

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-7/MDS

Mine code : 38TMN38010

- (i) Name of the Inspecting : **A042**) **A.S.SANJEEVA RAO**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : MR SENTHAMIL SELVEM-MGR-GEOLOGY&Mr MOHAN,GEOLOGIST
Official with
Designation
- (iv) Date of Inspection : 13/12/2022
- (v) Prev.inspection date : 17/08/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PUDUPALAYAM(NORTH)**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **TAMIL NADU**
- District : **ARIYALUR**
- Village : **PUDUPALAYAM**
- Taluka : **ARIYALUR**
- Post office : **PUDUPALAYAM**
- Pin Code :
- FAX No. : **04329-226005**
- E-mail : **Yadav_m@madrascements.co.in**
- Phone : **04329-294400**
- (f) **Police Station** : **ARIYALUR**
- (g) **First opening date** : **24/03/2009**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **GOVINDPURAM ROAD**
MADRAS CEMENTS LIMITED,
Govindrajapuram, Sendurai Road, Ariyalur-621713
3. (a) **Lease Number** : **TMN1030**
- (b) **Lease area** : **4.83**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **15/06/2015**
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 : Shri.Kesamsetti Maheshkumar,Full Time
 Qualification : B.tech Mining
 Appointment/ : 18/07/2018
 Termination date

Geologist
 Name : S ARUN,Full Time
 Qualification : MSC.GEOLOGY
 Appointment/ : 01/04/2017
 Termination date

Manager
 Name : A RAMBABU
 Qualification : B.TECH MINING,FCC
 Appointment/ : 01/07/2019
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	07/08/2006
Plan/Scheme of Mining	:	MP modif under 17(3) MCR 2016	24/10/2016
	:	MP review under 17(1) MCR 2016	30/10/2018
	:	MP modif under 17(3) MCR 2016	18/08/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	No backlog exploration.
1b	Exploration over lease area for geological axis 1 or 2	G-1	G-1	Nil.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil.	No exploration carried out in the year 2021-22	Nil.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil.	Entire lease area explored G-1level.	Nil.
1e	Balance reserve as on 01/04/20		(111)5,19,194Ts (221)13,01,210Ts (222)38,25,730Ts (Cao-40%to 50%,SiO2-7%-8%)	As on 1.4.2022.
1f	General remarks of inspecting officers on geology, exploration etc		Lease area has been proved upto 56m depth.Total depth drilled was 491m with 200mx200m grid interval.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	No separate Proposal.	No separate Proposal for development.	Nil.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes.	OB benches-3nos.	Nil.
2c	Stripping ratio or ore to OB ratio	1:0	1:0	No generation of OB.
2d	Quantity of topsoil generation in m3	Nil.	No generation of top soil.	Nil.
2e	Quantity of overburden generation in m3	Nil.	No generation of over burden.	Nil.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No proposal is envisaged.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit.	One pit.	Between grid lines E200-E300 and N100-N200
3b	Quantity of ROM mineral production proposed	99,980Ts	99,959.98Ts	Nil.
3c	Recovery of sailable/usable mineral from ROM production	100 %	100 %	No waste generation.
3d	Quantity of mineral reject generation	Nil.	Nil.	No 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.	Nil.
3g	Grade of sub grade mineral generation	Nil.	No generation of sub grade mineral.	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.	Adopted non-conventional method by engaging Xcentric Ripper.	Drilling & Blasting is done on contingency condition by adopting controlled blasting techniques.
3k	Provision of mining machineries in mineral benches	8m hight and width.	Bench width maintained as 8m.	Nil.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8m.	8m.	suitable for mining.
3m	Total area covered under excavation/pits	9.53Ha	9.53Ha	Nil.
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	Nil.
3o	Total area put in use under different heads at the end of year	17Ha.	16.935Ha.	Nil.
3p	Production of ROM mineral during the last five year period as applicable	2017-18=1499400Ts 2018-19=1498032Ts	2017-18 - 937133 Ts 2018-19 - 1245691Ts 2019-20 - 744618.28Ts 2020-21 - 372176.02 Ts 2021-22 - 99959.98 Ts	Nil.
		Ts 2019-20=1000200 Ts 2020-21=600900Ts 2021-22=99980Ts		
3q	General remarks of inspecting officers on method of mining etc.		Controlled blasting techniques are being adapted .	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)	No Dump proposed.	The entire topsoil and OB already used for backfilling .	Done as proposed in the approved document.
4b	Location of topsoil, OB and mineral reject dumps	No proposal.	Not applicable.	Nil.
4c	Number of dumps within lease area and outside of lease area	One.	One.	As proposed.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NE side of lease area ,where mineral exhausted.	As proposed,NE side of lease area ,where mineral exhausted.	Between grid Location: N-S: 450 to 700 & E-W: 480 to 640 Grid Location: N-S: 450 to 700 & E-W: 480 to 640.
4e	Number of active and alive dumps.	Nil.	Nil.	Nil.
4f	Number of dead dumps.	One dump.	One dump.	One dump.
4g	Number of dumps established.	One dump.	One dump.	One dump.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes,0.02m.	Inactive dump.	Nil.
4i	Length of Retaining wall or garland drain all along dumps	Garland drain all along peripheral bund 700m X 3m X 2m	700m lengthy garland drainage all along the peripheral bund.	Nil.
4j	Number of settling ponds	2 ponds.	2 no's of settling ponds on the eastern side of the mining lease boundary.	Nil.
4k	Specific comments of inspecting officer on waste dump management			Dump stablised.

