

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-20.MDS

Mine code : 38TMN38015

- (i) Name of the Inspecting : **M017**) **Matiul Islam**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Mr S S Rao, Mine Manager & Mr Srithar G, Geologist
Official with
Designation
- (iv) Date of Inspection : 11/01/2023
- (v) Prev.inspection date : 11/01/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **REDDIPALAYAM-32.645-ML3**
- (b) **Registration NO.** : **IBM/441/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : TAMIL NADU
District : ARIYALUR
Village :
Taluka :
Post office :
Pin Code :
FAX No. : 04329 249253
E-mail : sendilkumar.k@adityabirla.
Phone : 04329 249240
- (f) Police Station : VIKRAMANGALAM
- (g) First opening date : 10/03/2006
- (h) Weekly day of rest : SUN
2. Address for : REDDIPALAYAM PO
correspondance : ARIYALUR TK&DT
3. (a) Lease Number : TMN0991
- (b) Lease area : 43.4
- (c) Period of lease : 50
- (d) Date of Expiry : 19/03/2056
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : ULTRATECH CEMENT LIMITED
 POST-REDDIPALAYAM, TEHSIL-
 ARIYALUR ARIYALUR TAMIL
 NADU
 Phone:022-66917800
 FAX :022-66928109

Owner : JHANWAR.K.C
 Ultra Tech Cement
 Ltd.Aditya Birla S.K. Ahire
 Marg, Worli, Mumbai.
 GREATER BOMBAY MAHARASHTRA
 Phone: 022-66917800
 FAX : 022-66928109

Agent : RAJESH SANKAR
 Reddipalayam Post, Ariyalur
 Dist. ARIYALUR TAMIL NADU
 Phone: 04329249240
 FAX :

Mining Engineer

Name : MR.SENTHIL KUMAR,Full Time
 Qualification : B.E IN MINING
 Appointment/ : 27/04/2017
 Termination date

Geologist

Name : G.SRITHAR,Full Time
 Qualification : MSC (GEO)
 Appointment/ : 02/04/2019
 Termination date

Geologist

Name : BALAMURUGAN.R.,Full Time
 Qualification : MSC. GEOLOGIST
 Appointment/ : 01/12/2017 01/04/2019
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	02/07/2012
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	23/02/2016
		MP review under 17(1) MCR 2016	18/02/2021

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	Nil	Nil	Entire reserves proposed to be & exhausted by the end of FY 2021-22 vide last approved ROMP. FMCP already approved from FY 2022-23 to 2023-24.
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Entire lease area already fully explored upto G1 level. Entire reserves proposed to be & exhausted by the end of FY 2021-22 vide last approved ROMP. FMCP already approved from FY 2022-23 to 2023-24.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Northern Pit	Northern Pit	As proposed

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed Ore - 3 Topsoil - 1	Separate benches maintained Ore - 3 Topsoil - 1	-do-
2c	Stripping ratio or ore to OB ratio	1: 2.42 (Tonne: Tonne)	1: 2.04 (Tonne: Tonne)	-do-
2d	Quantity of topsoil generation in m3	61,023 cu.m.	60,977 cu.m.	-do-
2e	Quantity of overburden generation in m3	1,07,833 cu.m	1,07,832 cu.m.	-do-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Development of pit was found satisfactory

