

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

**MCDR INSPECTION REPORT**

**Chennai regional office**

**Mine file No :** TN/PT/LST-13-MDS

**Mine code :** 38TMN38021

- (i) Name of the Inspecting : **T003** ) **S.THIRUNAVUKKARASU**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri S.Makesh,GM(Mines), R Kamaraj,Mine Manager,S.Sel  
Official with  
Designation
- (iv) Date of Inspection : 26/02/2019
- (v) Prev.inspection date : 02/08/2017

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **PERIATHIRUKONAM(64.515 HA**
- (b) **Registration NO.** : **IBM/291/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : TAMIL NADU  
District : ARIYALUR  
Village :  
Taluka :  
Post office :  
Pin Code :  
FAX No. : 04329-235111  
E-mail : s.makesh@dalmiacement.com  
Phone : 04329-235459, 9865165326
- (f) Police Station : KEELAPALUR
- (g) First opening date : 26/03/2001
- (h) Weekly day of rest : SUN
2. Address for : DALMIA CEMENT (B)LTD  
correspondance : DALMIAPURAM-621651  
TRICHY.
3. (a) Lease Number : TMN1542
- (b) Lease area : 44.7
- (c) Period of lease : 25
- (d) Date of Expiry : 23/01/2036
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : DALMIA CEMENT (BHARAT) LIMITED  
 TIRUCHIRAPALLI TAMIL  
 NADU  
 Phone:  
 FAX :

Owner : T. VENKATESAN  
 Dy. Managing Director  
 Dalmia Cement (B) Ltd  
 CHENNAI CITY TAMIL NADU  
 Phone: 044-28279933, 9  
 FAX : 044-28276508

Agent : R. A. KRISHNAKUMAR  
 Executive Director Dalmia  
 cements(B) Ltd.,  
 Dalmiapuram TIRUCHIRAPALLI  
 TAMIL NADU  
 Phone: 04329-294632  
 FAX : 04329-235111

## Mining Engineer

Name : S.RADAKRISHNAKANTH, Full Time  
 Qualification : BE(MINING)  
 Appointment/ : 03/12/2012  
 Termination date

## Geologist

Name : S. Selvakumar, Full Time  
 Qualification : M.Sc. (Applied Geo)  
 Appointment/ : 03/12/2012  
 Termination date

## Manager

Name : R.KAMARAJ  
 Qualification : M.Sc GEOLOGY  
 Appointment/ : 04/01/2016  
 Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 20/07/2004  
 Plan/Scheme of Mining Mining Scheme rule 12 MCDR1988 25/02/2015

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	No Backlog of previous year
1b	Exploration over lease area for geological axis 1 or 2	NIL	NIL	The entire lease hold area explored under 111 level
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable	Not applicable	The entire lease hold area explored under 111 level
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	The entire lease hold area explored under 111 level
1e	Balance reserve as on 01/04/20	---	(111) - 1517875 Tons (211) - 4718129 Tons (221) - 1344854 Tons	reserves as on 01.04.2018
1f	General remarks of inspecting officers on geology, exploration etc	---	--	geology, exploration id founs satisfactory

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	4th,,5th , 6th& 7th bench	4th,,5th , 6th& 7th bench	Asper the proposal
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes proposed	As per the proposal	No deviation obsdved
2c	Stripping ratio or ore to OB ratio	1:1.12	1:1.10	nil
2d	Quantity of topsoil generation in m3	NIL	NIL	During the year no topssoil development
2e	Quantity of overburden generation in m3	645548	77319	Due to less production

