

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

MCDR INSPECTION REPORT

Chennai regional office

Mine file No : TN/TCR/LST-42.MDS

Mine code : 38TMN28002

- (i) Name of the Inspecting : **T003**) **S.THIRUNAVUKKARASU**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri.M.Mayilrajan,GM & Shri.M.Kalishkumar Managaer (M
Official with
Designation
- (iv) Date of Inspection : 06/11/2020
- (v) Prev.inspection date : 21/11/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **DEVARMALAI**
- (b) **Registration NO.** : **IBM/170/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **TAMIL NADU**
- District : **KARUR**
- Village : **DEVARMALAI**
- Taluka : **KULLTHALAI**
- Post office : **KURUNIKULATHUPATTI**
- Pin Code : **621301**
- FAX No. : **04551-220666**
- E-mail : **ragunathsingh@chettinadcm**
- Phone : **04551-220620**
- (f) **Police Station** :
- (g) **First opening date** : **03/02/1989**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **ALAMBADIMINES (PO)**
correspondance : **VIA-PALAYAM-624620**
: **DINDIGUL DT.**
3. (a) **Lease Number** : **TMN1570**
- (b) **Lease area** : **166.53**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **02/02/2009**
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : CHETTINAD CEMENT CORPORATION LIMITED
 4TH FLOOR, RANI SEETHAI
 HALL BLDG 603, ANNA SALAI
 CHENNAI CITY TAMIL NADU
 Phone:044-28292727, 42149955
 FAX :044 - 28291558

Owner : SP.ST.PALANIAPPAN , MD
 RANISEETHAI HALL ANNASALAI
 CHENNAI CITY TAMIL NADU
 Phone: 044- 28292727
 FAX : 04428291558

Agent : G.Raghunathsingh
 DINDIGUL TAMIL NADU
 Phone:
 FAX :

Mining Engineer

Name : KALISH KUMAR,Full Time
 Qualification : B.TECH WITH FCC
 Appointment/ : 15/10/2016
 Termination date

Geologist

Name : V.SASIKUMAR,Full Time
 Qualification : MSC.GEOLOGY
 Appointment/ : 02/04/2008
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	14/07/1988
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	02/08/2002
		Mining Scheme rule 12 MCDR1988	03/08/2006
		Renewal under rule 24 MCR1960	11/03/2008
		Mining Scheme rule 12 MCDR1988	15/05/2014
		Modif.approved Mining Scheme	01/06/2015
		MP review under 17(1) MCR 2016	24/04/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NA	fully explored. Totally 34 borehole drilled with 3001 meters depth (Minimum 34 mtrs & Maximum 118.25 mtrs)
1b	Exploration over lease area for geological axis 1 or 2	NIL	NA	Fully explored under G1 level
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NA	No expenditure incurred
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NA	Fully explored under G1 level
1e	Balance reserve as on 01/04/20	Fully explored under G1 level	Fully explored under G1 level	NIL
1f	General remarks of inspecting officers on geology, exploration etc	----	----	Geology, exploration is found satisfactory

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	N 270 to N 430 & N 270 to N 430 & E 1010 to E 1300 1300 N 420 to N 610 & E 3160 to E 3370 N 700 to N 770 & E 3395 to E 3500	N 270 to N 430 E 1010 to E 1300 N 420 to N 610 E 3160 to E 3370 N 700 to N 770 & E 3395 to E 3500	& & & E	As per the proposal
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No. of Benches in Topsoil/ Overburden - 2 Bench No. of Benches in Ore - 2 Bench	No. of Benches in Topsoil/ Overburden - 2 Bench No. of Benches in Ore - 2 Bench	- 2	Separate benches in topsoil, overburden and mineral carried out as per Proposal given in Review of Mining plan
2c	Stripping ratio or ore to OB ratio	1:0.71	1:1.20		In Limestone faces, handling of interburden reject (Calc gneiss & Granite gneiss) is more. So Stripping Ratio is 1:1.20
2d	Quantity of topsoil generation in m3	13,929 M3	4,500 M3		Top soil was utilized for afforestation purposes.
2e	Quantity of overburden generation in m3	1,76,967M3	3,35,616 M3		As per plan
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	----	---		development of pit is found satisfactory

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	2	2	As per the proposal
3b	Quantity of ROM mineral production proposed	7,98,997 Ts	7,98,997 Ts	Within limit
3c	Recovery of sailable/usable mineral from ROM production	1:0.71	1:1.20	In Limestone faces, handling of interburden reject (Calc gneiss & Granite gneiss) is more. So Stripping Ratio is 1:1.20
3d	Quantity of mineral reject generation	5,65,080 Ts	8,84,302 Ts	
3e	Grade of mineral rejects generation and threshold value declared.	<35% CaO	<35% CaO	NIL
3f	Quantity of sub grade mineral generation.	NIL	NA	No sub-grade mineral generation
3g	Grade of sub grade mineral generation	NIL	NA	No sub-grade mineral generation
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Mechanized method	Mechanised method adopted for segregating from ROM
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NA	No analysis or beneficiation study proposed
3j	Provision of drilling and blasting in mineral benches	Yes	Drilling and Blasting is carried out as per plan	As per the proposal
3k	Provision of mining machineries in mineral benches	Shovel- 3 No, Rock Breaker- 1 No Tippers- 10 Nos, Wagon Drills-1 No	Shovel- 3 No, Rock Breaker- 1 No Tippers- 10 Nos, Wagon Drills-1 No	Mining machineries provided in mineral benches

