

**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 : S011) SALIL SANDIP KUJUR
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri M.Mayilrajan DGM Mines, RAGHUNATHSINGH-AVP, KALIS
Official with
Designation
- (iv) Date of Inspection : 21-NOV-19
- (v) Prev.inspection date : 15-OCT-18

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@chettinadcem
- Phone : 04551-220620
- (f) **Police Station** :
- (g) **First opening date** : 03-FEB-89
- (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** : 411.51
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 02-FEB-09
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-OCT-16
 Termination date

Geologist

Name : V.SASIKUMAR,Full Time
 Qualification : MSC.GEOLOGY
 Appointment/ : 02-APR-08
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	14-JUL-88
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	02-AUG-02
		Mining Scheme rule 12 MCDR1988	03-AUG-06
		Renewal under rule 24 MCR1960	11-MAR-08
		Mining Scheme rule 12 MCDR1988	15-MAY-14
		Modif.approved Mining Scheme	01-JUN-15
		MP review under 17(1) MCR 2016	24-APR-19

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	nil	nil	all areas has been explored to G1 category.
1b	Exploration over lease area for geological axis 1 or 2	g1	G1	EXPLORATION IN G1 CATEGORY IS COMPLETED FOR ENTIRE LEASE.
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	-	48.643 (111) Million Tons	48.643 (111) Million Tons IN G1 CATEGORY.
1f	General remarks of inspecting officers on geology, exploration etc	-	-	EXPLORATION COMPLETED AND 48.643 (111) Million Tons LIMESTONE IS IN PROVED CATEGORY.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Grid Interval in East side E 3000 to E 3750 & E 1250 to E 1500	Grid Interval in East side E 3000 to E 3750 & E 1250 to E 1500	AS PER PLAN.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	YES No. of Benches in OB- 2 Bench Ore - 2 Bench	NO TOP SOIL AVAILABLE No. of Benches in OB- 2 Bench Ore - 2 Bench	The waste generated during mining shall include overburden and ore zone waste, which consists of calc-gneiss, Pegmatite and granite gneiss. No topsoil is likely to be generated during the Scheme period as topsoil already removed and used for afforestation purpose and prepared bund along mine periphery.
2c	Stripping ratio or ore to OB ratio	1:1.10	1:0.95	WITHIN LIMIT.
2d	Quantity of topsoil generation in m3	NIL	NIL	NIL
2e	Quantity of overburden generation in m3	10,57,692 M3	2,80,008 M3	WITHIN LIMIT.
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	2	2	AS PER PLAN.
3b	Quantity of ROM mineral production proposed	25,00,000 Ts	7,64,222 Ts	MOEF to be obtained for enhanced production of 25 Lac Ts, it is under process. working for the existing EC consent of 8.0 Lac Ts

3c	Recovery of sailable/usable mineral from ROM production	1:1.10	1:0.95	WITHIN LIMIT.
3d	Quantity of mineral reject generation	27,50,000	Ts 7,28,021 Ts	MOEF to be obtained for enhanced production of 25 Lac Ts, it is under process. working for the existing EC consent of 8.0 Lac Ts. So Rejection Ratio is low
3e	Grade of mineral rejects generation and threshold value declared.	<35% CaO	<35% CaO	AS PER PLAN
3g	Grade of sub grade mineral generation	NIL	NIL	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised method adopted	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	Primary breaking of rock are done by conventional drilling and blasting operations. Deep hole drilling and blasting are being carried out for rock breaking.	YES, Primary breaking of rock are done by conventional drilling and blasting operations. Deep hole drilling and blasting are being carried out for rock breaking.
3k	Provision of mining machineries in mineral benches	yes	shovel=2 dumper=10 drill=2 wt=1 dozers/wheel loader=2	as per plan

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	yes height & width=9-10 m	Yes, maintaining 9-10 mtr benches and it is suitable for method of Mining.	as per plan.
3m	Total area covered under excavation/pits	29.85.0 Ha	29.85.0 Ha	as per plan.
3n	Ore to OB ratio for the pit/mine during the year.	1:1.10	1:0.95	within limit.
3o	Total area put in use under different heads at the end of year	pit-29.85 dumps-7.25 roads-2.28 office/infra-.29 bund/plantation-2.98 total=42.65.0 Ha	pit-29.85 dumps-7.25 roads-2.28 office/infra-.29 bund/plantation-2.98 total=42.65.0 Ha	as per proposal.
3p	Production of ROM mineral during the last five year period as applicable	2014-15-8,00,000 Ts 2015-16-25,00,00 Ts 2016-17-25,00,00 Ts 2017-18-25,00,00 Ts 2018-19-25,00,00 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	all 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
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	no topsoil available.	ob and mineral rejects are dumper at one location in two dumps. located in the centre of the lease. Mineral Reject -2 Dump	as per plan.

