

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/TCR/LST-50-Mds

Mine code : 38TMN14037

- (i) Name of the Inspecting : **M017**) **Matiul Islam**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : S.Ramesh, DGM (MINES) & C.Mesvin, Manager (Mines)
Official with
Designation
- (iv) Date of Inspection : 31/01/2021
- (v) Prev.inspection date : 04/09/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PERIYAKURICHI**
- (b) **Registration NO.** : **IBM/613/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : TAMIL NADU
- District : PERAMBALUR
- Village : PERIYAKURICHI
- Taluka : SENDURAI
- Post office : PERIYAKURICHI
- Pin Code : 621719
- FAX No. : 04329-48248
- E-mail : icldal@eth.net
- Phone : 04329-48201 to 48207
- (f) Police Station : Sendurai
- (g) First opening date : 19/09/1992
- (h) Weekly day of rest : SUN
2. Address for : The India Cements Ltd.,
correspondance Coramandel Towers,93,Karpagam Avenue,
R.A.Puram,Chennai
3. (a) Lease Number : TMN1032
- (b) Lease area : 56.55
- (c) Period of lease : 20
- (d) Date of Expiry : 04/03/2012
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : THE INDIA CEMENTS LIMITED
 DHUN BUILDING 827, ANNA
 SALAI CHENNAI CITY TAMIL
 NADU
 Phone:044-28521526, 28521527,28572100,28572400
 FAX :044-28526311

Owner : Lakshmi Aparna Sreekumar
 M/S India Cements Ltd.,
 827,Anna salai,DHUN
 Building Chennai CHENNAI
 CITY TAMIL NADU
 Phone:
 FAX :

Agent : P.Balasubramaniyan
 M/S The India Cements Ltd.,
 827,Annasalai, DHUN
 Building Chennai CHENNAI
 CITY TAMIL NADU
 Phone:
 FAX :

Mining Engineer

Name : C.MESVIN,Full Time
 Qualification : BE (MINING)
 Appointment/ : 01/12/2016
 Termination date

Geologist

Name : K.MANI,Full Time
 Qualification : MSC(GEOLOGY)
 Appointment/ : 19/10/2017
 Termination date

Manager

Name : C.MESVIN
 Qualification : BE(MINING)
 Appointment/ : 01/12/2016
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	23/02/1989
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	27/03/1992
		Mining Scheme rule 12 MCDR1988	09/05/2002
		Mining Scheme rule 12 MCDR1988	15/02/2007
		Renewal under rule 24 MCR1960	10/05/2012
		MP review under 17(1) MCR 2016	23/11/2016

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 to G-1 level
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	36 exploration boreholes were drilled with total merage of 865.23m.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	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	-	0.831 Million tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Satisfactory

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed area between section line 300-900N and 900-1100 E and 300-900N and 900-1100 E and working RL=72.0 m to70.0m , 64.0m to 49.5m & 57.0m to 48.0m	Actual working between section line 300-900N and 900-1100 E and working RL=72.0 m to68.0m , 64.0m to 49.0m	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed	Maintained	As proposed
2c	Stripping ratio or ore to OB ratio	1:1.98	1:1.04	Less overburden development

2d	Quantity of topsoil generation in m3	4,352	2,512.5	Within limit
2e	Quantity of overburden generation in m3	1,47,810	65,763.49	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	One	One	As proposed
3b	Quantity of ROM mineral production proposed	3,74,013 T	2,41,406.75 T	Less ROM production due to less plant requirement
3c	Recovery of sailable/usable mineral from ROM production	224408.00 T (60%)	180253.08 T (74.67%)	Better recovery than anticipated
3d	Quantity of mineral reject generation	1,49,605.00 T	61,153.67 T	Less reject generation due to less production & better recovery
3e	Grade of mineral rejects generation and threshold value declared.	SiO2 >18.0%	SiO2 >18.0%	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	NA	NA	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	NA	NA	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	Nil	Nil	Non-conventional mining using rock-breakers carried out
3k	Provision of mining machineries in mineral benches	Back Hoe-2, Rock Breaker-1, Tipper-3, Front End Loader-1 & water tanker-1	Back Hoe-2, Rock Breaker-1, Tipper-3, Front End Loader-1 & water tanker-1	As proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 m	6 m	Suitable
3m	Total area covered under excavation/pits	26.33.0 ha	24.40.0 ha	Within limit
3n	Ore to OB ratio for the pit/mine during the year.	1:1.98	1:1.04	Within limit
3o	Total area put in use under different heads at the end of year	Area under mining-26.33.0, Overburden dump-14.48.5, Mineral storage----, Roads-2.50.0, Protective-0.72.0,	Area under mining-24.40.0, Overburden dump-14.48.5, Mineral storage----, Roads-2.50.0, Protective-0.72.0,	Within limit