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height-10 mtr, Width-10mtr	Height-10 mtr, Width-10mtr are maintained	As per the proposal
3m	Total area covered under excavation/pits	35.255 Ha	35.255 Ha	As per the proposal
3n	Ore to OB ratio for the pit/mine during the year.	1:0.71	1:1.20	In Limestone faces, handling of interburden reject (Calc gneiss & Granite gneiss) is more. So Stripping Ratio is 1:1.20
3o	Total area put in use under different heads at the end of year	58.05.0 Ha	58.05.0 Ha	As per plan
3p	Production of ROM mineral during the last five year period as applicable	2014-15-8,00,000 Ts 2015-16-25,000,00 Ts 2016-17-25,000,00 Ts 2017-18-25,00,000 Ts 2018-19-25,00,000 Ts 2019-20-7,98,997 Ts	2014-15-6,11,391 Ts 2015-16 -7,28,043 Ts 2016-17-7,89,248 Ts 2017-18 - 6,29,212Ts 2018-19 -7,28,020 Ts 2019-20-7,36,619 Ts	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)	Mineral Reject - 2 Dump, Top Soil- 1 dump	Mineral Reject - 2 Dump, Top Soil- 1 dump	As per plan, Top soil was utilized for afforestation purposes

4b	Location of topsoil, OB and mineral reject dumps	The reject dump yards are located in the barren , non mineral bearing areas in the inside of the ML area at West side of lease area	The reject dump yards are located in the barren , non mineral bearing areas in the inside of the ML area at West side of lease area	As per plan
4c	Number of dumps within lease area and outside of lease area	4	4	Dumps which are outside the lease area are inactive
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	N 2720 to N 2840 & E 720 to E 760 N 500 to N 700 & E 2500 to E 2580 N 340 to N 560 & E 300 to E 470	N 340 to N 560 & E 300 to E 470	As per plan
4e	Number of active and alive dumps.	Active- 2 Nos Alive- 3 Nos	Active- 2 Nos Alive- 3 Nos	As per plan
4f	Number of dead dumps.	NIL	Na	NIL
4g	Number of dumps established.	NIL	NA	Not at this nstage
4h	Whether Retaining wall or garland drain all along dumps are there.	---	Provided	Garland drainage Provided at West side Dump
4i	Length of Retaining wall or garland drain all along dumps	---	Provided	Dump No 1 - 3.1 Km garland drainage
4j	Number of settling ponds	NIL	2	Settling pond maintained
4k	Specific comments of inspecting officer on waste dump management	---	---	waste dump management is found stisfactory

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 not extracted fully
5b	Area under backfilling of mined out area	NIL	Not Applicable	No area mined out till now . So no back filling
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Topsoil only used for peripheral bund and plantation	Topsoil only used for peripheral bund and plantation	As topsoil thickness is less than 0.5 meters, we have utilized for afforestation
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	Total area not reclaimed and rehabilitated
5e	General remarks of inspecting officers on backfilling and reclamation etc.	---	---	backfilling, reclamation doesnot arise st 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).	yed	Submitted	Submitted in time
6b	Area available for rehabilitation (ha) .	NIL	NA	No Area available for rehabilitation
6c	afforestation done (ha).	2.00.0ha	1.00.0ha	Afforestation undr progassive
6d	No. of saplings planted during the year	4000	2000	Afforestation undr progassive
6e	Cumulative no .of plants	---	2000	nil
6f	Any other method of rehabilitation	NIL	Not Applicabl	No other specific method of rehabilitation
6g	Cost incurred on watch and care during the year	NIL	Not Applicable	NIL

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NA	NL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NA	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NIL	NA	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NA	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NA	NIL
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NIL	NA	No waste land available
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NA	No waste land available
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NA	No waste land available

6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly Proposed	Done Quarterly	Periodically Monitored
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	---	---	PMCP compliance & progressive closure operations is not arise

Mineral Conservation:

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

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	13,929 M3	4,500 M3	Top soil was utilized for afforestation purposes

8b	Concurrent use or storage of topsoil	13,929 M3	4,500 M3	Top soil was utilized for afforestation purposes.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB Dump Provided	OB Dump Provided	As per plan
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NIL	NA	not at this stage
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	NA	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	4000 Nos.	2000 Nos.	Survival rate 70%
8g	Survival rate	70%	70%	Survival rate 70%
8h	Water sprinkling on roads to control airborne dust	Water tanker to be used	Water tanker to be used	As per plan
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	---	----	aesthetic beauty in and around mines area is good

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto Date 09.10.2020. A.R. submitted upto Date 27.06.2020	M.R. Submitted upto Date 09.10.2020. A.R. submitted upto Date 27.06.2020	Submitted
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given in the format	M.Kalishkumar - Mining Engineer V.Sasikumar - Geologist	Part-I No. 8&9 & Part-II, employment & wages.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given in the format	Area under pits- 35.25 Ha Area under dumps- 12.015 Ha	Part-I Sl. No 12
9d	Scrutiny of Annual return on afforestation	Given in the format	1000 trees planted	Part-I Para 4.4
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given in the format	884302 Ts	Part-V General Geology, Sl.No.4.2(B)
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given in the format	Not applicable	Part-VI, Sl.No.2
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given in the format	Rs. 336.76	Part - VII(cost of Production)-
9h	Scrutiny of Annual return on fixed assets	Given in the format	Rs.24,14,08,162	Part - III, Sl.No
9k	Scrutiny of Annual return on mining machineries	Given in the format	Shovel- 3 No, Rock Breaker- 1No Tippers- 10 Nos, Wagon Drills-1 No	

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(1)	18/02/2021			
MCDR17	Rule 26(2)	18/02/2021			

Date :

(S. THIRUNAVUKKARASU)

Indian Bureau of Mines