4b	Location of topsoil, OB and mineral reject dumps	no top soil available ob/reject dumps-2 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.	as per plan dumps are located and used.
4c	Number of dumps within lease area and outside of lease area	Within Lease-4	Within Lease-4 Outside Lease-2	Dumps which are outside the lease area are inactive and made long before. no activity found in old dumps which are located outside the lease.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Grid Interval in East side E 2000 to E 2500 & E 3000 to E 3500	Grid Interval in East side E 2000 to E 2500 & E 3000 to E 3500	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.
4e	Number of active and alive dumps.	2	2	as per plan.
4f	Number of dead dumps.	two outside lease	two outside lease	nil
4g	Number of dumps established.	nil	nil	nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drainage Provided	Garland drainage Provided	nil
4i	Length of Retaining wall or garland drain all along dumps	3.1 km	3.1 Km garland drainage had done all along the dump	as per plan.
4j	Number of settling ponds	nil	1	nil
4k	Specific comments of inspecting officer on waste dump management	-	-	satisfactory.

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.	MINERAL NOT EXCAVATED COMPLETELY IN ANY AREA.	NIL, MINERAL NOT EXCAVATED COMPLETELY IN ANY AREA.	AS PER PLAN.
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)	NA	NA	NIL
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	SATISFACTORY.

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	nil
6b	Area available for rehabilitation (ha) .	nil	nil	nil
6c	afforestation done (ha).	nil	2 ha in barren land	nil
6d	No. of saplings planted during the year	750	750	nil. as per plan.
6e	Cumulative no .of plants	3000	3000	nil
6f	Any other method of rehabilitation	na	na	nil
6g	Cost incurred on watch and care during the year	nil	nil	nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	no area available	no area available for reclamation as mineral not exhausted completely.	mineral not exhausted completely.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	nil	nil	no area available for reclamation & rehabilitation as mineral not exhausted completely.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NA	NA	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	WATER IN ACCUMULATED IN THE PIT.	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	NO WASTE LAND AVAILABLE	NO WASTE LAND AVAILABLE WITH THE LESSEE.	NO WASTE LAND AVAILABLE
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NO WASTE LAND AVAILABLE	NIL
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NA	NA

6p	Compliance of environmental monitoring (core zone and buffer zone)	YES	Periodically Monitored	ALL DATA WITHIN NORM,
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	NO GRADE WISE SORTING IN LEASE AREA	NO SORTING IS DONE	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 .	NO BENIFICATION AT MINES	NO BENIFICATION IS CARRIED OUT AT MINES	ALL MATERIAL IS TAKEN TO PLANT AND MIXING IS DONE WITH OTHER MATERIALS FORM DIFFERENT MINES.
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)	NO TOPSOIL AVAILABLE	NO TOPSOIL IS REMOVED	NIL

8b	Concurrent use or storage of topsoil	NA	NA	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	ONLY ONE TYPE OF DUMPS AVAILABLE FOR OB/REJECTS	ONLY ONE TYPE OF DUMPS AVAILABLE FOR OB/REJECTS IN WASTERN SIDE OF THE LEASE.	REJECTS/OB ARE STORED AT ONE PLACE.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	MINERAL NOT EXCAVATED COMPLETELY	NO RECLAMATION IS CARRIED OUT.	MINERAL NOT EXCAVATED COMPLETELY
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	3000	3000	AS PER PLAN
8g	Survival rate	80%	70%	NIL
8h	Water sprinkling on roads to control airborne dust	WT IS USED	WATER SPRINKLER ARE USED	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	SUBMITTED	SUBMITTED TO IBM	NIL

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mr.V.Sasikumar - Geologist Mr.M.Kalishkumar - Mining Engineer	PRESENT AT SITE	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	42.65.0 Hect	42.65.0 Hect is given	nil
9d	Scrutiny of Annual return on afforestation	750 Nos	750 Nos	found as provided.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	7,28,021 Ts	7,28,021 Ts quantity of rejects mentioned.	nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	nil	no stock is maintained at mines.	nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Rs.364.31	Rs.364.31 is given	nil
9h	Scrutiny of Annual return on fixed assets	Rs. 24,16,02,930	Rs. 24,16,02,930 its include all land cost/infra etc.	
9k	Scrutiny of Annual return on mining machineries	Shovel, Dozer, Loader, Tipper, Air compressor and water tanker	Shovel, Dozer, Loader, Tipper, Air compressor and water tanker are mentioned.	nil

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed		Show cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

Date :

(SALIL SANDIP KUJUR)

Indian Bureau of Mines