3p	Production of ROM mineral during the last five year period as applicable	2015-16 =374080 Ts 2016-17 =357480 Ts 2017-18 =374900 Ts 2018-19 =374669 Ts 2019- 20=374013.00 Ts	2015-16=299738.10 Ts 2016-17=350463.90 Ts 2017-18=372986.60 Ts 2018-19= 314371.40 Ts 2019-20=241406.75 Ts	Within limits
3q	General remarks of inspecting officers on method of mining etc.	-	-	Satisfactory

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposed	Separate dumps maintained	As proposed
4b	Location of topsoil, OB and mineral reject dumps	Western , Eastern and Northern side of ML. Top soil-300N to 500N and1000E to 1200E. Overburden 0n to 0N to 800N AND 0E to 800E, 1000E to 1300E.	Western , Eastern and Northern side of ML. Top soil-300N to 500N and1000E to 1200E. Overburden 0n to 0N to 800N AND 0E to 800E, 1000E to 1300E.	As proposed
4c	Number of dumps within lease area and outside of lease area	Three dumps within lease area	Three dumps 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	Backfilling being carried out
4f	Number of dead dumps.	Three	Three	Nil

4g	Number of dumps established.	Two	Two	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	Garland drain maintained
4i	Length of Retaining wall or garland drain all along dumps	Length not proposed	1825 m	Nil
4j	Number of settling ponds	Number not proposed	Seven settling ponds maintained	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	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	1.30.0 ha	0.70.0 ha	Less area available for backfilling due to less overall excavation
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	Yes	As proposed
5d	Total area fully reclaimed and rehabilitated	0.75.0 ha	0.75.0 ha	Rehabilitated by plantation
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	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 in time	Nil
6b	Area available for rehabilitation (ha) .	4.40.0 ha	4.40.0 ha	Nil
6c	afforestation done (ha).	0.75.0 ha	0.75.0 ha	As proposed
6d	No. of saplings planted during the year	800 nos	800 nos	As proposed
6e	Cumulative no .of plants	-	16,156 nos	Nil
6f	Any other method of rehabilitation	Nil	Nil	Nil
6g	Cost incurred on watch and care during the year	Rs 2.00 Lakhs	Rs 2.00 Lakhs	As proposed
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	85m*90m*19.0m	85m*90m*19.0m	As proposed
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)Afforestati on on backfilled area	800 nos	800 nos	As proposed
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	Nil

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA	No waste land available
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	Carried out	Complied
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	Satisfactory

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	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	-	-	Satisfactory

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Carried out	As proposed
8b	Concurrent use or storage of topsoil	Proposed	Carried out	As proposed
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No dumping proposed. Only backfilling proposed.	No dumping carried out. Only backfilling carried out.	As proposed
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Carried out	As proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Carried out	Backfilling in progress

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	-	16,156 nos of plantations existing	Nil
8g	Survival rate	>90%	>90%	As proposed
8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out	Water sprinkling done by water tanker.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Satisfactory

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	Submitted in time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given in Part I, Sl 2	Manager Sri.C.Mesvin Mining Engineer in charge Sri.C.Mesvin Geologist in charge Sri.K.Mani	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 18.050 (iii) Reclaimed/Rehabilitated 6.350 (iv) Used for waste disposal 12.945 (v) Occupied by plant, buildings, residential, welfare buildings & roads 3.000 (vi) Other Purpose ((Green belt, Topsoil dump & Peripherhy bund)) 9.260 (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 800 (b) Outside lease area 0 (ii) Species 0 (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 61154 b. Grade 45	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 180253.000 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 270.00	Nil
9h	Scrutiny of Annual return on fixed assets	Given in Part II(A)(Capital Structure)	Net Total Assets - Rs 1,26,26,96,903/-	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 0.900 CUM 2 Non Electrical Opencast TIPPER 4.500 CUM 3 Non Electrical Opencast FRONT END LOADER 1.800 CUM 1 Non Electrical Opencast BACK HOE 1.200 CUM 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
MCDR17	Rule 31(4)	15/02/2021			

Date :

(Matiul Islam)

Indian Bureau of Mines