

**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.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(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.makeish@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 : 30
- (d) Date of Expiry : 26/01/2036
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
	:	MP review under 17(1) MCR 2016	29/11/2019

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	Mine Fully explored under G1 level
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NA	No Exploration proposed during the FY 2018-19
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NA	Mine fully explored
1e	Balance reserve as on 01/04/20	---	(111) - 1147286 (211) - 4653918 Tons (221) - 1344854 Tons	nil
1f	General remarks of inspecting officers on geology, exploration etc	-----	-----	Geology, exploration is found satisfactory

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N - 6911 to 7812 E - 8080 to 8679	N - 6911 to 7812 E - 8080 to 8679	As per the proposal
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top Soil - 1 Bench Over Burden - 3 benches Lst - 4 benches	Top Soil - 1 Bench Over Burden - 3 benches Lst - 4 benches	nil
2c	Stripping ratio or ore to OB ratio	1:0.99	1:1.07	Stripping Ratio more due to less production
2d	Quantity of topsoil generation in m3	NIL	NA	No topsoil generation

2e	Quantity of overburden generation in m3	465784	464309	NIL
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	----	---	Pit development 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	472512 MT	434800 MT	NIL
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	Total ROM used for cement manufacturing
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 generated.
3g	Grade of sub grade mineral generation	NIL	NA	No sub-grade is generated.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	As per proposed in ROMP
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	For Drilling ICM260 drill machine 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 machine 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	NIL
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 ROMP
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 ROMP
3m	Total area covered under excavation/pits	15.050 H.a	15.050 H.a	As per proposed in ROMP
3n	Ore to OB ratio for the pit/mine during the year.	1:0.99	1:1.07	Stripping Ratio more due to less production
3o	Total area put in use under different heads at the end of year	44.705 H.a	44.705 H.a	As per proposed in ROMP
3p	Production of ROM mineral during the last five year period as applicable	2014-15 945552 2015-16 568987 2016-17 590940 2017-18 575182 2018-19 472512 2019-20 471492	2014-15 636700 2015-16 298600 2016-17 489100 2017-18 419600 2018-19 434800 2019-20* 292200	For 2019-20 production details updated till January 2020
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)	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 ROMP
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Western part of the lease N 7489 - 7572 E 7218 - 7155 & N 7411 - 7442 E 7043 - 7019	Western part of the lease N 7489 - 7572 E 7218 - 7155 & N 7411 - 7442 E 7043 - 7019	As per proposed in ROMP
4e	Number of active and alive dumps.	NIL	na	No active or alive dumps available
4f	Number of dead dumps.	01	01	NIL
4g	Number of dumps established.	01	01	Overburden dumb was in the western side within the lease area
4h	Whether Retaining wall or garland drain all along dumps are there.	Provided	Provided	Provided all along the overburden dump
4i	Length of Retaining wall or garland drain all along dumps	300*2*1 (mtr.)	300*2*1 (mtr.)	Provided
4j	Number of settling ponds	01	01	in side the mines for settling
4k	Specific comments of inspecting officer on waste dump management	----+	---	Waste dump management is found good.

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.	Limestone is excavated upto the full depth and then backfilling is carried out	Limestone is excavated upto the full depth and then backfilling is carried out	NIL
5b	Area under backfilling of mined out area	0.988 ha	1.15 ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	top soil is spread over the top of the backfilled area	top soil is spread over the top of the backfilled area	NIL
5d	Total area fully reclaimed and rehabilitated	Total Area Reclaimed - 4.610 ha N 7040 - 7205 E 7359 - 7546 N 7048 - 7122 E 7635 - 7704 N 7130 - 7206 E 7717 - 7800 N 7357 - 7396 E 7713 - 7813 N 7393 - 7555 E 7614 - 7728 N 7579 - 7659 E 7715 - 7814	Total Area Reclaimed - 4.610 ha N 7040 - 7205 E 7359 - 7546 N 7048 - 7122 E 7635 - 7704 N 7130 - 7206 E 7717 - 7800 N 7357 - 7396 E 7713 - 7813 N 7393 - 7555 E 7614 - 7728 N 7579 - 7659 E 7715 - 7814	During the FY17-18 Area Reclaimed - 1.15 ha
5e	General remarks of inspecting officers on backfilling and reclamation etc.	----	---	Back filling, reclamation is found as per 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	Submitted	Submitted

6b	Area available for rehabilitation (ha) .	0.988 Ha (2018-19)	0.988 Ha (2018-19)	Total Area Reclaimed - 4.61 ha
6c	afforestation done (ha).	0.988 Ha (2018-19)	0.35 Ha (2018-19)	Tree Saplings planted only in the Backfilled area only
6d	No. of saplings planted during the year	1200 saplings (2018-19)	389 Saplings (2018-19)	Tree Saplings planted is under progress
6e	Cumulative no .of plants	---	4541 saplings (Upto 2018-19)	NIL
6f	Any other method of rehabilitation	NIL	NA	No other specific method of rehabilitation
6g	Cost incurred on watch and care during the year	NIL	NANIL	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	na	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	yes	Area Reclaimed 1.15 ha	Total Area Reclaimed - 4.610 ha
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	1200 saplings	389 saplings	plantation under progress during the time of inspection
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.	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)	Yes	M/s. Ensyscon Environmental Lab, Chennai is engaged for monitoring Environmental data on a Quarterly basis	As per proposed in ROMP
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	472512 M	434800 MT	nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized	Mechanized	As per proposed in ROMP

7c	Different grade of mineral sorted out at mines.	NIL	NA	No different grade of mineral
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 found satisfactory

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Topsoil is proposed usee for backfilled in the Limestone excavated area inside the mines	Topsoil is use for backfilled in the Limestone excavated area inside the mines	NIL
8b	Concurrent use or storage of topsoil	NIL	NA	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	NIL	NA	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Overburden material is used for Backfilling	Overburden material is used for Backfilling	NIL
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)	Plantation	Planted varieties of Trees like Neem, Pungan, Accacia, etc and other trees in the backfilled area.	NIL
8g	Survival rate	90%	90%	NIL
8h	Water sprinkling on roads to control airborne dust	Proposed	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 found good.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	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 FY18-19 (i) Covered under current Workings -15.05 ha (iii) Reclaimed / Rehabilitated - 4.610 ha (iv) Used for Waste Disposal - 0.48 ha (v) Occupied by plant, buildings, residential, welfare buildings & Roads - 0.12 ha (vi) Other Purpose (Green belt, Road, area, non Mineral Bearing Land for future dumps, Afforestation, Infrastructure) - 24.445 ha	Part-I Sl.No.12

9d	Scrutiny of Annual return on afforestation	Given in the format	No.of Trees planted within the Lease Area during FY18-19 389 Outside Lease Area FY 18-19- 852 Survival Rate - 90%	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	Production - 434800MT.	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, Sl.No. 2 (Royalty and Rents)
9k	Scrutiny of Annual return on mining machineries	Given in the format	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	PART - V (General Geology & Mining)

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