

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-26.MDS

Mine code : 38TMN38041

- (i) Name of the Inspecting : **A042**) **A.S.SANJEEVA RAO**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Mr.SUMANTA DAS-MANAGER(MINES) &MR XAVIER HONESTRAJ,M
Official with
Designation
- (iv) Date of Inspection : 13/12/2022
- (v) Prev.inspection date : 13/11/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ALANTHURAIYARKATTALAI**
- (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 : ALANTHURAIYARKATTALA
- Taluka : ARIYALUR
- Post office : SUNDARKUDI
- Pin Code : 621704
- FAX No. : 043219-249253
- E-mail : sendilkumar.k@adityabirla.c
- Phone : 043219-249240
- (f) **Police Station** : Ariyalur
- (g) **First opening date** : 17/10/2012
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : REDDIPALAYAM CEMENT WORKS
REDDIPALAYAM PO
ARIYALUR TALUK & DISTRICT
3. (a) **Lease Number** : TMN1598
- (b) **Lease area** : 8.14
- (c) **Period of lease** : 50
- (d) **Date of Expiry** : 12/12/2062
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 : AMIT KUMAR MATHUR, Full Time
 Qualification : BE MINING
 Appointment/ : 29/12/2017 24/09/2022
 Termination date

Mining Engineer

Name : Mr Sudharsan R, Full Time
 Qualification : BE, Mining
 Appointment/ : 25/09/2022
 Termination date

Geologist

Name : SURESH.E, Full Time
 Qualification : M.SE IN GEOLOGY
 Appointment/ : 01/07/2018 22/05/2022
 Termination date

Geologist

Name : Mr Uttam Singh, Full Time
 Qualification : MSc PhD(Geology)
 Appointment/ : 22/05/2022
 Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 03/01/2005
 Plan/Scheme of Mining : Fresh under rule 22 MCR1960 03/01/2006
 : MP review under 17(1) MCR 2016 20/01/2017
 : MP review under 17(1) MCR 2016 03/12/2021

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil.	Nil.	No backlog exploration.
1b	Exploration over lease area for geological axis 1 or 2	G-1	G-1	Nil.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil.	No exploration carried out in the year 2021-22.	Nil.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil.	Nil.	Entire lease area has been explored to G-1 level.
1e	Balance reserve as on 01/04/20		(111)941,119Ts (221)1674479Ts	As on 1.4.2022.
1f	General remarks of inspecting officers on geology, exploration etc			Lease area has been proved upto 40m depth(ultimate depth)by putting 16number of core drill holes .Total depth drilled was 565m with 100mx100m grid interval.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Nil.	No separate Proposal.	No separate Proposal for development.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes.	OB benches-Nil.	Nil.
2c	Stripping ratio or ore to OB ratio	1:0.70	1:0.80	Nil.
2d	Quantity of topsoil generation in m3	Nil.	No generation.	Nil.
2e	Quantity of overburden generation in m3	53,764ts	66,051Ts	Due to more intercalations.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No separate proposal for development is envisaged.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit.	Between cross section limnes A-A'to D-D'.	Grid lines E299800-E300200 and N1221450-N1221300
3b	Quantity of ROM mineral production proposed	71,186Ts	71,082Ts	Nil.
3c	Recovery of sailable/usable mineral from ROM production	85%	85%	Nil.
3d	Quantity of mineral reject generation	12562Ts	12490Ts	Interstecial burden,calcarious sand stone.
3e	Grade of mineral rejects generation and threshold value declared.	CaO-<20%,SioO2->40%	CaO-<20%,SioO2->40%	Nil.
3f	Quantity of sub grade mineral generation.	Nil.	No generation.	Nil.
3g	Grade of sub grade mineral generation	No generation of sub grade mineral.	Nil.	Nil.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised .	Mechanised method.	Nil.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil.	No proposal.	Nil.
3j	Provision of drilling and blasting in mineral benches	Non conventional mechanised and deployment of rock breaker .	As proposed non conventional mechanised method.	No drilling and blasting.

3k	Provision of mining machineries in mineral benches	Rock breaker, Tipper and Excavator.	As proposed Rock breaker, Tipper and Excavator.	Nil.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6m height and width.	As proposed ,6m height and width.	Nil.
3m	Total area covered under excavation/pits	3.09hect.	3.09hect.	Nil.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.93	1:1.18	Nil.
3o	Total area put in use under different heads at the end of year	8.14hect	8.14hect.	Nil.
3p	Production of ROM mineral during the last five year period as applicable	2017-18 - 71224Ts. 2018-19 - 71194Ts. 2019-20 - 71184Ts 2020-21 - 71188Ts 2021-22 - 71186Ts	2017-18 -70420Ts. 2018-19 -71146Ts. 2019-20 -709996Ts 2020-21 -55904Ts 2021-22-71082Ts	Nil.
3q	General remarks of inspecting officers on method of mining etc.		No drilling and blasting is carried out.	Nil.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes.	Separate dumps for top soil and OB/reject .	Nil.
4b	Location of topsoil, OB and mineral reject dumps	North side of ML.	As proposed in northern side of ML.	Nil.

