

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/PBR/LST-22.Mds

Mine code : 38TMN24054

- (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)
Official with
Designation
- (iv) Date of Inspection : 13/01/2023
- (v) Prev.inspection date : 28/07/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ALTHIYUR-160.73(GO.103)**
- (b) **Registration NO.** : **IBM/613/2011.**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : TAMIL NADU
District : PERAMBALUR
Village :
Taluka :
Post office :
Pin Code :
FAX No. : -
E-mail : mines@indiacement.co.in
Phone : 044-28521526.
- (f) Police Station : ALATHIYUR
- (g) First opening date : 10/10/2001
- (h) Weekly day of rest : SUN
2. Address for : INDIA CEMENTS LTD
correspondance : Coramandal Towers,
R A Puram,Chennai
3. (a) Lease Number : TMN0992
- (b) Lease area : 160.73
- (c) Period of lease : 50
- (d) Date of Expiry : 16/10/2055
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 : Shri.T.BALASUBRAMANIAN
 dALAVOI WORKS, CEMENT NAGAR
 POST, SENDURAI
 TALUK,ARIYALUR DISTRICT
 ARIYALUR TAMIL NADU
 Phone: 04329 248206
 FAX :

Mining Engineer

Name : K.ANANDKUMAR,Full Time
 Qualification : AMIE(MINING ENGINEERING)
 Appointment/ : 29/03/2019
 Termination date

Geologist

Name : G.BALU,Full Time
 Qualification : MSC(GEO), FCC
 Appointment/ : 15/10/2018
 Termination date

Manager

Name : G.BALU
 Qualification : MSC(GEO),FCC
 Appointment/ : 07/10/2020
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	17/02/2005
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	06/01/2012
		Mining Scheme rule 12 MCDR1988	22/03/2016
		MP review under 17(1) MCR 2016	11/11/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Entire lease has already been 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	32.138 Million Tonnes	32.138 Million Tonnes	As proposed
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Entire lease area already fully explored upto G1 level.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Between section lines ML-500N-1200N and 600E-1400E.	Between section lines ML-500N-1200N and 600E-1400E.	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, One Top Soil Bench, five overburden bench, Three ore benches.	Yes, One Top Soil Bench, five overburden bench, Three ore benches.	-do-
2c	Stripping ratio or ore to OB ratio	1:8.50	1:5.62	Violations pointed out for deviations in ROM, OB, TS & MR qtys.
2d	Quantity of topsoil generation in m3	1,15,050 cu.m.	49,486.6 cu.m.	-do-

2e	Quantity of overburden generation in m3	10,46,426 cu.m.	3,83,684.65 cu.m.	-do-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Violations pointed out for deviations in ROM, OB, TS & MR qtys.

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	3,46,437 tonne	2,25,116.42	Violation pointed out
3c	Recovery of sailable/usable mineral from ROM production	3,11,793 tonne (90%)	1,90,941.22 tonne (84.8%)	-do-
3d	Quantity of mineral reject generation	34,644 tonne (10%)	34,175.2 tonne (15.2%)	Within proposal
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	Mechanical method	Mechanical 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	Drilling & Blasting proposed on contingency basis	Non-conventional mining practiced without drilling & blasting	As proposed
3k	Provision of mining machineries in mineral benches	Surface Miner-1, Shovel-1, Dozer-1, Tipper-15, and Water tanker-1	Surface Miner-1, Shovel-1, Dozer-1, Tipper-15, and Water tanker-1	-do-
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	81.21.0 Ha (Till the end of current plan period)	45.82 Ha	Within proposal
3n	Ore to OB ratio for the pit/mine during the year.	1:8.50	1:5.62	Violation pointed for deviation in ROM, OB & MR qtys.
3o	Total area put in use under different heads at the end of year	Area under mining - 81.21 Ha Top Soil Storage - 1.60 Ha Mineral Storage - 0.65 Ha Infrastructure - 2.30 Ha Low grade yard - 6.31 Ha Green Belt - 9.69 Ha	Already exploited & abandoned by opencast (O/C) mining 4.000 Ha Covered under current (O/C) Workings 45.820 Ha Reclaimed/Rehabilitated 14.780 Ha Used for waste disposal 3.740 Ha Occupied by plant, buildings, residential, welfare buildings & roads 2.300 Ha Other Purpose (Green Belt, Mineral and topsoil storage) 19.550 Ha	Within proposal
3p	Production of ROM mineral during the last five year period as applicable	2017-18= 1228409 Ts 2018-19=1285947 Ts 2019-20=2431705 Ts 2020-21=1961552 Ts 2021-22=346437 Ts	2017-18= 309191.69 Ts 2018-19=368363.56 Ts 2019-20=277800.60 Ts 2020-21=233410.99 Ts 2021-22=225116.42 Ts	Within proposal

