

**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 : **M017**) **Matiul Islam**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Mr N J Reddy, GM (Mines), Mr G Balu, AGM (Mines&Geo),
Official with
Designation
- (iv) Date of Inspection : 12/01/2023
- (v) Prev.inspection date : 06/08/2021

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	Nil	Nil	Entire lease area already fully explored upto G1 level
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	-do-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	-do-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	-do-
1e	Balance reserve as on 01/04/20	4.846 Million tonnes	5.039 Million tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Geology & Exploration of the mine were found satisfactory.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Between section lines ML-2 to ML-10, and 900E to 1200E	Between section lines ML-2 to ML-10, and 900E to 1200E	As proposed
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	-do-
2c	Stripping ratio or ore to OB ratio	1:0.44	1:0.00	Violation pointed for deviation in Overburden & Top Soil excavation
2d	Quantity of topsoil generation in m3	2,500 cu.m.	Nil	-do-

2e	Quantity of overburden generation in m3	1,36,604 cu.m.	Nil	-do-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Violation pointed for deviation in Overburden & Top Soil excavation

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	5,96,213 tonnes	2,31,568.02 tonnes	Violation pointed out for deviation in ROM, Ore & Mineral Rejects quantities.
3c	Recovery of sailable/usable mineral from ROM production	5,03,925 tonnes (84.5%)	1,81,090.86 tonnes (78.2%)	-do-
3d	Quantity of mineral reject generation	92,288 tonnes (15.5%)	50,477.16 tonnes (21.8%)	-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	Mechanized method	Mechanized method	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	Nil

3j	Provision of drilling and blasting in mineral benches	Nil	Nil	Non-conventional mining practiced without drilling & blasting.
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"	As proposed
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	-do-
3m	Total area covered under excavation/pits	56.66.5 Ha.	42.135 Ha.	Within proposal
3n	Ore to OB ratio for the pit/mine during the year.	1:0.44	1:0.00	Violation pointed for deviation in Ore, OB & MR excavation
3o	Total area put in use under different heads at the end of year	64.81 Ha	55.77 Ha	Within proposal
3p	Production of ROM mineral during the last five year period as applicable	2017-18=659565 Ts 2018-19=590324 Ts 2019-20=591726 Ts 2020-21=729993 Ts 2021-22=596213 Ts	2017-18=362236.75 Ts 2018-19=409582.55 Ts 2019-20=293279.44 Ts 2020-21=305663.88 Ts 2021-22=231568.02 Ts	-do-
3q	General remarks of inspecting officers on method of mining etc.	-	-	Violation pointed for deviation in Ore, OB & MR excavation

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	OB & MR proposed to be backfilled into mined out areas. TS proposed to be spread over backfilled areas.	MR backfilled into mined out areas	No OB or TS excavated during the year.
4b	Location of topsoil, OB and mineral reject dumps	1 Waste dump- North Western side of ML	1 Waste dump- North Western side of ML	As proposed
4c	Number of dumps within lease area and outside of lease area	One Dump within ML	One Dump within ML	-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	-do-
4f	Number of dead dumps.	One	One	-do-
4g	Number of dumps established.	One	One	-do-
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Already existing garland drain being maintained	-do-
4i	Length of Retaining wall or garland drain all along dumps	Nil	1,500 m long pre-existing garland drain maintained	-do-
4j	Number of settling ponds	Nil	2 nos of already existing settling ponds being maintained	-do-
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory.

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.	Backfilling proposed into fully mined out areas	Backfilling carried out into fully mined out areas	As proposed
5b	Area under backfilling of mined out area	0.85 Ha	0.30 Ha	Violation pointed out for deviation
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed	Nil	No TS removed during the year
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Violation pointed out for deviation in backfilling area

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
6b	Area available for rehabilitation (ha) .	0.85.0 Ha	0.30.0 Ha	Violation pointed out for deviation
6c	afforestation done (ha).	0.40.0 Ha	0.40.0 Ha	As proposed
6d	No. of saplings planted during the year	500 nos	500 nos	-do-
6e	Cumulative no .of plants	2,500 nos (during the plan period)	17,230 nos (since inception)	-do-
6f	Any other method of rehabilitation	Nil	Nil	Nil

6g	Cost incurred on watch and care during the year	No estimate	Rs 1.20 Lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	0.85 Ha	0.30 Ha	Violation pointed out
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	-do-	-do-	-do-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	0.40 Ha	0.40 Ha	-do-
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.	Nil	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Nil	Nil	No waste land available
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NA	NA	-do-

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	-do-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Quarterly monitoring performed	All parameters within norms
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	Violation pointed for deviation in backfilling area

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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 grade-wise mineral sorting i.e. manual or mechanical.	Mechanized method	Mechanized method	Mobile Screen deployed
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 and beneficiation issues	-	-	No issues were observed with mineral conservation. No beneficiation was proposed or carried out within the lease.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Nil	No top soil removed during the year
8b	Concurrent use or storage of topsoil	Proposed	Nil	No top soil removed during the year
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB & MR proposed to be backfilled into mined out areas	MR backfilled into mined out area.	No OB generated during the year.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	-do-	-do-	-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)	16,730 nos saplings existing at the beginning of the year	500 nos saplings planted during the year	17,230 nos saplings cumulatively planted by the end of the year
8g	Survival rate	>90%	92.3%	As proposed
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	Water Tanker & Permanent Water Sprinklers used
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	The aesthetic beauty in and around mines area is found satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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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	Manager G.Balu Mining Engineer in charge M.Sateesh Babu Geologist in charge K.Mani	Given in Part I, Sec 7-9	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings- 55.98.5, Occupied by plant, buildings, residential, welfare buildings & roads-6.08.0, Other Purpose (Green belt, Periphery bund)-9.15.5	Given in Part I, Sec 12	Nil
9d	Scrutiny of Annual return on afforestation	4.4 (a) Within lease area (b) Outside lease area (i) Number of trees planted during the year 500 0 (ii) Survival rate in percentage 95.00 0	Given in Part V, Sec 4. Mining Operations during the year	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	4.2(B) (ii) Mineral Rejects generated with grades (tonnes) a. Quantity 50477 b. Grade 45	Given in Part V, Sec 4. Mineral Rejects for Limestone	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Category Opening stock (in tonne) Production (in tonne) Closing stock (in tonne) (a) Open Cast Workings 0.000 181090.860 0.000	Given in Part VI, Sec 1	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine Price & Cost of Production Rs 332.00/-	Given in Part VI, Sec 2 & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets - Rs 1,32,02,22,171 /-	Given in Part II A Capital Structure	Nil
9k	Scrutiny of Annual return on mining machineries	Type of machinery Capacity of each unit No. of units Electrical/ Non-Electrical (specify) Used in opencast/ underground (specify) BACK HOE 1.200 CUM 1 Non Electrical Opencast TIPPER 8.000 CUM 2 Non Electrical Opencast OTHER HEM MACHINERY 0.000 1 Non Electrical Opencast WATER TANKER 9000.000 LITRE 1 Non Electrical Opencast	Given in Part V, Sec 5	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)	27/01/2023			

Date :

(Matiul Islam)

Indian Bureau of Mines