

**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 : 38TMN38001

- (i) Name of the Inspecting : **T003**) **S.THIRUNAVUKKARASU**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri.E.Vasudevan,AGM (mines) & Shri.R.Kamaraj Manager
Official with
Designation
- (iv) Date of Inspection : 21/02/2020
- (v) Prev.inspection date : 05/09/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PERIATHIRUKONAM**
- (b) **Registration NO.** : **IBM/929/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : TAMIL NADU
- District : ARIYALUR
- Village : PERIATHIRUKONAM
- Taluka : ARIYALUR
- Post office : IDAYATHANKUDI
- Pin Code :
- FAX No. : 04329-35111
- E-mail : s.makesh@dalmiacement.com
- Phone : 04329-235459, 9865165326
- (f) Police Station : KEELAPALUR
- (g) First opening date : 01/04/2011
- (h) Weekly day of rest : SUN
2. Address for : Dalmia Cement (B) Ltd.
correspondance DALMIAPURAM-621651
TRICHY
3. (a) Lease Number : TMN0745
- (b) Lease area : 61.37
- (c) Period of lease : 50
- (d) Date of Expiry : 29/03/2051
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 : J. V. GUNGANE
 Executive Director Dalmia
 Cement(B) Ltd Dalmiapuram
 TIRUCHIRAPALLI TAMIL NADU
 Phone: 04329-235123, 9865139444
 FAX : 04329-235111

Mining Engineer

Name : S.RADAKRISHNAKANTH, Full Time
 Qualification : BE(MINING)
 Appointment/ : 04/06/2001
 Termination date

Geologist

Name : S. Selvakumar, Full Time
 Qualification : M.Sc. (Applied Geo)
 Appointment/ : 01/12/2008
 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	08/01/1996
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	28/12/2001
	:	Mining Scheme rule 12 MCDR1988	07/03/2006
	:	Mining Scheme rule 12 MCDR1988	27/10/2011
	:	Mining Scheme rule 12 MCDR1988	04/03/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NA	Mine fully explored
1b	Exploration over lease area for geological axis 1 or 2	NIL	NA	The entire lease hold area falls explored under G1 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NA	The entire lease hold area falls explored under G1 level.
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NA	The entire lease hold area falls explored under G1 level.
1e	Balance reserve as on 01/04/20	----	(111) - 2213513 Tons (211) - 3244932 Tons (221) - 182283 Tons	nil
1f	General remarks of inspecting officers on geology, exploration etc	----	----	Geology, exploration of the mine is found satisfactory, Mine fully explored under G1 level

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N - 7017 to 7108 E - 8319 to 8123	N - 7017 to 7108 E - 8319 to 8123	As per the proposal
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	NIL	NA	No topsoil bench development
2c	Stripping ratio or ore to OB ratio	1:0.11	1:0.18	Less than the proposal due to less production
2d	Quantity of topsoil generation in m3	NIL	NA	No top soil generation

2e	Quantity of overburden generation in m3	111467	107008	NIL
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NIL	NA	Development of pit is found satisfactory

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1	1	NIL
3b	Quantity of ROM mineral production proposed	992017 MT	597400MT	NIL
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	100% RECOVERY
3d	Quantity of mineral reject generation	NIL	NA	No Mineral reject Generation
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NA	No Mineral reject Generation
3f	Quantity of sub grade mineral generation.	NIL	NA	No sub-grade is generation.
3g	Grade of sub grade mineral generation	NIL	NA	No sub-grade is generation.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	As per proposed in SOM
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NA	No other beneficiation

3j	Provision of drilling and blasting in mineral benches	Proposed	As per the proposal	As per proposed in SOM
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
3m	Total area covered under excavation/pits	21.32 H.a	21.32 H.a	As per proposed in SOM
3n	Ore to OB ratio for the pit/mine during the year.	1:0.11	1:0.18	Stripping Ratio slightly more due to less production
3o	Total area put in use under different heads at the end of year	2014-15 895528 2015-16 1199778 2016-17 934845 2017-18 934954 2018-19 992017 2019-20 863949	2014-15 570630 2015-16 382600 2016-17 809500 2017-18 593500 2018-19 597400 2019-20* 461700	For 2019-20 production details updated till January 2020
3p	Production of ROM mineral during the last five year period as applicable	-----	-----	Method of mining is found satisfactory
3q	General remarks of inspecting officers on method of mining etc.	---	---	method of mining is found satisfactory

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No separate dump for Top soil	No separate dump for Top soil	Top soil and Overburden is backfilled in limestone excavated area inside the Mines
4b	Location of topsoil, OB and mineral reject dumps	OB Dump is located in the Non Limestone area- Western side of the lease area	OB Dump is located in the Non Limestone area- Western side of the lease area	NIL

4c	Number of dumps within lease area and outside of lease area	1 (within lease area)	1 (within lease area)	As per proposed in SOM
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Western part of the lease N 7228 to 7583 E 6967 to 7346	Western part of the lease N 7228 to 7583 E 6967 to 7346	As per proposed in SOM
4e	Number of active and alive dumps.	NIL	NA	Overburden soil is backfilled in the mined out area & sub grade dump is not generated during the year 2018 -19
4f	Number of dead dumps.	01	01	NIL
4g	Number of dumps established.	01	01	Overburden dump was in the western side within the lease area
4h	Whether Retaining wall or garland drain all along dumps are there.	proposed	Provided	Provided all along the overburden dump
4i	Length of Retaining wall or garland drain all along dumps	700*2*1 (mtr.)	700*2*1 (mtr.)	NIL
4j	Number of settling ponds	1	1	Provided in side the mines for settling of water in the sump area
4k	Specific comments of inspecting officer on waste dump management	-----	-----	waste dump management found 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.	nil	extraction of Limestone is under progassive	As per proposed in SOM

