INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/PT/LST-12.MDS **Mine code : 38TMN24035**

(i) Name of the Inspecting Officer and ID No. : **S(011) SALIL SANDIP KUJUR**

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine Official with Designation : MR. MAGESH-GM-MINES,TAMILSELVEM-MGR-GEOLOGY

(iv) Date of Inspection : 16-NOV-18

(v) Prev.inspection date : 09-NOV-17

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KATTUPIRINGIUM(44.58HA)**

(b) Registration NO. :

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : TAMIL NADU
District : PERAMBALUR
Village : PERIYANGALUR & VALAJ
Taluka : ARIYALUR
Post office : KATTUPIRINGIUM
Pin Code : 621714
FAX No. : 04329-226005
E-mail : ravichandran@madrascements
Phone : 04329-226001

(f) Police Station : ARIYALUR

(g) First opening date : 01-JUL-02

(h) Weekly day of rest : SUN

2. Address for correspondance : MADRAS CEMENT LIMITED
AURAS CORPORATE CENTRE, V FLOOR
98-A, RADHAKRISHNAN ROAD, MYLAPORE CHENNAI- 4

3. (a) Lease Number : TMN0743
(b) Lease area : 44.58
(c) Period of lease : 30
(d) Date of Expiry : 02-JUL-30

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 : C. RAVICHANDRAN
GENERAL MANAGER (Adm)
MADRAS CEMENTS LTD,
GOVINDAPURAM WORKS,
SENDURAI ROAD ARIYALUR
TAMIL NADU
Phone: 04329-226001
FAX : 04329-226005

Mining Engineer
Name : K.M.RAVIKUMAR,Full Time
Qualification : B.TECH-MINING
Appointment/ Termination date : 01-OCT-13

Geologist
Name : V.C.SHUNMUGAM,Full Time
Qualification : M.SC-GEOLOGY
Appointment/ Termination date : 11-SEP-08

Manager
Name : K.NAGENDRAN
Qualification : B.TECH MINING-FIRST CLASS CERTIFICATE
Appointment/ Termination date : 22-JUN-15

6. Date of approval of Mining Plan/Scheme of Mining :

Mining Scheme rule 12 MCDR1988	19-APR-05
Modif.approved Mining Scheme	01-SEP-06
Mining Scheme rule 12 MCDR1988	10-AUG-11
Mining Scheme rule 12 MCDR1988	12-MAY-15

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NO PROPOSAL	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	-	8.29 MILLION TONNES	NIL
1f	General remarks of inspecting officers on geology, exploration etc	-	-	SATISFACTORY

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	SL-4 From RL-58.0 to 40.0	SL-4 From RL-58.0 to 40.0	NIL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches developed	Separate benches developed AS PER PROPOSAL	NIL
2c	Stripping ratio or ore to OB ratio	1:00	1:2.39	NIL
2d	Quantity of topsoil generation in m3	No proposal	120566	NIL
2e	Quantity of overburden generation in m3	No proposal	473983	NIL

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

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit operation	Single pit operation	NIL
3b	Quantity of ROM mineral production proposed	400130 Tonnes	397737.79 Tonnes	NIL,WITHIN LIMIT
3c	Recovery of sailable/usable mineral from ROM production	100 % mineral recovered from ROM (400130 Tons)	100 % mineral recovered recovered from ROM (397737.79 Tons)	NIL
3d	Quantity of mineral reject generation	Not Applicable as proposal to consume on ROM (Run of Mine) basis	As proposed, consumed on ROM (Run of Mine) basis	nil
3e	Grade of mineral rejects generation and threshold value declared.	NA	As proposed, consumed on ROM (Run of Mine) basis	NIL
3f	Quantity of sub grade mineral generation.	NA	NA	NIL
3g	Grade of sub grade mineral generation	NA	NA	NIL
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	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 Ripper Dozer	NIL
3k	Provision of mining machineries in mineral benches	YES Ripper Dozer - 1 No Pneumatic drilling machine & compressor Excavator-EX-200 Excavator-EX-200 Tipper - 8 No's Water Tanker - 1 No	Ripper Dozer - 1 No Pneumatic drilling machine & compressor Excavator-EX-200 Excavator-EX-200 Tipper - 8 No's Water Tanker - 1 No	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The height of the benches is proposed to maintain at height of 8.0 meters	As proposed height of the bench is maintained	NIL
3m	Total area covered under excavation/pits	15.62.0 Ha	15.62.0 Ha	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1:0.00	1:2.39	NIL

