

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-45.MDS

Mine code : 38TMN38029

- (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)
Official with
Designation
- (iv) Date of Inspection : 16/12/2023
- (v) Prev.inspection date : 12/01/2023

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ADANAKURICHI, ALATHIYUR &**
- (b) **Registration NO.** : **613/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : TAMIL NADU
District : ARIYALUR
Village : ADANAKURICHI
Taluka : SENDURAI
Post office : CEMENTNAGAR
Pin Code : 621730
FAX No. : 04329-248248
E-mail : dal_planthead@indiacement.
Phone : 04329248201 TO 203
- (f) Police Station :
- (g) First opening date : 16/10/2006
- (h) Weekly day of rest : SUN
2. Address for : DHUN BUILDING,
correspondance NO:827, ANNA SALAI,
CHENNAI
3. (a) Lease Number : TMN1033
(b) Lease area : 80.26
(c) Period of lease : 50
(d) Date of Expiry : 16/03/2045
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 : INDIA CEMENTS LTD
 INDIA CEMENT LTD, SANKAR
 NAGAR POST, TIRUNELVELI
 DISTRICT. TIRUNELVELI TAMIL
 NADU
 Phone:
 FAX :

Agent : Shri.T.BALASUBRAMANIAN
 dALAVOI WORKS, CEMENT NAGAR
 POST, SENDURAI
 TALUK,ARIYALUR DISTRICT
 ARIYALUR TAMIL NADU
 Phone: 04329 248206
 FAX :

Mining Engineer

Name : J.PRIESTLY MACAULAY,Full Time
 Qualification : BE MINING
 Appointment/ : 15/09/2003
 Termination date

Geologist

Name : P.Ramasamy,Full Time
 Qualification : MSC (GEO)
 Appointment/ : 02/07/1998
 Termination date

Manager

Name : J.PRIESTLY MACAULAY
 Qualification : BE(MINING)
 Appointment/ : 15/09/2003
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	24/06/1994
Plan/Scheme of Mining		MP modif under MCR 1960	21/08/1998
		Mining Scheme rule 12 MCDR1988	26/07/2002
		PMCP under 23B(1) for Fresh	26/05/2005
		Mining Scheme rule 12 MCDR1988	15/02/2007
		Mining Scheme rule 12 MCDR1988	10/05/2012
		MP review under 17(1) MCR 2016	23/11/2016
		MP modif under 17(3) MCR 2016	27/11/2018
		MP review under 17(1) MCR 2016	03/11/2021

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	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	35 exploration boreholes were drilled with total merage of 1130m with 200m*200m & 100m * 100m grid interval.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal	Nil	Exploration carried out by The India cements Limited.
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	8111057 tons of Reserves & Resources as per the RMP approved on 03.11.2021	7685644 tons as per submitted annual returns 2022-2023	Cement Grade Limestone.
1f	General remarks of inspecting officers on geology, exploration etc	Nil	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.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Mining working Planned in between section line ML-2(200) to ML-10(1000), and 700E to 1100E	Mining working was in between section line ML-2(200) to ML-10(1000), and 900E to 1200E.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, One bench for Top Soil/Overburden Bench, Two benches for limestone.	Yes, One bench for Top Soil/Overburden Bench, Two benches for limestone.	Nil

2c	Stripping ratio or ore to OB ratio	1:0.00	1:0.00	Nil
2d	Quantity of topsoil generation in m3	No Proposal	Nil	Nil
2e	Quantity of overburden generation in m3	No Proposal	12680 cum of OB has 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	12688 cum of OB has generated againsted the proposal. Violation has issued under Rule 11(1) of MCDR, 2017	Nil

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single Pit	Single Pit	Nil
3b	Quantity of ROM mineral production proposed	388700 tons	352377 tons	Less ROM mineral production due to plant requirement.
3c	Recovery of sailable/usable mineral from ROM production	349830 tons	323193 tons	Less ROM Limestone production due to plant requirement.
3d	Quantity of mineral reject generation	38870 tons	29184 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.	Nil	Nil	No subgrade
3g	Grade of sub grade mineral generation	No Proposal	Nil	Not applicable
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Mechanized 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
3j	Provision of drilling and blasting in mineral benches	No Proposal	Nil	Mining is being carried out by Non-Conventional method.
3k	Provision of mining machineries in mineral benches	Back hoe-1, Rock breaker-1, Tipper-2, Water Tanker-1	Back hoe-1, Rock breaker-1, Tipper-2, Water Tanker-1	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Overburden-5m, Limestone-5m	Overburden-5m, Limestone-5m	Nil
3m	Total area covered under excavation/pits	56.16.5 Ha.	56.16.5 Ha.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.00	1:0.00	Nil
3o	Total area put in use under different heads at the end of year	Area under mining-56.16.5, Overburden-1.55.5, Mineral storage-0.51.0, Infrastructure-2.22.0, Roads-3.86.0, Protective bund-1.84.5	Area under mining-56.16.5, Overburden-1.55.5, Mineral storage-0.51.0, Infrastructure-2.22.0, Roads-3.86.0, Protective bund-1.84.5	Nil
3p	Production of ROM mineral during the last five year period as applicable	2018-19=590324 Tons 2019-20=591726 Tons 2020-21=729993 Tons 2021-22=596213 Tons 2022-23=388700 Tons	2018-19=409582 Tons 2019-20=293279 Tons 2020-21=305663 Tons 2021-22=231568 Tons 2022-23=352377 Tons	Nil

