

**INDIAN BUREAU OF MINES  
MINERAL DEVELOPMENT AND REGULATION DIVISION**

**MCDR INSPECTION REPORT**

**Chennai Regional Office**

<b>Mine file No. TN/ALR/LST-50.MDS</b>		<b>Mine code 38TMN14037</b>
(i)	Name of the inspecting officer, designation	Shri Matiul Islam, Asst. Controller of Mines
(ii)	Date of inspection:	14.11.2024
(iii)	Accompanied mine official and designation	N.JAYA BHARATA REDDY, GENERAL MANAGER(MINES)/E.MOHAN,SR.MANAGER(MINES)
<b>Part I - General Information</b>		
1	Name of the Mine	Periyakurichi Limestone Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	56.55.0 Ha (Non forest Land)
3	Mine code	38TMN 14037
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/613/2011
5	Name of the lessee, Address, phone, email and fax number	M/s. The India Cements Limited, Coromandal Towers, 93, Santhome High Road, Karapagam Avenue, Raja Annamalai Puram, Chennai - 600 028 Phone No: 044-28572100 Fax No: 04329 248248 Email id: palanikumaresan.m@indiacements.co.in
6	Village	Periyakurichi
7	Taluka/Mandal	Sendurai
8	District	Ariyalur
9	Pin code	621719
10	State	TamilNadu
11	Post office	Periyakurichi
12	Nearest police station	Sendurai
13	Nearest Railway station	R.S.Mathur
14	Date of opening of Mine	09.09.1992
15	Weekly day of rest	Scattered
16	Period of Lease	50 Years (as per MMDR Amendment)
17	Lease Expiry	04.03.2042
18	Name of the Nominated Owner with Address, phone, email, fax number and Date of appointment	V.M.Mohan The India Cements Limited Coromandal Towers, 93,Santhome High Road, Karpagam Avenue,Chennai-600 028 044-28572100 Fax-044-28526311 <a href="mailto:mines@indiacements.co.in">mines@indiacements.co.in</a> Date of appointment:01.11.2023
		T.Balasubramanian The India Cements Limited

19	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Dalavoi Works Cement Nagar-Post,Ariyalur -District, PIN- 621730 Phone-04329-248221 Email id: balasubramanian.t@indiacements.co.in Fax:04329-248248 Date of appointment:21.02.2013
20	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	E.Mohan The India Cements Limited Dalavoi Works Cement Nagar-Post,Ariyalur -District, PIN- 621730 Phone-9942994553 Email id: mohan.e@indiacements.co.in Fax:04329-248248 Date of appointment: 01.07.2024
21	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	E.Mohan B.E(Mining) ,FCC& Experience-20 Years The India Cements Limited Dalavoi Works Cement Nagar-Post,Ariyalur -District, PIN- 621730 Phone-9942994553 Email id: mohan.e@indiacements.co.in Fax:04329-248248 Date of appointment: 01.07.2024
22	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes, Appointed Geologist: N.S.Balaji M.Sc(Geology) ,& Experience-14 Years The India Cements Limited Dalavoi Works Cement Nagar-Post,Ariyalur -District, PIN- 621730 Phone-7702415991 Date of appointment:25.10.2024
23	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	TN/ALR/LST/ROMP-1665.MDS ,Dated:05.11.2021
24	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	This approval is subjected to the extension of the validity of the mining lease by the State government as per Section 8A(5) of MMDR Act,2015(Amended).
25	Mineral(s) granted in lease and proved for mining	Limestone & Kankar
26	Method of Mining(Opencast,Underground)	Opencast
27	Category (Fully Mechanised, Others or Manual)	"A" category Fully Mechanised
28	Captive/Non Captive	Captive Purpose

**EXPLORATION**

SL.NO	ITEMS	PROPOSED	ACTUAL	REMARKS
1a	Backlog of previous year	Nil	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	36 Exploration borehole drilled with total meterage of 865.23 m.
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 01/04/2024	0.39 Million tonnes	0.39 Million tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Geology & Exploration of the lease were found satisfactory.

