

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/TCR/LST/-5,Mds

Mine code : 38TMN14020

- (i) Name of the Inspecting : **M017**) **Matiul Islam**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : TC.Gopi Rajesh Kumar - Manager-Mines
Official with
Designation
- (iv) Date of Inspection : 11/02/2021
- (v) Prev.inspection date : 30/10/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PERIANGALUR**
- (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 : PERIANGALUR
Taluka : ARIYALUR
Post office :
Pin Code : 621704
FAX No. : 04329-235111
E-mail : s.makesh@dalmiacement.com
Phone : (04329) 22004
- (f) Police Station : ARIYALUR
- (g) First opening date : 08/09/1965
- (h) Weekly day of rest : SUN
2. Address for : DALMIA CEMENT (BHARAT) LIMITED
correspondance : DALMIAPURAM-621651
3. (a) Lease Number : TMN0109
(b) Lease area : 70.01
(c) Period of lease : 20
(d) Date of Expiry : 07/09/1985
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 : E.VASUDEVAN, Full Time
 Qualification : B.E (MINING), MBA
 Appointment/ : 03/12/2012
 Termination date

Geologist

Name : S. Selvakumar, Full Time
 Qualification : M.Sc. (Applied Geo)
 Appointment/ : 01/12/2008
 Termination date

Manager

Name : E. Vasudevan
 Qualification : B.TECH WITH FIRST CLASS
 Appointment/ : 03/12/2012
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	04/02/1998
Plan/Scheme of Mining	:	Renewal under rule 22 MCR1960	09/09/2003
	:	Modif.of approved Mining Plan	31/12/2003
	:	Mining Scheme rule 12 MCDR1988	18/05/2011
	:	Mining Scheme rule 12 MCDR1988	09/02/2015
	:	MP modif under 17(3) MCR 2016	04/05/2018
	:	MP review under 17(1) MCR 2016	11/12/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Entire lease fully explored to G-1 level
1b	Exploration over lease area for geological axis 1 or 2	G-1	G-1	Entire lease fully explored to G-1 level
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	-	Proved Mineral Reserve (111) - 8016677 Tons Feasible Mineral Resources (211) - 5064537 Tons Inferred Mineral Resources (221) - 3491428 Tons	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Entire lease area already fully explored to G-1 level

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Northern, Central & Eastern side of the lease	Northern, Central & Eastern side of the lease	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No Top soil or Overburden envisaged	No Top Soil or Over Burden encountered	As per plan
2c	Stripping ratio or ore to OB ratio	1:0	1:0	As proposed
2d	Quantity of topsoil generation in m3	Nil	Nil	As proposed

2e	Quantity of overburden generation in m3	Nil	Nil	As proposed
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Pit development was found satisfactory. No Top Soil/OB/SB/IB/Waste/Rejects were encountered.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Single pit operation proposed & carried out
3b	Quantity of ROM mineral production proposed	12,49,154 MT	7,96,153 MT	Less production due to less market demand.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	As per plan
3d	Quantity of mineral reject generation	Nil	Nil	As per plan
3e	Grade of mineral rejects generation and threshold value declared.	> 6% of Fe in limestone	> 6% of Fe in limestone	No mineral rejects generated
3f	Quantity of sub grade mineral generation.	8,98,469 MT	Nil	No sub-grade mineral encountered
3g	Grade of sub grade mineral generation	SIO2 7.10 - 8.20 AL2O3 2.25 - 3.70 FE2O3 8.10 - 12.35 CAO 42.10 - 45.40	NA	No sub-grade mineral encountered.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Nil	No sub-grade mineral encountered.

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	Proposed	Carried out	As per plan
3k	Provision of mining machineries in mineral benches	Hydraulic Excavators, Dozer, Drilling Machine, Pump, Haul Trucks, etc proposed.	Hydraulic Excavators, Dozer, Drilling Machine, Pump, Haul Trucks, etc deployed.	As per plan
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 m	6 m	As proposed.
3m	Total area covered under excavation/pits	53.23 H.a	53.23 H.a	As per plan
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	As per plan
3o	Total area put in use under different heads at the end of year	70.01 H.a	70.01 H.a	As per plan
3p	Production of ROM mineral during the last five year period as applicable	2015-16 796825 2016-17 798800 2017-18 796628 2018-19 1051079 2019-20 1249154 (Tonnes)	2015-16 796900 2016-17 794800 2017-18 779700 2018-19 781957 2019-20 796153 (Tonnes)	Less production over the years due to non-obtainment of enhanced EC.
3q	General remarks of inspecting officers on method of mining etc.	-	-	The method of mining was found to be satisfactorily in line with the proposals.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No Top Soil/OB/Rejects envisaged	No Top Soil/OB/Rejects encountered	As per proposal
4b	Location of topsoil, OB and mineral reject dumps	NA	NA	Nil
4c	Number of dumps within lease area and outside of lease area	1 (within lease area)	1 (within lease area)	As per proposal
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Over mined out area within UPL in the south-western portion of the lease	Over mined out area within UPL in the south-western portion of the lease	As proposed
4e	Number of active and alive dumps.	1	1	As proposed
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	1	1	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil	NA	Nil
4i	Length of Retaining wall or garland drain all along dumps	Nil	NA	Nil
4j	Number of settling ponds	Nil	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	No waste generated. Sub-grade dump maintained in the south-west corner of the lease as proposed & handled for blending with ROM as per requirement.

