

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/TCR/LST-66-Mds

Mine code : 38TMN24003

- (i) Name of the Inspecting : **G039**) **G.C.Sethi**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Thiru.N.J.Reddy, GM Mines and Thiru.Bhaskaran, Geolog
Official with
Designation
- (iv) Date of Inspection : 08/07/2023
- (v) Prev.inspection date : 08/09/2022

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ADHANAKURICHI**
- (b) **Registration NO.** : **IBM/613/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : TAMIL NADU
- District : ARIYALUR
- Village : ADHANAKURICHI
- Taluka : SENDURAI
- Post office : CEMENT NAGAR
- Pin Code : 621730
- FAX No. : 04329-248248
- E-mail : j.thirumeni@indiacements.co
- Phone : 04329-248206
- (f) Police Station : DALAVOI
- (g) First opening date : 06/01/1996
- (h) Weekly day of rest : SUN
2. Address for : THE INDIA CEMENT LTD.
correspondance Dalavoi Cement Works, Cement Nagar PO-621730.
Sendurai Taluk,Ariyalur DT.
3. (a) Lease Number : TMN1042
- (b) Lease area : 47.42
- (c) Period of lease : 50
- (d) Date of Expiry : 02/02/2054
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 : K.Rathinavel,Full Time
 Qualification : BE(MINING)
 Appointment/ : 20/05/2016
 Termination date

Geologist

Name : S.Nirmalkalam,Full Time
 Qualification : MSc Geology
 Appointment/ : 21/01/2021
 Termination date

Manager

Name : G.BALU
 Qualification : MSC(GEO),FCC
 Appointment/ : 15/09/2003
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	18/02/2003
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	15/02/2007
		Mining Scheme rule 12 MCDR1988	06/01/2012
		Mining Scheme rule 12 MCDR1988	06/01/2012
		Mining Scheme rule 12 MCDR1988	10/05/2012
		Mining Scheme rule 12 MCDR1988	22/03/2016
		MP review under 17(1) MCR 2016	10/11/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	Geological axis - 1.	Geological axis - 1.	Entire lease area are under G-1 category.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not applicable	Not applicable	Entire area has been explored under G-1 category with 200m X 200m grid interval.
1e	Balance reserve as on 01/04/20	3.724 million tons	3.847 million tons	Cement Grade Limestone.
1f	General remarks of inspecting officers on geology, exploration etc	It is belongs to Niniyur stage of Cretaceous system.	No exploration has been done during 2022- 23. Entire area has been explored up to G1 level.	Entire ML area has been drilled and proved upto 65m

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Working proposed between the co-ordinates N 200 to N 900 and E 600 to E 1200.	Development is not carried out as per proposal.	Violation issued under Rule 11(1) of MCDR, 2017
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	One bench each in Topsoil & OB and 3 benches in Ore.	One bench each in Topsoil & OB and 3 benches in Ore.	Nil
2c	Stripping ratio or ore to OB ratio	1 : 0.29	1 : 0.10	The deviation is due to lesser production.
2d	Quantity of topsoil generation in m3	No Proposal	Nil	Nil
2e	Quantity of overburden generation in m3	No Proposal	Nil	Nil

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Working proposed between the co-ordinates N 200 to N 900 and E 600 to E 1200.	Development is not carried out as per proposal. Mineral reject is only the waste material.	The deviation is due to lesser production. Violation issued under Rule 11(1) of MCDR, 2017
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Between the co-ordinates N 200 to N 900 and E 600 to E 1200.	Production is not carried out as per proposal.	Violation issued under Rule 11(1) of MCDR, 2017
3b	Quantity of ROM mineral production proposed	378865 tons	199719 tons	Violation issued under Rule 11(1) of MCDR, 2017
3c	Recovery of sailable/usable mineral from ROM production	90% Recovery	90% Recovery	Nil
3d	Quantity of mineral reject generation	78287 tons	17347 tons	Violation issued under Rule 11(1) of MCDR, 2017
3e	Grade of mineral rejects generation and threshold value declared.	Silica more than 18%	Silica more than 18%	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil	Not applicable
3g	Grade of sub grade mineral generation	Nil	Nil	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.	Nil	No beneficiation is carried out	Not applicable