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

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one	one	as per the proposal
3b	Quantity of ROM mineral production proposed	575182 MT	419600MT	with in the limite
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	NIL
3d	Quantity of mineral reject generation	NA	NA	No mineral reject generation
3e	Grade of mineral rejects generation and threshold value declared.	High Ferruginous Limestone	High Ferruginous Limestone	Blanded with High grade
3f	Quantity of sub grade mineral generation.	19831MT	1647 MT	High Ferruginous Limestone
3g	Grade of sub grade mineral generation	Sio2 7.10 - 14.20 Al2O3 1.62 - 4.84 Fe2O3 6.00 - 12.35 CaO 35 - 45.4	Sio2 13.17 Al2O3 3.42 Fe2O3 6.97 CaO 40.32	High Ferruginous Limestone
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	No beneficiation study proposed & carried out for sub-grade

3j	Provision of drilling and blasting in mineral benches	For Drilling ICM260 drill compressor is used. For Blasting, Magazine for Explosives Storage, ANFO Mixing shed & Road Van for Explosives Transporting from Magazine to Blasting Site are available in Mines	For Drilling ICM260 drill compressor is used. For Blasting, Magazine for Explosives Storage, ANFO Mixing shed & Road Van for Explosives Transporting from Magazine to Blasting Site are available in Mines	
3k	Provision of mining machineries in mineral benches	For Loading 30T Class Excavator is used. For Transportation 31 ton Taurs tippers are used	For Loading 30T Class Excavator is used. For Transportation 31 ton Taurs tippers are used	As per proposed in SOM
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height - 6M Bench Width - 10m	Bench Height - 6M Bench Width - 10m	As per proposed in SOM
3m	Total area covered under excavation/pits	13.85 H.a	13.85 H.a	As per proposed in SOM
3n	Ore to OB ratio for the pit/mine during the year.	1:1.12	1:1.10	nil
3o	Total area put in use under different heads at the end of year	44.705 ha	44.705 ha	As per the proposal
3p	Production of ROM mineral during the last five year period as applicable	2013-14 487650 2014-15 945552 2015-16 568987 2016-17 590940 2017-18 575182 2018-19-397512	2013-14 502151 2014-15 636700 2015-16 298600 2016-17 489100 2017-18 419600 2018-19- 372300	
3q	General remarks of inspecting officers on method of mining etc.	---	--	method of mining is found to be satisfactory.

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Backfilling	Backfilling	Overburden is backfilled in limestone excavated area inside the mine
4b	Location of topsoil, OB and mineral reject dumps	two old dumps N6800- N7000-E7600- E7400 ana N 6700-6900 E7000 E7200	two old dumps N6800- N7000-E7600-E7400 ana N 6700-6900 E7000 E7200	Observe in the same place
4c	Number of dumps within lease area and outside of lease area	Two existing sump with the lease	Two existing sump with the lease	curent year backfilling carrie out as per the SOM
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Backfilling N7800 - N8000 & E7600- E 7650	Backfilling N7800 - N8000 & E7600- E 7650	as per the proposal of SOM
4e	Number of active and alive dumps.	NIL	NIL	Backfilling is under prograssive, hence the existing dumps are inactive
4f	Number of dead dumps.	NIL	NIL	NIL
4g	Number of dumps established.	one	one	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Provided	As per the proposal
4i	Length of Retaining wall or garland drain all along dumps	300 x 2 x 1 mts	300 x 2 x 1 mts	NIL
4j	Number of settling ponds	NIL	NIL	Not applicable
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
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Proposed after excavation of the Limestone upto the full depth, the overburden is dumped in the bottom over which the top soil is spread over the back filled area	As per the perposal backfilling is carried out	Nil
5b	Area under backfilling of mined out area	1.186 ha	1.186 ha	durnig the plan period 0.99 hect
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	After backfilling the overburden at the bottom of the Mined out area, top soil is spread over the top of the backfilled area	top soil is spread over the top of the backfilled area.	as per the proposal
5d	Total area fully reclaimed and rehabilitated	4.171 ha	4.171 ha	as per the proposal
5e	General remarks of inspecting officers on backfilling and reclamation etc.	--	--	back filling, reclamation are as pewr the proposal

