d	Quantity of mineral reject generation	Nil	Nil	No reject generation
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil	No sub-grade mineral generation
3g	Grade of sub grade mineral generation	NA	NA	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	NA	NA	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	Nil

3j	Provision of drilling and blasting in mineral benches	Yes, Proposed to carryout Drilling & Blasting on contingency condition	Adopted Non-conventional method by engaging Xcentric Dozer & on contigency measure adopted controlled blasting techniques	As proposed
3k	Provision of mining machineries in mineral benches	"Excavator - 2 No's Xcentric Ripper - 1 No Dozer - 1 No Tipper - 30 No's Water Tanker - 1 No"	"Excavator - 2 No's Xcentric Ripper - 1 No Dozer - 1 No Tipper - 15 No's Water Tanker - 1 No"	As proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8m	8m	As proposed
3m	Total area covered under excavation/pits	30.78.0 Ha	30.78.0 Ha	As per the proposal
3n	Ore to OB ratio for the pit/mine during the year.	1:1.45	1:2.50	Ore to OB ratio high due to reduced production of ROM

3o	Total area put in use under different heads at the end of year	Area under mining 31.67.0 Storage for top soil 1.69.0 Overburden / dump 7.10.0 Mineral Storage 0.35 Infrastructure (workshop, administrative building) 0.20.0 Roads 2.50.0 Railways Nil Tailing pond Nil Effluent treatment plant Nil Mineral separation plant Nil Township area Nil Area Backfilled Nil Others to be specified (green belt etc.,) 20.09.0 Total 63.60.0	Area under mining 30.78.0 Storage for top soil 1.44.0 Overburden / dump 7.10.0 Mineral Storage 0.35.0 Infrastructure (workshop, administrative building) 0.20.0 Roads 1.50.0 Railways Nil Tailing pond Nil Effluent treatment plant Nil Mineral separation plant Nil Township area Nil Area Backfilled 9.20.0 Others to be specified (green belt etc.,) 13.03.0 Total 63.60.0	Within limits
3p	Production of ROM mineral during the last five year period as applicable	2016-17 - 1699514 Tons 2017-18 - 1696123 Tons 2018-19 - 1699832 Tons 2019-20 - 2999800 Tons 2019-20 - 2999860 Tons	2016-17 - 1278759 Tons 2017-18 - 996401 Tons 2018-19 - 1605545 Tons 2019-20 - 1659895.39 Tons 2020-21 - 1075614.65 Tons	Within limits
3q	General remarks of inspecting officers on method of mining etc.	-	-	Satisfactory

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)	Topsoil-1 OB benches-3 L.st benches- 3	Topsoil-1 OB benches-3 L.st benches- 3	Separate dumps maintained as per plan
4b	Location of topsoil, OB and mineral reject dumps	Northern side of the Mining Lease area	Northern side of the Mining Lease area	As per plan
4c	Number of dumps within lease area and outside of lease area	2 Nos.	2 Nos.	As per plan
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Northern side on the mineral exhausted area	Northern side on the mineral exhausted area	As per plan
4e	Number of active and alive dumps.	2 Nos.	2 Nos.	As per plan
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	Nil	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	As per plan
4i	Length of Retaining wall or garland drain all along dumps	"Length of Garland drain all along peripheral bund 3544m X 2m X 1.5m "	3544m lengthy garland drainage has been maintained all along the peripheral bund	As per plan
4j	Number of settling ponds	2 No's of settling ponds proposed on the eastern side of the mining lease boundary	2 No's of settling ponds constructed on the eastern side of the mining lease boundary	As per plan
4k	Specific comments of inspecting officer on waste dump management	-	-	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.	Bacfilling proposed in the south-western side after exhaustion of mineral	Backfilling under progress in the south-western side	As proposed
5b	Area under backfilling of mined out area	9.17.0 ha	9.20.0 ha	As proposed
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed	Carried out	As proposed
5d	Total area fully reclaimed and rehabilitated	Not proposed	Backfilling carried over 9.20 ha	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Satisfactory

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 in time	As proposed
6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	No proposal in approved plan	2.00 ha	Nil
6d	No. of saplings planted during the year	1000 nos sapling proposed	5000 nos saplings planted	More than proposal
6e	Cumulative no .of plants	41000 No's	91000 No's	More than proposal
6f	Any other method of rehabilitation	Nil	Nil	Nil

