#### INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

## MCDR inspection REPORT

# Chennai regional office

	Mine :	file No : TN/TCR/LST-	MdS	Mine code : 38TMN14037	
	(i)	Name of the Inspecting Officer and ID No.	:	MØ17 ) Matiul Islam	
	(ii)	Designation	:	Assistant Controller Mine	
	(iii)	Accompaning mine Official with Designation	:	C.Mesvin, Senior Manager,	(Mines), P.Vignesh, Officer
	(iv)	Date of Inspection	:	09/03/2023	
	(v)	Prev.inspection date	:	07/07/2022	
		РА	RT-	·I : GENERAL INFORMATION	
1.	(a)	Mine Name	:	PERIYAKURICHI	
	(b)	Registration NO.	:	IBM/613/2011	
	(c) (d) (e) (f) (g)			PERIYAKURICHI 621719 04329-48248 icldal@eth.net	
	(h)	Weekly day of rest	:	SUN	
2.		ess for espondance	:	The India Cements Ltd., Coramandel Towers,93,Karpa R.A.Puram,Chennai	agam Avenue,
3.	(a) (b) (c) (d)	Lease Number Lease area Period of lease Date of Expiry	:	TMN1032 56.55 50 04/03/2042	
4.	Mine	ral worked	:	LIMESTONE Mai	n

5.	Name	and Address of	the			
		Lessee	:	THE INDIA	CEMENTS LIMITED	
				DHUN BUILD	ING 827, ANNA	
					NNAI CITY TAMIL	
				NADU Phone:044-	28521526, 28521527,28572100,2857240	0
				FAX :044-		0
		Owner	:	Lakshmi Aj	parna Sreekumar	
					Cements Ltd.,	
				827,Anna s Building C	AIAI,DHUN Phennai CHENNAI	
				CITY TAMIL		
				Phone:		
				FAX :		
		Agent	:	P.Balasubr	amaniyan	
					dia Cements Ltd.,	
				827,Annasa Building C	hennai CHENNAI	
				CITY TAMIL		
				Phone:		
				FAX :		
		Mining Enginee	r			
		Name	:	C.MESVIN,F	ull Time	
		Qualification	:	· -		
		Appointment/ Termination da		01/12/2016		
		Geologist				
		Name	:	K.MANI,Ful	l Time	
		Qualification	:	MSC (GEOLOG	Y)	
		Appointment/ Termination da		19/10/2017		
		Manager				
		Name	:	C.MESVIN		
		Qualification	:	BE(MINING)		
		Appointment/ Termination da	: te	01/12/2016		
6.		of approval of		.ng :	Fresh under rule 22 MCR1960	23/02/1989
	Plan/	Scheme of Minin	g		Mining Scheme rule 12 MCDR1988 Mining Scheme rule 12 MCDR1988	27/03/1992 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 MP modif under 17(3) MCR 2016	23/11/2016 03/11/2021
					MP modif under 17(3) McR 2010 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	Nil	Nil	Lease already fully explored upto G1 level.
1b	Exploration over lease area for geological axis 1 or 2	Gl	Gl	36 exploration boreholes drilled with total meterage of 865.23m.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	Nil
ld	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Nil
le	Balance reserve as on 01/04/20	0.701 Million Tons	0.701 Million Tons	As per Modification to the approved Mining Plan
lf	General remarks of inspecting officers on geology, exploration etc	-	_	The geology & exploration of the lease were found satisfactory.

# Development :

Gl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Between section lines 300N-700N and 900E-1200 E		As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	overburden bench, Three	bench, Three ore	Separate bench for topsoil, overburden & mineral are being maintained.
2c	Stripping ratio or ore to OB ratio	1:1.046	1:1.60	Nil
2d	Quantity of topsoil generation in m3	3,903 cu.m.	5,176 cu.m.	Variatino due to irregular thickness of top soil

2e	Quantity of overburden generation in m3	1,55,747 tonnes	93,046.55 tonnes	Variation due to lithological variations over the deposit
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	_	_	Development of the pit was found 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	2,13,132 tonnes	1,91,878.16 tonnes	Within limit
3c	Recovery of sailable/usable mineral from ROM production	1,38,364 Tonne	1,38,220.70 Tonne	-do-
3d	Quantity of mineral reject generation	74,768 Ts	53,657.46 Ts	-do-
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	Mechanised method	Mechanised method	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	Nil