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.	Nil	NA	No waste material is available for backfilling
5b	Area under backfilling of mined out area	Nil	NA	No waste material is available for backfilling
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	NA	No topsoil available
5d	Total area fully reclaimed and rehabilitated	Nil	NA	Mineral not exhausted yet
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Mining is still under progress. Mineral isn't exhausted yet. No waste material is available for backfilling. A Water Reservoir is proposed to be left at the end of life of the mine.

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 in time	Nil
6b	Area available for rehabilitation (ha) .	Nil	Nil	As per plan
6c	afforestation done (ha).	0.10 ha	0.10 ha	As per plan
6d	No. of saplings planted during the year	150 nos proposed	150 nos planted	As per plan

6e	Cumulative no .of plants	-	8,674 saplings planted till date	Both inside & outside the lease area
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	Nil	Nil	Mining still under progress. No waste material available for backfilling.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	NA	NA	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Water Reservoir proposed to be left at the end of life of the mine	Nil	Mining still under progress. Mineral not exhausted yet.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA	No waste land available within the lease area

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed to be carried out quarterly	M/s. ITC Lab, Chennai is engaged for monitoring Environmental data on a Quarterly basis	Complied. Environmental monitoring data within permissible limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	The PMCP Compliance & Progressive Closure Operations are found to be in line with the proposals.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	12,49,154 tonnes	7,96,153 tonnes	No sorting proposed or carried out
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	Nil	Nil	Nil

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Mineral Conservation & Beneficiation were found to be in line with the proposals.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil envisaged	No top soil encontered	As per plan
8b	Concurrent use or storage of topsoil	No top soil envisaged	No top soil encontered	As per plan
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No OB/Waste/Rejec ts/Fines envisaged	No OB/Waste/Rejects/Fines encountered	As per plan
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	No OB/Waste/Rejects/F ines available
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	After mining is completed, the entire lease area will be converted into water reservoir.	Mining still under progress.	Mineral not exhausted yet.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	150 nos saplings proposed to be planted during the year.	150 nos saplings planted during the year. 8,674 saplings planted till date (both withing & outside the lease).	As per plan
8g	Survival rate	85%	85%	As per plan

8h	Water sprinkling on roads to control airborne dust	Proposed	Provided	As proposed
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	The aesthetic beauty in and around the mines area was found to be satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Given	Submitted in time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given in Part I, Sl 2	Manager Shri. E. Vasudevan Mining Engineer in charge Shri. E. Vasudevan Geologist in charge Shri. S. Selvakumar	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given in Part I, Sl 12	(i) Already exploited & abandoned by opencast (O/C) mining 0.000 (ii) Covered under current (O/C) Workings 53.230 (iii) Reclaimed/Rehabilitated 0.000 (iv) Used for waste disposal 0.000 (v) Occupied by plant, buildings, residential, welfare buildings & roads 1.440 (vi) Other Purpose (AFFORESTATION, FUTURE MINING) 15.340 (vii) Work done under progressive mine closure plan during the year 0.000	Nil

9d	Scrutiny of Annual return on afforestation	Given in Part V, Sec 4. Mining Operations during the year	4.4 (i) Number of trees planted during the year (a) Within lease area 150 (b) Outside lease area 0 (ii) Species 0 (iii) Survival rate in percentage 85.00	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given in Part V, Sec 4 - Mineral Rejects for Limestone	4.2 Opencast 4.2 (B) (ii) Mineral Rejects generated with grades (tonnes) a. Quantity 0 b. Grade 0	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given in Part VI, Sl 1 & 2	Category Opening stock (in tonne) Production (in tonne) Closing stock (in tonne) (a) Open Cast Workings 1071063.000 736387.000 1011297.000	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given in Part VI, Sl 2 & Part VII	Ex-Mine Price / Cost of Production - Rs 178.72/-	Nil
9h	Scrutiny of Annual return on fixed assets	Given in Part II(A)(Capital Structure)	Net Total Assets - Rs 7,31,11,629/-	Nil

9k	Scrutiny of Annual return on V, Sec 5/6/8/9 mining machineries	Given in Part	Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) Used in opencast/ underground (specify) BACK HOE 2.100 CUM 1 Non Electrical Opencast FRONT END LOADER 4.000 CUM 4 Non Electrical Opencast BLAST HOST DRILL 115.000 MM 1 Non Electrical Opencast OTHERS (NON-ELEC.) 7.500 4 Non Electrical Opencast	Nil
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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 :

(Matiul Islam)

Indian Bureau of Mines