INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-36.MDS Mine code: 38TMN38042

(i)Name of the Inspecting: M017) Matiul Islam

Officer and ID No.

: Assistant Controller Mine (ii) Designation

(iii) Accompaning mine : Mr Srihari Rao S (Mine Engineer) & Mr G S S Naidu Ada

Official with

Designation

(iv) Date of Inspection : 18/11/2020 (v) Prev.inspection date : 05/11/2019

PART-I : GENERAL INFORMATION

(a) Mine Name : KAIRULABAD-24.63.5HA

(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 : Kairulabad Taluka Ariyalur Post office : Kairulabad Pin Code : 621705

FAX No. : 04329-249217

E-mail

Phone : 04329-249240

(f) Police Station : ARIYALUR First opening date : 10/01/2017 (g)

Weekly day of rest (h) : SUN

Address for : REDDIPALAYAM CEMENT WORKS

correspondance REDDIPALAYAM PO

ARIYALUR DT.-621704.

3. (a) Lease Number :

> (b) Lease area (C) Period of lease : (d) Date of Expiry

4. Mineral worked : LIMESTONE Main 5. Name and Address of the

Lessee : ULTRATECH CEMENT LIMITED

KARUR TAMIL NADU

Phone: FAX:

Mining Engineer

Name : S SRIHARI RAO, Full Time

Qualification : B.TECH IN MINING

Appointment/ : 19/02/2018

Termination date

Geologist

Name : R BALAMURUGAN, Full Time

Qualification : MSC GEOLOGY
Appointment/ : 19/02/2018

Termination date

Manager

Name : S SRIHARI RAO
Qualification : B.TECH WITH FCC
Appointment/ : 19/02/2018

Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 31/07/2014 Plan/Scheme of Mining MP modif under 17(3) MCR 2016 18/08/2017

PAGE : 3

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|-----------|----------------------|---|
| 1a | Backlog of previous year | Nil | Nil | Total lease area explore to G-1 level |
| 1b | Exploration over lease area for geological axis 1 or 2 | | G-1 | Nil |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | Nil | Nil | Nil |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Nil | Nil | Nil |
| 1e | Balance reserve as on 01/04/20 | - | 0.111 Million Tonnes | Nil |
| 1f | General remarks of inspecting officers on geology, exploration etc | - | - | Satisfactory |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-------------------------------|---|--------------|
| 2a | Location of development w.r.t.lease area | N- 1230783/E- | N-1230606 to N- 1230783/E-294720 to E- 295020 | As per plan |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | benches | Separate benches maintained Topsoil - 1 Ore -1 | As per plan |
| 2c | Stripping ratio or ore to OB ratio | 1: 0.36 (Tonne : Tonne) | 1: 0.39 (Tonne : Tonne) | Within limit |
| 2d | Quantity of topsoil generation in m3 | 17,716 m3 | 19,155.16 m3 | Nil |
| 2e | Quantity of overburden generation in m3 | Nil | Nil | As per plan |

2f General remarks - - Satisfactory of inspecting officers on development of pit w.r.t. type of deposit etc

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|---|---|
| 3a | Number of pit proposed for production | N-1230606 to N1230783/E- 294720 to E- 295020 | N-1230606 to N1230783/E- 294720 to E-295020 | As per proposal |
| 3b | Quantity of ROM mineral production proposed | 104,957 T | 91,954.90 T | Production is less due to lockdown for COVID-19. |
| 3с | Recovery of sailable/usable mineral from ROM production | 90% of ROM | 90% of ROM | Nil |
| 3d | Quantity of mineral reject generation | 11662 Т | 7523.58 T | Rejects quantity is less due to less Production. |
| 3e | Grade of mineral rejects generation and threshold value declared. | Below 30% of CaO | Below 30% of CaO | 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 | Nil | Nil | 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-coventional mining method without drilling & blasting |

| 3k | Provision of mining machineries in mineral benches | Excavator & Tippers proposed | Excavator & Tippers used | As per proposal |
|----|--|---|--|-----------------|
| 31 | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | 3 Mtrs 1 mtr - Topsoil 2 mtrs - Limestone | 3 Mtrs 1 mtr - Topsoil 2 mtrs - Limestone | As per proposal |
| 3m | Total area covered under excavation/pits | - | 6.20 На | Nil |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1: 0.36 (Tonne: Tonne) | 1: 0.39 (Tonne : Tonne) | Nil |
| 30 | Total area put in use under different heads at the end of year | - | 11.86 На | Nil |
| 3p | Production of ROM mineral during the last five year period as applicable | 2018-19 105,116 | 2017-18 12,831.53 2018-19 105,146.28 2019-20 91,954.90 | Within limit |
| 3q | General remarks of inspecting officers on method of mining etc. | - | - | Satisfactory |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|------------|---------------------|-----------------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | - | No dumps maintained | As per plan |
| 4b | Location of topsoil, OB and mineral reject dumps | - - | 1 | As per proposal |

| 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. | Nil | Nil | Nil |
| 4i | Length of Retaining wall or garland drain all along dumps | Nil | Nil | Nil |
| 4j | Number of settling ponds | Nil | Nil | Nil |
| 4k | Specific comments of inspecting officer on waste dump management | - | - | Satisfactory |