4c	Number of dumps within lease area and outside of lease area	2 Dumps with in lease area.	As proposed in document.	Nil.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Between grid Location:N1221 500 to N1221700 and E300000- E300200-	As proposed in approved document.	Nil.
4e	Number of active and alive dumps.	2 nos.	2 nos.	Nil.
4f	Number of dead dumps.	Nil.	Nil.	Nil.
4g	Number of dumps established.	2 nos.	2 nos.	Nil.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes.	No proposal for current year .	Nil.
4i	Length of Retaining wall or garland drain all along dumps	No proposal.	Nil.	Nil.
4j	Number of settling ponds	Nil.	Nil.	One settling pond is available.
4k	Specific comments of inspecting officer on waste dump management			Dump stablised.

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.	After complete extraction of mineral.	As proposed after complete extraction of mineral.	Nil.
5b	Area under backfilling of mined out area	0.46hect	0.59hect.	Nil.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil.	Nil.	Nil.

5d	Total area fully reclaimed and rehabilitated	0.25hect.	0.25hect.	Nil.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			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.	Report for the year 2021-22 has been submitted.
6b	Area available for rehabilitation (ha) .	0.46hect	0.46hect	Nil.
6d	No. of saplings planted during the year	Nil.	1000saplings.	With in lease area.
6e	Cumulative no .of plants	Nil.	80%	Nil.
6f	Any other method of rehabilitation	No proposal.	Nil.	Nil.
6g	Cost incurred on watch and care during the year	No details.	Nil.	Nil.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal.	Nil.	Nil.1;
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.46hect	0.59hect.	Worked out area.

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal.	Nil.	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.	No waste land available.	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)	Proposed.	Periodical Monitoring for every quarter.	Environment monitoring report submitted.All the parameters are with in limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Back filling proposed for year 2021-22 has been carriedout.	Nil.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Entire ROM.	Entire ROM.	Nil.
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.	No.	Consumption of entire ROM.	Nil.
7d	Any beneficiation process at mines	No.	No beneficiation process has been proposed.	Nil.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Satisfactory.

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed.	Top soil used for afforestation.	Nil.
8b	Concurrent use or storage of topsoil	Nil.	No generation of top soil during the year 2021-22.	Nil.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed.	Maintained as proposed.	Mineral reject.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Back filling proposed.	Back filling is in progress.	Nil.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil.	Nil.	Nil.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposal for 1000 plantation .		With in ML area.
8g	Survival rate	-	80%	Nil.
8h	Water sprinkling on roads to control airborne dust	Proposed.	Water tanker being used for dust suppression.	Nil.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation carried out along the lease boundaries.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	All the returns are submitted.	Annual return for the year 2021-22 has also received.	Nil.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mr. Xavier Honestraj-Manager(Mines) ;Mr. Uttam Singh-Geologist;Mr.S ivaputra.L-Mining Engineer	Accompanied during inspection of mine.	As per Part - I.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings- 3.10ha;Reclaimed/Rehabilitated- 0.22ha;waste disposal- 0.97ha;Other Purpose ((Green belt,safety zone & Others))- 3.46ha;Occupied by plant, buildings, residential, welfare buildings & roads- 0.02ha;Work done under progressive mine closure plan during the year- 0.37ha	Furnished under Part - I of 12.	Nil.
9d	Scrutiny of Annual return on afforestation	1000plantation .	Furnished under Part - V of 4.4.	Nil.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	12490Ts	Furnished under part V ofsec 4.	Nil.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	71082Ts.	Furnished under part VI.	Nil.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine price- 244.89/-	Furnished under part Part-VI .	Nil.
9h	Scrutiny of Annual return on fixed assets	Rs.4071694/-	Furnished under part VI.	Nil.
9k	Scrutiny of Annual return on mining machineries	BACK HOE- 0.9CUM-lunit;	Furnished in Part-V of section 5;DUMPER-25Ts- 8units;OTHER HEM MACHINERY-4.00-lunit;WATER TANKER- 5000Lts-lunit.	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

Date :

(A.S.SANJEEVA RAO)

Indian Bureau of Mines