3q	General remarks - of inspecting officers on method of mining etc.	-	-	Violations pointed out for deviation in ROM, OB, TS & MR qtys.
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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)	Yes, 1 Topsoil Dump, 2 Waste Dumps, 1 mineral Stock	Yes, 1 Topsoil Dump, 2 Waste Dumps, 1 mineral Stock	As proposed
4b	Location of topsoil, OB and mineral reject dumps	Topsoil Dump - South East Waste Dumps- West and South Mineral Stock- South	Topsoil Dump - South East Waste Dumps- West and South Mineral Stock- South	-do-
4c	Number of dumps within lease area and outside of lease area	4 dumps within lease & 1 outside	4 dumps within lease & 1 outside	-do-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Partially inside Ultimate Pit Limit	Partially inside Ultimate Pit Limit	Dump will be rehandled in future
4e	Number of active and alive dumps.	Nil	Nil	Nil
4f	Number of dead dumps.	1	1	As proposed
4g	Number of dumps established.	1	1	-do-
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil	Nil	Previously constructed garland drain being maintained
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	2,250 m
4j	Number of settling ponds	Nil	Nil	3 nos. of previously constructed settling ponds being maintained

4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management was found satisfactory
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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.	Backfilling proposed in fully mined out areas	Backfilling carried out in fully mined out areas	As proposed
5b	Area under backfilling of mined out area	3.00.0 Ha	0 (Waste backfilled over previously backfilled area, no new area completely backfilled upto proposed level)	Violation pointed out for deviation
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	1.50.0 Ha	0.80.0 Ha	Violation pointed out
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Violations pointed out for inadequate backfilling & reclamation

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	As proposed
6b	Area available for rehabilitation (ha) .	1.50.0 Ha	0.80.0 Ha	Violation pointed out for deviation

6c	afforestation done (ha).	1.50.0 Ha	0.80.0 Ha	-do-
6d	No. of saplings planted during the year	1000 nos	1000 nos	As proposed
6e	Cumulative no .of plants	-	28825 nos	Nil
6f	Any other method of rehabilitation	Nil	Nil	Nil
6g	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	500m*60m*45m	400m*60m*18.0m	Violation pointed out for inadequate backfilling
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	2834790 Ts	1072565.52 Ts	-do-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	1.50.0 Ha	0.80.0 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	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	Conducted quarterly	All parameters within norms
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	Violations have been pointed out for inadequate backfilling & afforestation as per PMCP.

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	-do-
7c	Different grade of mineral sorted out at mines.	Lumps and Fines	Lumps and Fines	-do-
7d	Any beneficiation process at mines	Screening by Mobile screen	Screening by Mobile screen	-do-

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Mineral Conservation & beneficiation were found satisfactory
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	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)	Entire waste generated is proposed to be backfilled into mined out areas	Entire waste generated is backfilled into mined out areas	-do-
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)	27,825 nos of sapling existing before the beginning of the year	1,000 nos saplings planted during the year.	28,825 nos. saplings planted cumulatively till the end of the year.
8g	Survival rate	>90%	91%	As proposed

8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out	Water Tanker as well as Permanent Water Sprinkling arrangements deployed.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Aesthetic beauty in and around mines area was found satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Given	Submitted	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager Sri.G.Balu Mining Engineer in charge Sri. S. Anandkumar Geologist in charge Sri.G. Balu	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.	(i) Already exploited & abandoned by opencast (O/C) mining 0.000 4.000 4.000 (ii) Covered under current (O/C) Workings 0.000 45.820 45.820 (iii) Reclaimed/Rehabilitated 0.000 14.780 14.780 (iv) Used for waste disposal 0.000 3.740 3.740 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.000 2.300 2.300 (vi) Other Purpose (Green Belt, Mineral and top soil storage) 0.000 19.550 19.550 (vii) Work done under progressive mine closure plan during the year 0.000 0.000 0.000	Given in Part I, Sec 12	Nil
9d	Scrutiny of Annual return on afforestation	4.4 (a) Within lease area (i) Number of trees planted during the year 1000 0 (ii) Survival rate in percentage 91.00 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 34175 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 190941.220 0.000 (b) Underground Workings 0.000 0.000 0.000 (c) Dump Workings 0.000 0.000 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/-	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(spe cify) Used in opencast/under ground(specify) SURFACE MINER 1050.000 HP 1 Non Electrical Opencast SHOVEL (HYDRAULIC) 2.500 CUM 1 Non Electrical Opencast TIPPER 8.000 CUM 15 Non Electrical Opencast DOZER 380.000 HP 1 Non Electrical Opencast WATER TANKER 10000.000 LITRE 1 Non Electrical Opencast	Given in Part V, Sec 5	Nil
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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