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 carried out in the NW portion of the worked out pit. | Nil |
| 5b | Area under backfilling of mined out area | Nil | 1.166 ha | Entire waste/rejects generated during the plan period has been proposed to be backfilled |

| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | Proposed | Carried out | Nil |
|----|---|----------|-------------|--------------|
| 5d | Total area fully reclaimed and rehabilitated | Nil | 1.166 ha | Nil |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | - | _ | Satisfactory |

Progressive Mine Clousre Plan:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-------------------------|-------------------------|--|
| ба | Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2). | Yes | Submitted | Nil |
| 6b | Area available for rehabilitation (ha) . | Nil | Nil | Nil |
| 6c | afforestation done (ha). | 1 ha | 0.1 ha | Violation issued |
| 6d | No. of saplings planted during the year | 2000 nos | 200 nos | Violation issued |
| 6e | Cumulative no .of plants | 2000 nos (for the year) | 200 nos. (for the year) | Violation issued |
| 6f | Any other method of rehabilitation | Nil | Nil | Nil |
| 6g | Cost incurred on watch and care during the year | Nil | Nil | Nil |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | Nil | 1.166 ha | Entire waste/rejects generated during the plan period has been proposed to be backfilled |

| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | Nil | 1.166 ha | Entire waste/reject generated during the plan has been proposed to be backfilled |
|----|---|----------|-------------|--|
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area | Nil | Nil | Nil |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | Nil | Nil | Nil |
| 61 | 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) | Nil | Nil | Nil |
| 60 | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | Nil | Nil | Nil |
| бр | Compliance of environmental monitoring (core zone and buffer zone) | Proposed | Carried out | Complied |

6q General remarks of inspecting
officers on PMCP
compliance and
progressive
closure
operations etc.

Violation issued for inadequate afforestation

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-----------|-------------|--|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | 104,957 T | 91954.90 T | Production less due to lockdown for COVID-19 |
| 7b | Method of grade- wise mineral sorting i.e. manual or mechanical. | Nil | Nil | Nil |
| 7c | Different grade of mineral sorted out at mines. | Nil | Nil | Nil |
| 7d | Any beneficiation process at mines . | Nil | Nil | 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) | of topsoil | concurrently for | As per plan |
| 8b | Concurrent use or storage of topsoil | | Concurrent use of top soil carried out | As per proposal |

| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | No dumping proposed. | Entire top soil used concurrently. Entire waste backfilled/utlised in haul road & ramp | As proposed |
|--------|---|--|--|---|
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Utilisation of waste/rejects proposed | Utilisation of waste/rejects carried out | As proposed |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Restoration proposed to be carried out upon exhaustion of mineral | Restoration to be carried out upon exhaustion of mineral | Nil |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | 2000 nos sapling proposed for the year | 200 nos saplings planted during the year | Violation issued for inadequate afforestation |
| 8g | Survival rate | - | 60% | Nil |
| 8h | Water sprinkling on roads to control airborne dust | Proposed | Carried out | Nil |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | - | _ | Violation issued for inadequate afforestation |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------|-------------------|---------|
| 9a | Status of submission of Monthly and Annual returns | Given | Submitted in time | Nil |

| 9b | | Given in Part-I Sl. 2 | Mine Manager- Srihari Rao.S Geologist- GSS Naidu Adabala Mining Engineer - A Aravindan | Nil |
|----|--|---|---|-----|
| 9c | 5 | | Under forest Outside forest Total (i) Already exploited & abandoned by | Nil |
| | | | progressive mine closure plan | |
| 9d | Scrutiny of Annual return on afforestation | | 4.4 (i) Number of trees planted during the year (a) Within lease area 200 (b) Outside lease area 0 | Nil |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | 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 91954.900 0.000 | Nil |
|----|---|---------------------------------|--|-----|
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | • | Ex-Mine Price - Rs 178.09 | Nil |
| 9h | Scrutiny of Annual return on fixed assets | | Total 138341091 0 1365375 0 136975716 0 | Nil |
| 9k | Scrutiny of Annual return on mining machineries | Given in Part V, Sec 5/6/8/9 | Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) Used in opencast/ underground (specify) SHOVEL (HYDRAULIC) 0.900 CUM 1 Non Electrical Opencast TIPPER 10.000 CUM 6 Non Electrical Opencast WATER TANKER 4000.000 LITRE 1 Non Electrical Opencast OTHER HEM MACHINERY 20.000 1 Non Electrical Opencast | Nil |

Details of violations observed during current inspection and compliance position of violation pointed out

| Violation observed | | | Show couse position | | |
|--------------------|------------------|----------------|---------------------|-------------------------|--|
| Rule NO. | Issued on Com | mpliance on Ru | ile NO. | Issued on Compliance on | |
| MCDR17 Rule 1 | 11(1) 12/01/2021 | | | | |

Date: (Matiul Islam)

Indian Bureau of Mines