5b	Area under backfilling of mined out area	0.61 h	0.75 ha	nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NA	NIL
5d	Total area fully reclaimed and rehabilitated	Total Area Reclaimed - 24.50 ha N 7022 - 7665 E 6982 - 7828	Total Area Reclaimed - 24.50 ha N 7022 - 7665 E 6982 - 7828	During the FY18-19 Area Reclaimed - 0.75 ha
5e	General remarks of inspecting officers on backfilling and reclamation etc.	----	----	back filling, reclamation is found 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).	YES	Submitted	Submitted
6b	Area available for rehabilitation (ha) .	0.61 Ha (2018-19)	0.75 Ha (2018-19)	Total Area Reclaimed - 23.75
6c	afforestation done (ha).	1.65 ha (2018-19)	0.7 ha (2018-19)	Tree Saplings planted only in the Backfilled area only
6d	No. of saplings planted during the year	1800 saplings (2018-19)	726 Saplings (2018-19)	Plantation under prograssive during inspection
6e	Cumulative no .of plants	---	45244 saplings (upto 2018-19)	Tree Saplings planted only in the Backfilled area only.
6f	Any other method of rehabilitation	NIL	NA	NIL
6g	Cost incurred on watch and care during the year	NIL	NA	NIL

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	0.61 Ha (2018-19)	0.75 Ha (2018-19)	Total Area Reclaimed - 23.75 ha
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	YES	Area Reclaimed 0.75 ha	Total Area Reclaimed - 24.5 ha
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Backfilled area - 1800 saplings	Backfilled area - 726 saplings	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Backfilling proposed	Backfilling Carried out as per the proposal	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	PMCP returns prepared & duly Submitted	PMCP returns prepared & duly Submitted	Reclamation by back filling
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NIL	NA	No waste land available within the lease area
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NA	No waste land available within the lease area
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NA	No waste land available within the lease area

6p	Compliance of environmental monitoring (core zone and buffer zone)	propose	M/s. Ensyscon Environmental Lab, Chennai is engaged for monitoring Environmental data on a Quarterly basis	As per proposed in SOM
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	---	----	PMCP measures found satisfactory

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	992017 MT	597400 MT	NIL
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized	Mechanized	As per proposed in SOM
7c	Different grade of mineral sorted out at mines.	NIL	Na	All grade of mineral is used for cement manufacturing
7d	Any beneficiation process at mines	NIL	NA	No beneficiation at mine head
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	---	--	Mineral conservation & beneficiation are found good

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NIL	NA	No top soil generation during the plan period

8b	Concurrent use or storage of topsoil	NIL	NA	No top soil generation. Existing top soil dumps are use for afforestation
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	NIL	NA	only backfilling with Overburden
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Overburden material proposed for Backfilling of the Mined out Area after complete excavation of Limestone	Overburden material proposed 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)	NIL	NA	Backfilling Under progressive
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	---	45244 saplings (upto 2018-19	Plantations carried out in the Backfilled area
8g	Survival rate	90%	90%	NIL
8h	Water sprinkling on roads to control airborne dust	Haul Road Water sprinkling carried out with Mobile water tanker having 12KL capacity	Haul Road Water sprinkling carried out with Mobile water tanker having 12KL capacity	Water Sprinkling carried out with 12KL Water Tanker
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	---	----	Aesthetic beauty in and around mines area is found 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	Given in the format	Submitted	Submitted in time
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given in the format	Mines Manager - R.Kamaraj Mining Engineer - R.Kamaraj Geologist In-charge - S.Selvakumar	Part-I Sl.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	Lease Area Utilization at the end of FY 17-18 (i) Covered under current Workings - 21.30 ha (ii) Reclaimed / Rehabilitated - 24.50 ha (iiv) Used for Waste Disposal - 6.34 ha Afforestation, Infrastructure) 9.095 ha	Part-I Sl.No.12
9d	Scrutiny of Annual return on afforestation	Given in the format	2018-19= Lease area =726Nos and Outside Lease Area = 1093 Nos	Part-I Sl.No.12
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given in the format	0	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	(a) Opencast Working - Production - 597400MT	Part-VI, Sl.No.2 Part-VI, Sl.No.2
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given in the format	Ex.Mine Price - Rs.226.54 Cost of production - Rs.226.54	PART - VII (COST OF PRODUCTION)
9h	Scrutiny of Annual return on fixed assets	Given in the format	Rs.10,05,24,419/-	PART III, Royalty and Rents

9k	Scrutiny of Annual return on mining machineries	Given in the format	Back Hoe- 2 no Dozer - 165HP - 1No Air compressor - 460 CFM - 1no Tipper - 18Cu.m - 22 no Diesel Generator - 100KWH - 1no Pump - Diesel Driven - 1no Water Tanker - 12KL - 1 no	PART - V (General Geology & Mining) PART - V (General Geology & Mining)
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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 :

(S. THIRUNAVUKKARASU)

Indian Bureau of Mines