3ј	Provision of	Non-	Non-conventional mining	As proposed
	drilling and blasting in mineral benches	conventional	without drilling & blasting carried out	ing proposed
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	-do-
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 m bench height proposed	6 m bench height maintained	Suitable
3m	Total area covered under excavation/pits	25.24.5 ha	25.24.5 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:1.046	1:1.60	Nil
30	Total area put in use under different heads at the end of year	56.55 На	56.55 На	Nil
3р	Production of ROM mineral during the last five year period as applicable	"2017-18 =374900 Ts 2018-19 =374669 Ts 2019- 20=374013.00 Ts 2020- 21=373918.00 Ts 2021- 22=213132.00 Ts "	"2017-18=372986.60 Ts 2018-19= 314371.40 Ts 2019-20=241406.75 Ts 2020-21=313869.25 Ts 2021-22=191878.16 Ts"	Within limit
3q	General remarks of inspecting officers on method of mining etc.	-	-	The method of mining was 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)	Separate dumps 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 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 0E to 800E, 1000E to 1300E.	-do-
4c	Number of dumps within lease area and outside of lease area	Three dumps within lease area	Three dumps within lease area	-do-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	-do-
4e	Number of active and alive dumps.	Nil	Nil	Backfilling under progress
4f	Number of dead dumps.	Three	Three	Afforested
4g	Number of dumps established.	Two	Тwo	-do-
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	Garland drain all along dumps
4i	Length of Retaining wall or garland drain all along dumps		Only maintenance of pre- existing drains carried out	1825 m length of garland drain already exists
4j	Number of settling ponds	Pre-existing settlig ponds proposed to be maintained		Seven nos of settling pits existing
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory

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 into mined out areas	Backfilling carried out into mined out areas	As proposed
5b	Area under backfilling of mined out area	0.70.0 Ha	0.30.0 Ha	Violation already pointed out for deviation in backfilling
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed	Carried out	As proposed
5d	Total area fully reclaimed and rehabilitated	0.70.0 Ha	0.30.0 Ha	Violation already pointed out for deviation in backfilling
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	_	Violation already pointed out for deviation in backfilling.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Submitted	In time
бb	Area available for rehabilitation (ha) .	3.85 Ha	3.45 На	Nil
бс	afforestation done (ha).	0.70.0 Ha	0.70.0 Ha	As proposed
6d	No. of saplings planted during the year	800 nos	800 nos	-do-
бе	Cumulative no .of plants	3,600 nos saplings proposed to be planted during the plan period		Nil

6f	Any other method	Nil	Nil	Nil
	of rehabilitation			
бg	Cost incurred on watch and care during the year	Rs 2.00 Lakhs	Rs 2.00 Lakhs	Nil
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	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)Afforestati on on backfilled area	800 nos	800 nos	-do-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	Nil
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	Nil
бm	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	Nil	Nil
бn	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA	Nil

60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	Nil
бр	Compliance of environmental monitoring (core zone and buffer zone)	Periodical monitoring proposed	Periodical monitoring carried out	All parameters within norms
бq	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	_	Violation already pointed out for deviation in backfilling.

## 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	Nil
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	-	-	No issues were observed with conservation. No beneficiation proposed or carried out.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	removal &	Separate removal & utilisation of topsoil carried out	As proposed
8b	Concurrent use or storage of topsoil	Proposed	Carried out	-do-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB proposed to be backfilled into worked out benches. No rejects or fines envisaged.	OB backfilled into worked out benches.	-do-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling proposed	Backfilling carried out	-do-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	-do-	-do-	-do-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	afforested in the plan	17,756 nos. sapings planted cumulatively since inception.	-do-
8g	Survival rate	90%	92.5%	-do-
8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out	Water tanker deployed
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	The aesthetic beauty in and around mines area was found 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	Mines Manager: C.Mesvin Mining Engineer: C.Mesvin Geologist: P.Vignesh	Given in Part I, Sl 7-9	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	abandoned by opencast (O/C) mining		Nil

9d Scrutiny of 4.4 (i) Number Given in Part V, Sl 4.4 Nil Annual return on of trees afforestation planted during the year (a) Within lease area 800 (b) Outside lease area 0 (ii) Species 0 ( iii) Survival rate in percentage 92.50 9e Scrutiny of 4.2 (B) (ii) Given in Part V, Sl 4.2 Nil Annual return on Mineral mineral reject Rejects generation generated with (Grade and grades quantity) (tonnes) a. Quantity 53657 b. Grade 45 4.3 Underground 9f Scrutiny of Given in Part VI, Sl 1 Nil ategory Annual return on Opening stock ROM stock and/or (in tonne) graded ore Production (in tonne) Closing stock (in tonne) (a) Open Cast Workings 0.000 138220.700 0.000 Scrutiny of Ex-mine price Given in Part VI, Sl 2 & 9q Nil Annual return on & Cost of Part VII Production sale value, Ex. Mine price and Rs 285.00 per production cost tonne 9h Nil Scrutiny of Value of Fixed Given in Part II A Annual return on Assets - Rs Capital Structure fixed assets 1,32,02,22,171 / -

machineries each No.c unit Elec Non- (spe Used open unde (spe BACK 0.90 Non Ope BACK 1.60 Non Ope BACK 1.60 Non Ope TIPP CUM Elec Open WATE 1000 LITR	city of unit crical/ crical/ clectrical cify) in cast/ cground cify) HOE 0 CUM 2 clectrical cast HOE 0 CUM 1 clectrical cast LOADER 0 CUM 1 clectrical cast cast cast cast cast cast cast cast						
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Details of violations observed during current inspection and compliance position of violation pointed out							
Viola	tion observed		Show couse position				
Rule NO.	Issued on (	Compliance or	n Rule NC	). Issued on Complianc	e on		

#### Date :

(Matiul Islam)

Indian Bureau of Mines