#### INDIAN BUREAU OF MINES MINERALS DEVELOPMENT 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: G039 ) G.C.Sethi

Officer and ID No.

(ii) Designation : Regional Controller Mines

(iii) Accompaning mine : Thiru. N J Reddy, GM (Mines)

Official with Designation

(iv) Date of Inspection : 17/12/2023 Prev.inspection date : 09/03/2023 (v)

PART-I : GENERAL INFORMATION

(a) Mine Name : PERIYAKURICHI

Registration NO. : IBM/613/2011 (b)

(C) Category : A Mechanised

(d) Type of Working Opencast

Postal address (e)

> State : TAMIL NADU District PERAMBALUR Village PERIYAKURICHI Taluka

SENDURAI

Post office : PERIYAKURICHI

Pin Code : 621719

FAX No. : 04329-48248 : icldal@eth.net E-mail

: 04329-48201 to 48207 Phone

(f) Police Station : Sendurai First opening date : 19/09/1992 (g)

Weekly day of rest (h) : SUN

Address for : The India Cements Ltd.,

correspondance Coramandel Towers, 93, Karpagam Avenue,

R.A.Puram, Chennai

3. : TMN1032 Lease Number (a) Lease area : 56.55 (b) Period of lease : 50 (C)

> (d) Date of Expiry : 04/03/2042

Mineral worked 4 : 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

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

Fresh under rule 22 MCR1960 6. Date of approval of Mining Plan/Scheme of Mining

23/02/1989 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 MP modif under 17(3) MCR 2016 03/11/2021 MP review under 17(1) MCR 2016 05/11/2021

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal for the year 2022-23	Nil	The total mining lease area has already been explored.
1b	Exploration over lease area for geological axis 1 or 2		G1	36 exploration boreholes were drilled with total merage of 865.23m.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal	Not applicable	Exploration carried out by The India cements team.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal	Not applicable	Entire area has been explored under G-1 category
1e	Balance reserve as on 01/04/20	2.57 million tons as per the RMP approved on 05.11.2021	2.34 million tons as per the 2022-23 annual return.	Cement Grade Limestone.
1f	General remarks of inspecting officers on geology, exploration etc	Nil	Entire area has been explored up to G1 level.	Entire ML area has been drilled and proved.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area		300N-700N and 800E-1200 E .	Nil
2b	in topsoil, overburden and minerals (Rule	for Top Soil/Overburde		Nil
2c	Stripping ratio or ore to OB ratio	1:1.27	1:1.36	Deviation due to generation of waste in higher side
2d	Quantity of topsoil generation in m3	Tospoil has	4290 tons of Topsoil has been generated	Violation issued under Rule 11(1) of MCDR, 2017

2e	~	99800 cum of OB has been proposed	110448 cum of OB has been generated	Violation issued under Rule 11(1) of MCDR, 2017
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Nil	Violation issued for Tospoil & OB generation.	Nil

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Nil
3b	Quantity of ROM mineral production proposed	248425 tons	245538 tons	Nil
3с	Recovery of sailable/usable mineral from ROM production	149055 tons	149054 tons	Nil
3d	Quantity of mineral reject generation	99370 tons	96484 tons	Nil
3e	Grade of mineral rejects generation and threshold value declared.	SiO2 >18.0%	SiO2 >18.0%	Nil
3f	Quantity of sub grade mineral generation.	No Proposal	Not generated	Not Applicable
3g	Grade of sub grade mineral generation	No Proposal	Not generated	Not applicable
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised method	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not applicable	No beneficiation is carried out	Not Applicable

3ј	Provision of drilling and blasting in mineral benches	No Proposal	Not generated	Drilling and blasting not 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	As proposed the machineries are deployed.	Nil
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Top soil &Overburden- 6m, Limestone- 6m	Top soil &Overburden-6m, Limestone-6m	Nil
3m	Total area covered under excavation/pits	25.90.0 ha	25.50.0 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:1.27	1:1.36	Deviation due to generation of waste in higher side
30	Total area put in use under different heads at the end of year	Area under mining-25.90.0, Overburden dump-15.09.5,	Area under mining- 25.50.0, Overburden dump-15.34.5, Roads-1.80.0,	Nil
		Roads-1.80.0,	Protective-0.72.0	
		0.72.0		
3p	Production of ROM mineral during the last five year period as applicable	2018-19 =374669 Tons 2019-20 =374013 Tons 2020-21=373918 Tons 2021-22=213132 Tons 2022-23=248425 Tons	2018-19= 314371 Tons 2019-20=241406 Tons 2020-21=313869 Tons 2021-22=191878 Tons 2021-22=245538 Tons	Nil
3q	General remarks of inspecting officers on method of mining etc.	Nil	Mining operation is being done by opencast mechanised means.	Nil