3j	Provision of drilling and blasting in mineral benches	No proposal.	Drilling & Blasting are not done.	Not applicable
3k	Provision of mining machineries in mineral benches	Surface miner, Backhoe, Tippers, Rock Breakers Dozer	As proposed the machineries are deployed.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height - 6m and width 6- m	Bench height -6m and width 6- m	Nil
3m	Total area covered under excavation/pits	20.65 ha	20.65 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.29	1 : 0.10	The deviation is due to lesser production due to less plant requirement
3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2023. Mines = 20.65 hect Dump = 8.50 hect Mineral storage=0.60 hect Road = 1.64 hect	Land use Pattern as on 01.04.2023. Mines = 20.65 hect Dump = 8.50 hect Road = 1.64 hect	Nil
3p	Production of ROM mineral during the last five year period as applicable	2022-2023 = 378865 tons 2021-2022 = 356179 tons 2020-2021 = 621000 tons 2019-2020 = 615158 tons 2018-2019 = 538007 tons	2022-2023 = 199719 tons 2021-2022 = 176659 tons 2020-2021 = 264958 tons 2019-2020 = 204219 tons 2018-2019 = 311849 tons	Less limestone production due to less plant requirement.
3q	General remarks of inspecting officers on method of mining etc.	Mining operation is being done by opencast mechanised means.	Achieved ROM Production is 199719 tons during 2022- 2023 against proposal of 378865 tons.	Nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No Dumping proposal	Nil	No generation of Topsoil & OB
4b	Location of topsoil, OB and mineral reject dumps	No Dumping proposal	Nil	No generation of Topsoil & OB
4c	Number of dumps within lease area and outside of lease area	Lease area = 1 Non Lease area = Nil	Lease area = 1 Non Lease area = Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	Nil
4e	Number of active and alive dumps.	No Proposal	Nil	The Waste generated is proposed for backfilling in the mined out area.
4f	Number of dead dumps.	No Proposal	Nil	Nil
4g	Number of dumps established.	No Proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	Nil	Nil
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	Nil	Nil
4j	Number of settling ponds	No Proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	No Dumping proposal	No generation of Topsoil & OB	Nil

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Part Backfilling has been proposed	Backfilling has not done as per proposal.	Violation issued for deviation, under Rule 11(1) of MCDR, 2017
5b	Area under backfilling of mined out area	0.22 ha	0.03 ha.	Violation issued for deviation, under Rule 11(1) of MCDR, 2017
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal	No generation of top soil.	Nil
5d	Total area fully reclaimed and rehabilitated	Part Backfilling has been proposed	Backfilling has not done as per proposal.	Violation issued for deviation, under Rule 11(1) of MCDR, 2017
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Part Backfilling has been proposed	0.03 ha has been Backfilling against proposal of 0.22 ha	Violation issued for deviation, under Rule 11(1) of MCDR, 2017

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	PMCP report for the year 2022-23 has been submitted
6b	Area available for rehabilitation (ha) .	0.15 ha	0.15 ha	Nil
6c	afforestation done (ha).	0.15 ha	0.15 ha	Nil
6d	No. of saplings planted during the year	150 nos	300 nos	Nil
6e	Cumulative no .of plants	12481 nos	12631 nos	
6f	Any other method of rehabilitation	No Proposal	Nil	Nil

6g	Cost incurred on watch and care during the year	1.50 lakhs	2.0 lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	30m x 70m x 18m	10m x 30m x 18m	Violation issued for deviation, under Rule 11(1) of MCDR, 2017
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	78287 tons	17347 tons	Violation issued for deviation, under Rule 11(1) of MCDR, 2017
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	0.22 ha	0.03 ha	Violation issued for deviation, under Rule 11(1) of MCDR, 2017
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	Nil	Nil
6l	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

6o	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	Periodical monitoring.	Environmental parameters are within limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	More plantations done against the proposed number for compliance to PMCP proposals.	PMCP proposals have been complied.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	378865 tons	199719 tons	Violation issued for deviation, under Rule 11(1) of MCDR, 2017
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised method	Mechanised method	Nil
7c	Different grade of mineral sorted out at mines.	Lumps & Fines	Lumps & Fines	Nil
7d	Any beneficiation process at mines	No Proposal	No processing of mineral is involved.	Not applicable
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The available grade of Limestone in this lease area is cement grade.	Achieved ROM Production is 199719 tons during 2022- 2023 against proposal of 378865 tons.	Nil

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	Nil	Not applicable
8b	Concurrent use or storage of topsoil	No Proposal	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Dumping proposal	Nil	No generation of Topsoil & OB
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Part Backfilling has been proposed	Backfilling has not done as per proposal.	Violation issued for deviation, under Rule 11(1) of MCDR, 2017
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Part Backfilling has been proposed	Backfilling has not done as per proposal.	Violation issued for deviation, under Rule 11(1) of MCDR, 2017
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	150 saplings proposed.	300 saplings planted.	Plantation has been done as per proposal.
8g	Survival rate	No Proposal in the document.	90%	Nil
8h	Water sprinkling on roads to control airborne dust	Proposed	Water Sprinkling is being done on roads to control airborne dust.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Nil	Green belt developed as per proposal	Nil

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Submitted	Returns are submitted within time limit.	Both Annual & Monthly returns are submitted in online.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager, Geologist & mining engineer are appointed.	During inspection Mining Engineer, Geologist is present.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings 14.90ha; Used for waste disposal 8.50ha; Occupied by plant, buildings, residential, welfare buildings & roads-1.64ha; Other Purpose (Green Belt , Safety Zone & Others)- 7.410ha;	Furnished under part- I.	Nil
9d	Scrutiny of Annual return on afforestation	300 saplings	Furnished under part-V.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	7542 cu.m	Furnished in part- V, of 4.2.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	199719 tons	Furnished in part- VI	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production is Rs.339/-	Furnished in part- VII	Nil
9h	Scrutiny of Annual return on fixed assets	Rs.1300342456/ -	Furnished in part- II-A	Nil
9k	Scrutiny of Annual return on mining machineries	Backhoe, Tipper, Dozer, 6 Other HEM Machinery, Pumps	Furnished in part- V sec	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 11(1)	13/07/2023			

Date :

(G.C.Sethi)

Indian Bureau of Mines