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single Pit	Single Pit	As proposed
3b	Quantity of ROM mineral production proposed	186,627 T	186,564.45 T	-do-
3c	Recovery of sailable/usable mineral from ROM production	138,176 T	138,174.45 T	-do-
3d	Quantity of mineral reject generation	48,451 T	48,390 T	-do-
3e	Grade of mineral rejects generation and threshold value declared.	Below 34% of CaO	Below 34% of CaO	-do-
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	Mechanized	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	Rock breaker, Excavator & Tippers proposed	Rock breaker, Excavator & Tippers utilised	As proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 Meter	6 Meter	-do-
3m	Total area covered under excavation/pits	8.963 Ha	8.963 Ha	-do-
3n	Ore to OB ratio for the pit/mine during the year.	1:2.42 (Tonne:Tonne)	1:2.04 (Tonne:Tonne)	-do-
3o	Total area put in use under different heads at the end of year	32.645 Ha	32.645 Ha	-do-
3p	Production of ROM mineral during the last five year period as applicable	2019-20 399,899 2020-21 179,153 2021-22 138,176	2019-20 229693.85 2020-21 13107.97 2021-22 138174.45	Last ROMP approved in 2020-21.
3q	General remarks of inspecting officers on method of mining etc.	-	-	The method of mining was found satisfactory

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 to be spread over backfilled area	OB & MR used for backfilling & TS spread over backfilled area	As proposed
4b	Location of topsoil, OB and mineral reject dumps	Southern & Western side of North Pit	Southern & Western side of North Pit	-do-
4c	Number of dumps within lease area and outside of lease area	Nil	Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NA	NA	Nil
4e	Number of active and alive dumps.	Nil	Nil	Nil
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	Nil	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	NA	NA	Nil
4i	Length of Retaining wall or garland drain all along dumps	NA	NA	Nil
4j	Number of settling ponds	Nil	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	Entire waste generated used to backfill mined out area.

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 after full extraction of mineral	Backfilling carried out into fully mined out areas	As proposed
5b	Area under backfilling of mined out area	1.21 Ha	1.21 Ha	-do-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed	Carried out	-do-
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Backfilling & reclamation were found satisfactory

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) .	1.21 Ha	1.21 Ha	-do-
6c	afforestation done (ha).	Not specified	3.0 Ha	-do-
6d	No. of saplings planted during the year	7,000 nos	7,500 nos	As proposed
6e	Cumulative no .of plants	-do-	11,210 nos	-do-
6f	Any other method of rehabilitation	Nil	Nil	Nil

6g	Cost incurred on watch and care during the year	Rs. 2,62,500/-	Rs. 5,12,500/-	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	1.21 Ha	1.21 Ha	As proposed
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	1.21 Ha	1.21 Ha	-do-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not specified	3.0 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	No waste land within lease area
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)	Proposed	Carried out quarterly	All parameters within norms
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	PMCP Compliance & progressive closure operations were found satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No sorting proposed	No sorting carried out	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	Nil
7c	Different grade of mineral sorted out at mines.	NA	NA	Nil
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 or beneficiation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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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)	All waste proposed to be backfilled into mined out area	All waste backfilled into mined out area	-do-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed	Carried out	-do-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed	Carried out	-do-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Not specified	11,210 nos saplings planted cumulatively	Nil
8g	Survival rate	Not specified	65%	Nil
8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out	Water tanker deployed for water sprinkling on haul roads
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	The aesthetic beauty in and around mines area was 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	Yes	Submitted in time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager Mr. Srihari Seshagiri Rao Mining Engineer in charge Mr. Uma Maheswaran N Geologist in charge Mr. Srithar.G	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.	(ii) Covered under current (O/C) Workings 0.000 8.963 8.963 (vi) Other Purpose (Green belt, Safety Zone & Others) 18.674 (vii) Work done under progressive mine closure plan during the year 4.628	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 7500 0 (ii) Survival rate in percentage 65.00 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 48390 b. Grade Below threshold value	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 138174.000 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 219.43/-	Given in Part VI, Sec 2 & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets - Rs 1,72,61,536/-	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/under ground specify) BACK HOE 2.100 CUM 2 Non Electrical Opencast TRUCK 25.000 TONNE 7 Non Electrical Opencast OTHER HEM MACHINERY 4.000 1 Non Electrical Opencast WATER TANKER 10000.000 LITRE 1 Non Electrical Opencast DOZER 175.000 HP 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 34(2)	24/01/2023			

Date :

(Matiul Islam)

Indian Bureau of Mines