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.	No proposal.	No proposal for the year 2021-22
5b	Area under backfilling of mined out area	Nil.	Nil.	Nil.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal .	Nil.	Nil.
5d	Total area fully reclaimed and rehabilitated	No Proposal.	Nil.	Fully reclaimed area was 7.89ha.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Back filled area has been rehabilitated with plantation.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes.	Submitted.	Report for the year 2021-22 has been submitted.
6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	0.25ha	0.25ha	Nil.
6d	No. of saplings planted during the year	500 nos.	2000 no of saplings.	Nil.
6e	Cumulative no .of plants	Not available.	About 40,000 saplings.	Nil.
6f	Any other method of rehabilitation	No proposal.	Nil.	Nil.
6g	Cost incurred on watch and care during the year	Nil.	No specific details available.	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.	Rehabilitation done by green belt development on the backfilled area.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal.	Nil.	Nil.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal.	No waste land available.	Nil.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal.	No waste land available.	Nil.

6p	Compliance of environmental monitoring (core zone and buffer zone)	Environment monitoring report submitted.	Periodical Monitoring.	Environmental parameters are within limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			There was no proposal for back filling for year 2021-22.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Entire ROM.	Entire ROM.	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.	No.	Consumption of entire ROM.	Nil.
7d	Any beneficiation process at mines	Nil.	No beneficiation process proposed.	Nil.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Entire ROM being consumed in captive cement plant.	Nil.

Environment:

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

8b	Concurrent use or storage of topsoil	No Proposal.	No generatio of top soil or over burden.	Nil.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal.	Nil.	Nil.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No generation.	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)	No specific details.	About 40,000plantation.	Nil.
8g	Survival rate	90%	80%-90%	Nil.
8h	Water sprinkling on roads to control airborne dust	Water Tanker for control airborne dust is proposed.	Water tanker is being engaged for the purpose.	Nil.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Green belt developed on North and North eastern parts of lease boundary and backfilled area.	Nil.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	All the returns are submitted.	Annual return for the year 2021-22 has also submitted.	Nil.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mr E.THANGAKUMAR- Mining Engineer;Mr A.RAMBABU- Manager(Mines) ; Mr S.ARUN- Geologist;	Accompanied during inspection of mines.	Nil.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings-9.53 Ha;Reclaimed/Rehabilitated- 8.86Ha;Occupied by plant, buildings, residential, welfare buildings & roads- 0.80Ha;Other Purpose (GREEN BELT AND OTHERS)- 3.065Ha.	Furnished under Part - I of 11.	Nil.
9d	Scrutiny of Annual return on afforestation	2000-saplings	Furnished under Part Part - V of 4.4	Nil.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil.	No generation of reject material.	Nil.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	99,960Ts	Furnished under part VI.	Nil.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price - Rs.307.23	Furnished under part Part-VI at sl no.2 .	Nil.
9h	Scrutiny of Annual return on fixed assets	Rs.14463150/-	furnished under Part-IIA.	Nil.
9k	Scrutiny of Annual return on mining machineries	BACK HOE-1.200 CUM-1unit;BACK HOE-1.800 CUM-1unit;TIPPER-10CUM-10units;WATER TANKER-10000Lts-1unit.	Furnished in Part-V of section 5.	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 :

(A.S.SANJEEVA RAO)

Indian Bureau of Mines