**DEVELOPMENT**

2a	Location of development w.r.t.lease area	Between section lines 1000E-1200E and 300N -700N. RL 75.0-43.0 m	Between section lines 1000E-1200E and 300N -700N. RL 75.0-43.0 m	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, one topsoil bench, two overburden benches, three limestone benches.	Yes, one topsoil bench, two overburden benches, three limestone benches.	Separate benches for topsoil and overburden are being maintained.
2c	Stripping ratio or ore to OB ratio	1:2.19	1:0.59	Violation pointed out for deviations form development & exploitation proposals.
2d	Quantity of topsoil generation in m3	14040	750.05	Violation pointed out for deviations form development proposals.
2e	Quantity of overburden generation in m3	169088	64352.64 (Including ISR)	Violation pointed out for deviations form development proposals.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Violations pointed out for deviations form development & exploitation proposals.
<b>EXPLIOTATION</b>				
3a	Number of pit proposed for production	One , 820m*420m* 34m	One , 820m*420m* 34m	Only one pit, as proposed.
3b	Quantity of ROM mineral production proposed	253395 Ts	190127.49 Ts	Deviation due to lithological variation of the formation
3c	Recovery of sailable/usable mineral from ROM production	152038 Ts (60%)	152033.58 Ts (80%)	Violation pointed out for deviations form exploitation proposals.
3d	Quantity of mineral reject generation	101358 Ts/50679 m3 (40%)	38093.91 Ts/19046.96 m3 (70%)	Violation pointed out for deviations form exploitation proposals.
3e	Grade of mineral rejects generation and threshold value	SiO2 >18.0%	SiO2 >18.0%	As proposed
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	Not applicable
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical Method	Mechanical Method	As proposed
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No	No	Beneficiation study was done in Initial period.
3j	Provision of drilling and blasting in mineral benches	No	No	Non-convetional mining practiced without drilling and blasting.
3k	Provision of mining machineries in mineral benches	Back hoe-2,Rock breaker-1, Front end loader-1, Tipper-3, Water Tanker-1. pump-1	Back hoe-2,Rock breaker-1, Front end loader-1, Tipper-3, Water Tanker-1. pump-1	As proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Top soil-2m, Overburden-6m, Limestone-6m	Top soil-2m, Overburden-6m, Limestone-6m	As proposed
3m	Total area covered under excavation/pits	26.77.0 ha	25.60.0 ha	Within limits
3n	Ore to OB ratio for the pit/mine during the year.	1:2.19	1:0.59	Violation pointed out for deviations form development & exploitation proposals.
3o	Production of ROM mineral during the last five year period as applicable	2019-20=374013.00 Ts 2020-21=373918.00 Ts 2021-22=213132.00 Ts 2022-23=248425.00 Ts 2023-24=253396.00 Ts	2019-20=241406.75 Ts 2020-21=313869.25 Ts 2021-22=191878.16 Ts 2022-23=245538.77 Ts 2023-24=190127.49 Ts	Within limits

3p	Area used in diiferent purpose	Area under mining-26.77.0, Top soil dump - 0.71.0, Overburden dump- 14.24.5, Infrastructure - 0.30.0 Roads - 1.80.0, Protective - 0.72.0 Greenbelt - 5.00.0	Area under mining-25.60.0, Top soil dump - 1.18.0, Overburden dump- 15.24.5, Infrastructure - 0.30.0 Roads - 1.80.0, Protective - 0.72.0 Greenbelt - 5.00.0	Within acceptable limits
3q	General remarks of inspecting officers on method of mining etc.	-	-	Violations pointed out for deviations form development & exploitation proposals.
<b>SOILD WASTE MANAGEMENT-DUMPING</b>				
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Only Backfilling proposed	Backfilling Carried out	As proposed
4b	Location of topsoil, OB and mineral reject dumps	Topsoil dump-East side,Waste dump-West, North and NE side	Topsoil dump-East side,Waste dump-West, North and NE side	As proposed
4c	Number of dumps within lease area and outside of lease area	Topsoil dump-One, Waste dump-Three.With in ML	Topsoil dump-One, Waste dump-Three.With in ML	As proposed
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side of UPL	Out side of UPL	As proposed
4e	Number of active and alive dumps.	Nil	Nil	As proposed
4f	Number of dead dumps.	Four	Four	As proposed
4g	Number of dumps established.	Four	Four	Stablised with plantations.
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil	Nil	Garland drain and earthen bund are already made for a length of 1825 m.
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	Garland drain and earthen bund are already made for a length of 1825 m.
4j	Number of settling ponds	No proposal	Nil	4 nos already settling ponds are maintained
4k	Specinc comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory.
<b>SOLID WASTE MANAGEMENT-BACKFILLING</b>				
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	1.90.0 Ha	0.70.0 Ha	Violation poinetd out
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	1.00.0 Ha	0.60.0 Ha	Violation pointed out
5e	General remarks of inspecting officers on backfilling and reclamation etc	-	-	Violation poinetd out for deviation from reclamation & rehabilitation proposals.
<b>PROGRESSIVE MINE CLOUSRE PLAN</b>				
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) .	1.00.0 Ha	0.60.0 Ha	Violation pointed out
6c	Afforestation done (ha).	1.00.0 Ha	0.60.0 Ha	Violation pointed out
6d	No. of saplings planted during the year	700 nos	700Nos	As proposed
6e	Cumulative no .of plants	19256 Nos.	19256 Nos	As proposed
6f	Any other method of rehabilitation	Backfilling & Afforestation	Backfilling & Afforestation	As proposed
6g	Cost incurred on watch and care during the year	Rs 1.50 Lakhs	Rs 1.50 Lakhs	As proposed