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top soil and overburden is planned for backfilling and stablised with plantations.	Top soil and overburden is used for backfilling and stablised with plantations.	Nil
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 On 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 On to ON to 800N AND OE to 800E, 1000E to 1300E.	Area coverred by waste dump is 15.34.5 hectares and topsoil is 1.18.0 hectares in eastern side.
4c	Number of dumps within lease area and outside of lease area	Three dumps	Three dumps	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps are planned out side of UPL	Dumps are out side of UPL	Nil
4e	Number of active and alive dumps.		Active dump-Nil, Alive- Back filling	Nil
4f	Number of dead dumps.	Three	Three	Stabilized with Plantation
4g	Number of dumps established.	Two	Two	Stablised with plantations.
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Done as per proposal	Garland drain are already made
4i	Length of Retaining wall or garland drain all along dumps	Garland drain proposed along the existing dump		Garland drain for length of 1825m.
4j	Number of settling ponds	Settling pit already exists.	Settling pit already exists.	Seven settling pits are made

4k Specific Nil Garland Drainage has Nil comments of made inspecting officer on waste dump management

## 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.	Part backfilling proposed	Back filled in Mined out area	Nil
5b	Area under backfilling of mined out area	0.70.0	0.30.0	Violation issued under Rule 11(1) of MCDR, 2017
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	Yes	Nil
5d	Total area fully reclaimed and rehabilitated	1.00.0	1.00.0	Rehabilitated by plantations.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Nil	Partly backfilled done	Nil

#### 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	Yes, submitted to IBM	Nil
6b	Area available for rehabilitation (ha) .	7.00.0 ha	7.00.0 ha	Nil
6c	afforestation done (ha).	1.00.0	1.00.0	Nil

6d	No. of saplings planted during the year	700 nos	800 nos	Nil
6e	Cumulative no .of plants	18456	18556	Nil
6f	Any other method of rehabilitation		Backfilling & Afforestation	Nil
6g	Cost incurred on watch and care during the year	Rs 2.00 Lakhs	Rs 2.00 Lakhs	As per proposal
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	210m*60m*12.0m	180m*40m*12.0m	Violation issued under Rule 11(1) of MCDR, 2017
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	298190 Tons	277966 tons	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	700 nos	800 nos	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	Nil	Nil
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No Proposal	Nil	Nil

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No Proposal	Nil	Nil
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposal	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Complied. Env.monitoring is being done quarterly.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	Plantations done as per the proposed number for compliance to PMCP proposals.	Nil

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	248425 tons	245538 tons	Nil
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.		Mechanized Method	Nil
7c	Different grade of mineral sorted out at mines.		Nil	Nil
7d	Any beneficiation process at mines .	No Proposal	No processing of mineral is involved.	Not applicable

7e General remarks Nil The limestone are Nil of inspecting produced from the mine officer on is utilized for cement Mineral making in the captive conservation and plant of the company. beneficiation So, there is no mineral conservation problem in issues the mine.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	topsoil has	4290 cum of topsoil has generated.	Violation issued under Rule 11(1) of MCDR, 2017
8b	Concurrent use or storage of topsoil	Concurrent usage is proposed	Concurrently used	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not applicable	Not applicable	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Partly backfilling has proposed	As per proposal backfilling has not done	Violation issued under Rule 11(1) of MCDR, 2017
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Partly backfilling has proposed	Partly backfilling has not done	Violation issued under Rule 11(1) of MCDR, 2017
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	700	800	Nil
8g	Survival rate	90%	91.3%	Nil

8h	Water sprinkling on roads to control airborne dust	Yes	Yes	Water sprinkling is being done by water tanker.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Nil	Plantation has been done as per proposal.	Nil

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	Submitted	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager, Geologist & mining engineer are appointed.	Provided in part-I (3)	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	<pre>current (0/C) Workings 9.450ha;</pre>	Provided in part-I, Sl.No-12	Nil
9d	Scrutiny of Annual return on afforestation	800	Provided in part-V, Para-5	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)		Furnished in part- V, of 4	Violation issued under Rule 11(1) of MCDR, 2017
9f	Scrutiny of Annual return on ROM stock and/or graded ore		Provided in part-VI, Para-2	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Price=Rs 325.83 Production	Furnished in part- VII	Nil
9h	Scrutiny of Annual return on fixed assets	1300342456/-	Provided in part -II (A)	Nil
9k	Scrutiny of Annual return on mining machineries	Yes	Mentioned in part -V, Sec-6, -	Nil

# Details of violations observed during current inspection and compliance position of violation pointed out

Violation	n observed	Show couse position	
Rule NO.	Issued on Compliance on	Rule NO. Issued on Complia	nce on
MCDR17 Rule 11(1)	28/12/2023		

Date: (G.C.Sethi)

Indian Bureau of Mines