3q	General remarks of inspecting officers on method of mining etc.	Nil	Mining operation is being done by opencast mechanised means.	Nil
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No Proposal for dumping	Nil	Nil
4b	Location of topsoil, OB and mineral reject dumps	1 Waste dump- North Western side of ML	1 Waste dump- Western side of ML	Nil
4c	Number of dumps within lease area and outside of lease area	One Dump within ML	One Dump within ML	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside Ultimate Pit Limit (UPL).	Outside Ultimate Pit Limit (UPL).	Nil
4e	Number of active and alive dumps.	1 No	1 No	Nil
4f	Number of dead dumps.	One	One	Nil
4g	Number of dumps established.	One	One	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil	Garland drain already exists for a length of 1500m.
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	Garland drain already exists for a length of 1500m.
4j	Number of settling ponds	No proposal	Nil	2 Nos of Settling ponds are exist.
4k	Specific comments of inspecting officer on waste dump management	Nil	1500m garland drainage is constructed	Existing old dumps are present for OB

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 Back filled in Mined out area is proposed	Part Back filled in Mined out area is done	Nil
5b	Area under backfilling of mined out area	0.12 ha	0.08 ha	Violation issued under Rule 11(1) of MCDR, 2017
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	0.20 ha	0.20 ha	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Nil	0.08 ha of Backfilling done against the proposal of 0.12 ha	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	PMCP report for the year 2022-23 has been submitted	Submitted
6b	Area available for rehabilitation (ha) .	0.20.0 Ha	0.20.0 Ha	Nil
6c	afforestation done (ha).	0.20.0 Ha	0.20.0 Ha	Nil
6d	No. of saplings planted during the year	200 nos	400 nos	Nil
6e	Cumulative no .of plants	17430 nos	17630 nos	Nil
6f	Any other method of rehabilitation	Back filling and Plantation	Back filling and Plantation	Nil
6g	Cost incurred on watch and care during the year	No proposal	Rs 1.20 Lakhs	Nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	54m*22m*13.5m	30m*100m*15m	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	38870 Tons	29184 Tons	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	0.20.0 Ha	0.20.0 Ha	Nil
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	Complied. All Environmental parameters are with in norms	Periodical monitoring.
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.	Environmental monitoring is being done in quarterly basis all parameters for ambient air, water, noise, vibration are within the permissible limits.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes Proposed	Yes	Mobile screen deployed
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized method	Mechanized method	Nil
7c	Different grade of mineral sorted out at mines.	Lumps and Fines	Lumps and Fines	Nil
7d	Any beneficiation process at mines	No proposal	Nil	Not applicable
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Nil	The limestone are produced from the mine is utilized for cement making in the captive plant of the company.	So, there is no mineral conservation problem in the mine.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	No topsoil removal	Nil
8b	Concurrent use or storage of topsoil	Nil	No topsoil removal	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposal	Rejects are used for backfilling	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 done	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Partly backfilling has proposed	As per proposal backfilling has done	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	200 proposed	400 planted	Plantation has been done as per proposal.
8g	Survival rate	>90%	92.3%	Nil
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	Water sprinkling is being done by water tanker and permanent sprinkler.
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
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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	During inspection Mining Engineer, Geologist is present.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Provided in part-I, Sl.No-12	Nil
9d	Scrutiny of Annual return on afforestation	400 saplings	Provided in part-V, Para-5	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Mineral reject generation not shown	Violation has been issued.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	352377 tons	Provided in part-VI, Para-2	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price- Rs.339.50 & Production cost=Rs.339.50	Provided in part VI,para3(ii) and Part-VII.	Nil
9h	Scrutiny of Annual return on fixed assets	Rs. 1300342456/- for group of 7 leases	Provided in part -II (A)	Nil
9k	Scrutiny of Annual return on mining machineries	Back hoe-1, Rock Breaker-1, Tipper-1, Dumper-2 and Water tanker-1	Mentioned in part -V, Sec-6,	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)	28/12/2023			

Date :

(G.C.Sethi)

Indian Bureau of Mines