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( L x B x D)	1.90.0 Ha	0.70.0 Ha	Violation pointed out
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	1.90.0 Ha	0.70.0 Ha	Violation pointed out
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	700 nos	700 nos	As proposed
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not applicable	Not applicable	Not applicable
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA	Nil
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)	Yes	Yes	Periodic monitoring carried out
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	Violation pointed out for deviation from PMCP proposals
<b>MINERAL CONSERVATION</b>				
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Size-based sorting proposed	Size-based sorting carried out	As proposed
7b	Method of gradewise mineral sorting i.e. manual or mechanical.	Mechanical Method	Mechanical Method	As proposed
7c	Different grade of mineral sorted out at mines.	Lumps and fines	Lumps and fines	As proposed
7d	Any beneficiation process at mines	Nil	Nil	Nil
7e	General Remarks of inspecting officer on Mineral conservation & beneficiation issues	-	-	No issues were observed with mineral conservation. No beneficiation was proposed or carried out.
<b>ENVIRONMENT</b>				
8a	Separate removal and utilization of topsoil (Rule 32)	Separately removed & utilized	Separately removed & utilized	As proposed
8b	Concurrent use or storage of	Concurrent usage is proposed	Concurrently used	As proposed
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Concurrent usage is proposed	Concurrent used for back filling	As proposed
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original	Yes	Yes	As proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Yes	As proposed
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	18556+700=19256	18556+700=19256	As proposed
8g	Survival rate	>90%	>90%	As proposed
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	As proposed

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Aesthetic beauty in and around mines area was found satisfactory.
<b>COMPLIANCE UNDER RULE-45</b>				
9a	Status of submission of Monthly and Annual returns	Details Given in AR	Comment of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mine Manager: C.Mesvin (01.12.2016), Mining Engineer:C.Mesvin (01.12.2016) & Geologist:P.Vignesh (15.07.2020)	Presently,Mine Manager: E.Mohan (01.07.2024), Mining Engineer: E.Mohan (01.07.2024), & Geologist: N.S.Balaji (25.10.2024)	Notices of appointment duly received
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Provided in part-I, Sl.No-12 (i) Already Exploited and abandoned by Opencast mining = 7.40.0 (ii) Covered under (O-C) workings = 8.45.0 (iii) Reclaimed-rehabilitated = 9.75.0 (iv) Used for waste disposal = 15.24.5 (v) Occupied by plant ,buildings, residential, welfare building and roads = 2.10.0 (vi) Used for any other purpose (Specify) Green belt & Peripheral bund = 6.90.0 (vii) work done under progressive mine closure plan during the year = 0.000	Given in Part I, Sl 12	Nil
9d	Scrutiny of Annual return on afforestation	Number of trees planted during the year -700	Given in Part V, Sl 5	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Actual=38093.91 Ts Avg. grade - 28	Given in Part VI, Sl 3	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock - 1,000 tonnes	Given in Part VI, Sl 2 & 3(ii)	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex.Mine Price=Rs.401.83, Production cost=Rs=401.83	Given in Part VI, Sl 3 (ii) & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	GFA - Rs 1,29,21,73,040/-	Given in Part II A	Jointly for 7 Leases
9i	Scrutiny of Annual return on mining machineries	Back hoe-2,Rock breaker-1, Front end loader-1, Tipper-3, Water Tanker-1. pump-1	Given in Part V, Sl 6	Nil
<b>Details of violations observed during current inspection and compliance position of violations pointed out:-</b>				
<b>Violation observed</b>			<b>Show cause position</b>	
<b>Rule</b>	<b>Issued on</b>	<b>Compliance on</b>	<b>Issued on</b>	<b>Compliance on</b>
11(1)	17-12-2024			
<b>Date:</b>				<b>(Matiul Islam)</b> Indian Bureau of Mines