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	yes submitted in time	Submitted the PMCP every year. For the year submitted on 25.02.19
6b	Area available for rehabilitation (ha) .	Reclaimed / Rehabilitated2018-19= 0.98823.75 ha	Reclaimed / Rehabilitated2018-19= 0.98823.75 ha	NIL
6c	afforestation done (ha).	9.075 ha	9.075 ha	
6d	No. of saplings planted during the year	17-18 =1200.Tree	Achived 1200.Tree	Out side allalong boundary 600 trees

6e	Cumulative no .of plants	3600 saplings	4200 saplings	nil
6f	Any other method of rehabilitation	NA	NA	No othe method of rehabilitation
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	Area Reclaimed 0.988 ha	Area Reclaimed 0.988 ha	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	Afforestation of Backfilled area - 1300 saplings
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	--	Area Reclaimed 4.171ha	nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	Reclamation by back filling
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NIL	Reclamation by back filling
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	4.171 ha	4.171 ha	nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NIL	No waste land with in the lease area.



6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Backfillin	Backfillin	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed to carried out every Quarter	M/s. Ensyscon Environmental Lab, Chennai is engaged for monitoring Environmental data on a Quarterly basis	Verified found in as per the proposals
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	--	---	PMCP compliance & progressive closure operations is founs satisfactory.

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	575182 MT	419600 MT	nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized	Mechanized	
7c	Different grade of mineral sorted out at mines.	NIL	NIL	no sorted out at mines
7d	Any beneficiation process at mines	NA	NA	Nobeneficiation process at mines
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	---	--	Mineral conservation & beneficiation is taken care and utilizes all mierals

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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Nil	NIL	No top soil during the proposae year
8b	Concurrent use or storage of topsoil	NA	na	NO top siol generation
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	NIL	NIL	dumps for overburden, waste rock are use for bckfilling
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	yes	Overburden material is used for Backfilling of the Mined out Area after complete excavation of Limestone	as per the proposal
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Reclamation by Backfilling & Afforestation	Reclamation by Backfilling & Afforestation	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	----	Planted varieties of Trees like Neem, Pungan, Accacia, Subabul, etc and other trees in the backfilled area.	The Area is devoid of any large trees. It contains thorny bushes, natural vegetation like grasses, wild shrubs grown during the monsoon.
8g	Survival rate	90%	90%	NIL
8h	Water sprinkling on roads to control airborne dust	Yes proposaed	Haul Road Water sprinkling carried out with Mobile water tanker having 12KL capacity	NIL
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	yes	submitted	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Mines Manager - R.Kamaraj Mining Engineer - R.Kamaraj Geologist - S.Selvakumar	As per the notice received
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	given	Lease Area Utilization at the end of FY17-18 Already Exploited & (i) Abandoned by Opencast Workings - 0 ha (ii) Covered under current Workings -13.85 ha (iii) Reclaimed / Rehabilitated - 3.46 ha (iv) Used for Waste Disposal - 0.48 ha (v) Occupied by plant, buildings, residential, welfare buildings & Roads - 0.12 ha	NIL
9d	Scrutiny of Annual return on afforestation	given	No.of Trees planted within the Lease Area during FY17-18 1200. Outside Lease Area FY 17-18- 200 Survival Rate - 90%	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given	Mineral Reject Generated - 1647 tons Grade - High Ferruginous (Medium Grade)	As per the proposal
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	(a) Opencast Working - Production -419600MT	as per the proposal
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Ex.Mine Price - Rs.201.57 Cost of production - Rs.201.57	NIL
9h	Scrutiny of Annual return on fixed assets	Given	Rs.9,17,20,074/-	NIL

9k	Scrutiny of Annual return on mining machineries	Guven	Back Hoe- 2.1 Cu.m - 2 no Dozer - 165HP - 1No Air compressor - 300 CFM - 1no Tipper - 18Cu.m - 16 no Diesel Generator - 100KWH - 1no Pump - Electrical -1no	as per the proposal
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**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 :**

(S. THIRUNAVUKKARASU)

Indian Bureau of Mines