3o	Total area put in use under different heads at the end of year	S.no Activities Area use at the end of approved plan period (in Ha) 1 Area under mining 16.54.0 2 Storage for top soil 2.00.0 3 Overburden / dump 9.34.0 4 Infrastructure (workshop, administrative building) 0.20.0 5 Roads 1.00.0 6 Railways Nil 7 Green belt 7.25.0 8 Tailing pond Nil 9 Effulent treatment plant Nil 10 Mineral separation plant Nil 11 Township area Nil 12 Area to be Backfilled 5.33.0 13 Others to be specified 2.92.0 Total 44.58.0	S.no Activities Area use at the end of approved plan period (in Ha) Area use at the end of year 2016-17 (in Ha) 1 Area under mining 15.62.0 2 Storage for top soil 1.44.0 3 Overburden / dump 7.00.0 4 Infrastructure (workshop, administrative building) 0.20.0 5 Roads 1.50.0 6 Railways Nil 7 Green belt 2.00.0 8 Tailing pond Nil 9 Effulent treatment plant Nil 10 Mineral separation plant Nil 11 Township area Nil 12 Area to be Backfilled	AS PER PROPOSAL
3p	Production of ROM mineral during the last five year period as applicable	2013-14 915200 2014-15 924800 2015-16 603424 2016-17 400520 2017-18 400130	Year Actual in Tonnes 2013-14 351353.81 2014-15 115264.47 2015-16 341381.59 2016-17 400178.33 2017-18 397737.79	ALL PRODUCTION ARE WITHIN RANGE
3q	General remarks of inspecting officers on method of mining etc.	-	-	SATISFACTORY

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal	They have removed the over burden on the south eastern side in Block-II and the same has been used for backfilling on the Western side of Block-I between SL-1 to SL-2.	NIL
4b	Location of topsoil, OB and mineral reject dumps	No proposal	Top soil dump in Block-II & Block-III of the Mining lease. OB dump: North and South eastern side of Block-II & Southern side of Block III Mining lease	NIL
4c	Number of dumps within lease area and outside of lease area	Within the lease area - 6	Within the lease area - 6	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	North and South side of Block-II & Block-III	North and South side of Block-II & Block-III (OUSIDE UPL)	NIL
4e	Number of active and alive dumps.	6 No's of Active Dumps	6 No's of Active Dumps	NIL
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.	Garland drain around periphery of dump	Done as per the proposal	NIL
4i	Length of Retaining wall or garland drain all along dumps	Length of Garland drain all along dump 700 X 2 X 2 m	700m length garland drainage has been done all along the dumps	NIL
4j	Number of settling ponds	2 No's of settling pond has been proposed on the South eastern (Block-I) side of the mining lease boundary	Constructed 2 No's of settling pond on the South eastern (Block-I) side of the mining lease boundary	NIL

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.	Mineral proposed to be excavated on the Eastern side of Block-II	Mineral excavated on the Block-I already and backfilling started.	nil
5b	Area under backfilling of mined out area	nil	3.00ha	nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	propose to use the Topsoil for green belt development on the backfilled area as a part of Restoration / Rehabilitation .	Topsoil used for green belt development on the backfilled area	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).	Proposal as cited in the Mining plan	Submitted the PMCP report vide Rule 23 E(2) of MCDR 2017	nil
6b	Area available for rehabilitation (ha) .	nil	nil	nil
6c	afforestation done (ha).	nil	nil	nil

6d	No. of saplings planted during the year	nil	1500 nos	nil
6e	Cumulative no .of plants	nil	25000 nos	nil
6f	Any other method of rehabilitation	NA	NA	NIL
6g	Cost incurred on watch and care during the year	NIL	1.66 LAKHS	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Reclamation is under progress	Reclamation is under progress	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	Reclamation is under progress	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NIL	Reclamation is under progress	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	Reclamation is under progress/WATER HARVESTING POND IS MADE	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA	NIL

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	carryout Environmental monitoring both Core and Buffer Zones	M/s Ensyscon Environmental laboratory, Chennai has been engaged for monitoring Environmental Data on Quarterly basis.	NIL
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	ROM Mineral dispatch (400130 Tons)	ROM Mineral dispatch (397737.79 Tons)	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.	Not Applicable	Not Applicable	NIL
7d	Any beneficiation process at mines .	Not Applicable	Not Applicable	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)	used for green belt development	used for green belt development	NIL
8b	Concurrent use or storage of topsoil	used for green belt development	used for green belt development	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps of over burden is proposed	Separate dumps of over burden is being maintained on the southern side	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed for backfilling	Backfilling in progress	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Restoration planned in phased manner	done as per the proposal	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	NIL	1500 NOS PLANTATION IS DONE	NIL
8g	Survival rate	90%	90%	NIL

8h	Water sprinkling on roads to control airborne dust	Propose to engage Water Tanker for control airborne dust	10000 Liters water tanker used for sprinkling to control dust.	nil
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
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto October- 2018 A.R. submitted upto March- 2018	M.R. Submitted upto October- 2018 A.R. submitted upto March- 2018	nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information furnished	The information was found representative	nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	The land use furnished in appropriate colum/table	The information was found representative	nil
9d	Scrutiny of Annual return on afforestation	provided	The information was found correct	nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	no rejects	The information was found correct	nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	The information was furnished in appropriate colum/table	The information was found correct	nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	captive mine hence no sale of ore.	all ore is supplied to own captiveplant	nil

9h	Scrutiny of Annual return on fixed assets	provided	found as given in A.R	nil
9k	Scrutiny of Annual return on mining machineries	The information was furnished	The information was found correct	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 :

(**SALIL SANDIP KUJUR**)

Indian Bureau of Mines