INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT 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 Officer and ID No. : **M017) Matiul Islam**

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine Official with Designation : R Kamaraj, Mine Manager; M R Raja Ranjith Singh, DGM

(iv) Date of Inspection : 10/02/2021

(v) Prev.inspection date : 21/02/2020

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 correspondance : DALMIA CEMENT (B)LTD
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/ Termination date : 03/12/2012

Geologist

Name : S. Selvakumar,Full Time

Qualification : M.Sc. (Applied Geo)

Appointment/ Termination date : 03/12/2012

Manager

Name : R.KAMARAJ

Qualification : M.Sc GEOLOGY

Appointment/ Termination date : 04/01/2016

6. Date of approval of Mining Plan/Scheme of Mining :

Fresh under rule 22 MCR1960	20/07/2004
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	Nil	Mine already fully explored
1b	Exploration over lease area for geological axis 1 or 2	G-1	G-1	Mine already fully explored
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	No exploration proposed during FY 2019-20
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) - 2418283 Tons Feasible Mineral Resources (211) - 450058 Tons Inferred Mineral Resources (221) - 3692322 Tons	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Satisfactory

Development :

Sl.No.	Item	Propasals	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 proposed
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	As proposed
2c	Stripping ratio or ore to OB ratio	1:0.30	1:0.27	Marginally less SR
2d	Quantity of topsoil generation in m3	Nil	Nil	No top soil generation

2e	Quantity of overburden generation in m3	1,44,705	1,06,869	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	1	1	As proposed
3b	Quantity of ROM mineral production proposed	4,71,492 MT	3,82,800 MT	Less ROM production due to less market demand
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	As proposed
3d	Quantity of mineral reject generation	Nil	Nil	No reject generation
3e	Grade of mineral rejects generation and threshold value declared.	Nil	Nil	No reject generation
3f	Quantity of sub grade mineral generation.	Nil	Nil	No sub-grade generated
3g	Grade of sub grade mineral generation	NA	NA	No sub-grade generated
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	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	Proposed	Carried out	As proposed
3k	Provision of mining machineries in mineral benches	For Loading 30T Class Excavator is proposed to be used. For Transportation 31 ton Tauras tippers are proposed to be used.	For Loading 30T Class Excavator is used. For Transportation 31 ton Tauras tippers are used.	As proposed
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 proposed
3m	Total area covered under excavation/pits	15.78 Ha	15.78 Ha	As proposed
3n	Ore to OB ratio for the pit/mine during the year.	1:0.30	1:0.27	SR Marginally less
3o	Total area put in use under different heads at the end of year	44.705 H.a	44.705 H.a	As proposed
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 2019-2020 382800	Within limits
3q	General remarks of inspecting officers on method of mining etc.	-	-	The method of mining,etc. 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)	Top Soil generation envisaged. Entire OB proposed to be backfilled into worked out pit.	No top soil generated. Entire OB backfilled into worked out pit.	As proposed.
4b	Location of topsoil, OB and mineral reject dumps	Western part of the lease	Western part of the lease	As proposed
4c	Number of dumps within lease area and outside of lease area	1 (within lease area)	1 (within lease area)	As proposed
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	As proposed
4e	Number of active and alive dumps.	Nil	Nil	Entire OB is backfilled into worked out area
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	1	1	As proposed
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	300*2*1 (mtr.)	300*2*1 (mtr.)	As proposed
4j	Number of settling ponds	1	1	As proposed
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management is 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.	Backfilling proposed	Backfilling carried out	As proposed
5b	Area under backfilling of mined out area	0 ha	0 ha	No additional area utilised for backfilling.
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	After backfilling the overburden at the bottom of the Mined out area, top soil is spread over the top of the backfilled area	As per proposed in SOM
5d	Total area fully reclaimed and rehabilitated	Total Area Reclaimed - 4.610 ha	Total Area Reclaimed - 4.610 ha	During the FY19-20 Area Reclaimed - 0 ha
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Backfilling & reclaimation efforts are 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 in time
6b	Area available for rehabilitation (ha) .	0 Ha (2019-20)	0 Ha (2019-20)	Total Area Reclaimed - 4.61 ha
6c	afforestation done (ha).	0 Ha (2019-20)	0 Ha (2019-20)	Tree Saplings planted only in the Backfilled area only
6d	No. of saplings planted during the year	1200 saplings (2019-20)	1165 Saplings (2019-20)	Tree Saplings planted only in the Backfilled area only.

6e	Cumulative no .of plants	-	5706 Saplings (Upto 2019-20)	Tree Saplings planted only in the Backfilled area only.
6f	Any other method of rehabilitation	Nil	Nil	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	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Waste	Waste	As proposed
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Afforestation on the Backfilled area - 1200 saplings	Afforestation of Backfilled area - 1165 saplings	Afforestation of Backfilled area - 1165 saplings
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not at this stage	Not at this stage	Water Reservoir may be left if no material remains for backfilling
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 within lease area

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA	No waste land within lease area
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	No waste land within lease area
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed to be carried out quarterly	M/s. Interstellar Testing Center Lab, Chennai is engaged for monitoring Environmental data on a Quarterly basis	Environmental Monitoring Data within permissible limits
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	PMCP measures found satisfactorily complied.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No sorting proposed	No sorting carried out	As proposed
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	No sorting proposed / carried
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 & Benefication carried as proposed in SOM

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil envisaged	No top soil generated	Only OB generated
8b	Concurrent use or storage of topsoil	No top soil envisaged	No top soil generated	As proposed
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Nil	Nil	Entire OB generated backfilled into worked out benches
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed	Carried out	As proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Reclamation by Backfilling & Afforestation	Reclamation by Backfilling & Afforestation	Reclamation by Backfilling & Afforestation
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	The Area is devoid of any large trees. It contains thorny bushes, natural vegetation like grasses, wild shrubs grown during the monsoon.	Planted varieties of Trees like Neem, Pungan, Accacia, etc and other trees in the backfilled area.	Plantations carried out in the Backfilled area

8g	Survival rate	90%	90%	As proposed
8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out	With 12 KL Water Tanker
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	The aesthetic beauty in and around the mines area was satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Given	Submitted on 26/06/2020	Accepted
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given in Part I, Sl 2	Manager R.Kamaraj Mining Engineer in charge R.Kamaraj Geologist in charge 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 15.780 (iii) Reclaimed/Rehabilitated 4.610 (iv) Used for waste disposal 0.480 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.230 (vi) Other Purpose (GREEN BELT DEVELOPMENT, NON MINERAL BEARING AREA & REMAINING AREA FOR EXPLOITATION) 23.605 (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 1165 (b) Outside lease area 340 (ii) Species 90 (iii) Survival rate in percentage 90.00	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 (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 0.000 382800.000 0.000	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 244.56/-	Nil
9h	Scrutiny of Annual return on fixed assets	Given in Part II(A)(Capital Structure)	Net total assets - Rs 8,59,52,153/-	Nil

9k	Scrutiny of Annual return on mining machineries	Given in Part V, Sec 5/6/8/9	Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) Used in opencast/ underground (specify) BACK HOE 2.000 CUM 2 Non Electrical Opencast PUMPS (ELEC.) 200.000 L/MN 2 Electrical Opencast TIPPER 18.000 CUM 16 Non Electrical Opencast BLAST HOST DRILL 115.000 MM 1 Non Electrical Opencast GENERATOR (DIESEL) 100.000 KWH 1 Non Electrical Opencast	Nil

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