6g	Cost incurred on watch and care during the year	Nil	4.0 Lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	19.17.0 Ha	19.20.0 Ha	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Yes, backfilling is under progress in mineral exhausted area	Backfilling under progress	As per plan
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Nil	Backfilling under progress	As per plan
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	After exhaustion of Mineral, Northern side pit will be converted into reservoir whereas the southern side will be reclaimed.
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	NA	NA	No waste land available
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NA	NA	No waste land available

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	No waste land available
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Is being done on Quartrely basis	M/s Ensyscon Environmental laboratory, Chennai has been engaged for monitoring Environmental Data on Quarterly basis
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	Nil	Nil	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	Nil
7c	Different grade of mineral sorted out at mines.	NA	NA	Nil
7d	Any beneficiation process at mines	NA	NA	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Satisfactory

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal & utilisation of top soil proposed	Separate removal & utilisation of top soil carried out	As proposed
8b	Concurrent use or storage of topsoil	Proposed	Carried out	As proposed
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed	Maintained	As proposed
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling proposed	Backfilling carried out	As proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Restoration planned in phased manner	Being done as per the proposal	As per plan
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	-	91,000 nos of saplings have been planted cumulatively	Nil
8g	Survival rate	90%	90%	As proposed
8h	Water sprinkling on roads to control airborne dust	Proposed	10000 Liters water tanker engaged for sprinkling to control airborne dust	As proposed
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Satisfactory

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Given	Referred back for Royalty/Compensation/Depreciation Sections	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given in Part I, Sl 2	Manager Shri G.MAGESH Mining Engineer in charge Shri KALLURI SURENDAR Geologist in charge Shri V.MOHAN	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given in Part I, Sl 12	(i) Already exploited & abandoned by 0 opencast (O/C) mining (ii) Covered under current (O/C) 30.78 Workings (iii) Reclaimed/Rehabilitated 0 (iv) Used for waste disposal 8.54 (v) Occupied by plant, buildings, 1.7 residential, welfare buildings & roads (vi) Other Purpose (GREEN BELT & OTHERS) 22.58 (vii) Work done under progressive mine 0 closure plan during the year	Nil
9d	Scrutiny of Annual return on afforestation	Given in Part V, Sec 4. Mining Operations during the year	4.4 (i) Number of trees planted during the year (a) Within lease area 5000 (b) Outside lease area 0 (ii) Species 0 (iii) Survival rate in percentage 90.00	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given in Part V, Sec 4- Mineral Rejects for Limestone	4.2 (B) (ii) Mineral Rejects generated with grades (tonnes) a. Quantity 0 b. Grade 0	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given in Part VI, Sl 1 & 2	Category Opening stock (in tonne) Production (in tonne) Closing stock (in tonne) (a) Open Cast Workings 0.000 1659895.390 0.000	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given in Part VI, Sl 2 & Part VII	Ex-Mine Price / Cost of Production - Rs 285.67/-	Nil
9h	Scrutiny of Annual return on fixed assets	Given in Part II(A)(Capital Structure)	Description As at the beginning of the year Additions during the Year Sold or discarded during the year Depreciation during the year Net closing Balance Estimated market value(Tips) (i) Land (Tips) 0 0 0 0 0 0 (ii) Building Industrial 0 0 0 0 0 0 Residential 0 0 0 0 0 (iii) Plant and Machinery including transport equipment 0 0 0 0 0 0 (iv) Capitalised Expenditure such as pre-production exploration, development, major overhaul and repair to machinery etc. (As pr	Return referred back for correction

9k	Scrutiny of Annual return on V, Sec 5/6/8/9 mining machineries	Given in Part	Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) Used in opencast/ underground (specify) BACK HOE 1.600 CUM 2 Non Electrical Opencast DOZER 226.000 HP 1 Non Electrical Opencast DOZER 90.000 HP 1 Non Electrical Opencast TIPPER 10.000 CUM 7 Non Electrical Opencast WATER TANKER 10000.000 LITRE 1 Non Electrical Opencast	Nil
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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 :

(Matiul Islam)

Indian Bureau of Mines