INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Chennai regional office

Mine file No: TN/PBR/LST-53.MDS Mine code: 38TMN24047

(i) Name of the Inspecting : N005) ANUPAM NANDI

Officer and ID No.

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine : S.Vaithianthan,DGM(Geology)

Official with Designation

(iv) Date of Inspection : 20/04/2015
(v) Prev.inspection date : 19/01/2014

PART-I : GENERAL INFORMATION

. (a) Mine Name : ALANTHURAIYAR KATTALAI_22

(b) Registration NO. :

(c) Category : A Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : TAMIL NADU
District : PERAMBALUR

Village : ALANTHURAIYAR KATTAL

Taluka : ARIYALUR
Post office : ARIYALUR
Pin Code : 621707

FAX No. : 04329-247726

E-mail : mayilrajan.m@chettinadcemeı

Phone : 04329-249770

(f) Police Station : Vikramangalam

(g) First opening date : 29/11/2006

(h) Weekly day of rest : SUN

2. Address for : G.M. (Mines)

correspondance CHETTINAD CEMENT CORPORATION LIMITED

Ariyalur Works. Ariyalur

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 : CHETTINAD CEMENT CORPORATION LIMITED

4TH FLOOR, RANI SEETHAI HALL BLDG 603, ANNA SALAI CHENNAI CITY TAMIL NADU Phone:044-28292727, 42149955

FAX :044 - 28291558

Owner : SP.ST.PALANIAPPAN , MD

RANISEETHAI HALL ANNASALAI CHENNAI CITY TAMIL NADU Phone: 044- 28292727 FAX : 04428291558

Agent : K. KASIRAJAN

603, Anna Salai, Chettinad cements Corp Ltd CHENNAI

CITY TAMIL NADU

Phone: 9788858200, 04329-247726

FAX : 04329-247726

6. Date of approval of Mining Plan/Scheme of Mining

: Fresh under rule 22 MCR1960 17/09/2003 Modif.of approved Mining Plan 27/12/2006 Modif.of approved Mining Plan 09/10/2009 Mining Scheme rule 12 MCDR1988 05/07/2011

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--------------------|--------------------|---------|
| 1a | Backlog of previous year | NIL | | |
| 1b | Exploration over lease area for geological axis 1 or 2 | NIL. | NIL. | 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 | 2.47 million tons. | 2.47 million tons. | Nil |
| 1f | General remarks of inspecting officers on geology, exploration etc | Nil | Nil | Nil |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-----------|-------------|---------|
| 2a | Location of development w.r.t.lease area | 1: 0.5 | 1:0.5 | NIL. |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | NIL. | NIL. | NIL. |
| 2c | Stripping ratio or ore to OB ratio | NIL | NIL | NIL |
| 2d | Quantity of topsoil generation in m3 | NIL | NIL | NIL |
| 2e | Quantity of overburden generation in m3 | NIL | NIL | NIL |

2f General remarks Nil Nil Development is of inspecting systematic and 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 | 1 | 1 | NIL |
| 3b | Quantity of ROM mineral production proposed | 500000 | 496873.3 | NIL |
| 3с | Recovery of sailable/usable mineral from ROM production | 100% | 100% | NIL |
| 3d | Quantity of mineral reject generation | NIL | NIL | NIL |
| 3e | Grade of mineral rejects generation and threshold value declared. | CaO below 35 % | CaO below 35% | NIL |
| 3f | Quantity of sub grade mineral generation. | NA | NA | NIL |
| 3g | Grade of sub grade mineral generation | NA | NA | NIL |
| 3h | Manual / Mechanised method adopted for segregating from ROM | NA | NA | NIL |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | NA | NA | NIL |
| 3ј | Provision of drilling and blasting in mineral benches | NA | NA | NIL |

| 3k | Provision of mining machineries in mineral benches | Available | Available | NIL |
|----|--|--|---|-----|
| 31 | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | 5m TO 6m | 5m TO 6m | NIL |
| 3m | Total area covered under excavation/pits | 22.26 На | 22.26 На | NIL |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1: 0.00 | 1: 0.00 | NIL |
| 30 | Total area put in use under different heads at the end of year | 19.2 на | 19.2 НА | NIL |
| 3p | Production of ROM mineral during the last five year period as applicable | 2010-11: 500000 2011-12: 900000 2012-13: 900000 2013-14: 900000 2014-15: 900000 | 2010-11: 586416 2011-12: 499949 2012-13: 499943 2013-14: 499945 2014-15: 496873 | NIL |
| 3q | General remarks of inspecting officers on method of mining etc. | out using rock | Mining is being carreied out using rock braker and transport is made by taurus tipper. | NIL |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-----------|---------------------------------------|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Nil | Top soil and OB dumped separately | Nil |
| 4b | Location of topsoil, OB and mineral reject dumps | NIL | Dumped out side ML on Western side | Nil |

| 4c | Number of dumps within lease area and outside of lease area | Nil | Within ML :NIL OutsideML:1 | Nil |
|------------|--|-----------------------|---|-----|
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Nil | Nil | Nil |
| 4e | Number of active and alive dumps. | Nil | Nil | Nil |
| 4f | Number of dead dumps. | Nil | 1 | Nil |
| 4 g | Number of dumps established. | Nil | By afforestation along slopes. | Nil |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Nil | Garland drain made along the periphery dump | 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 | Dumping is limited | No adverse effect was observed to the surrounding | NIL |

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. | NIL | NIL | NIL |
| 5b | Area under backfilling of mined out area | NIL | NIL | NIL |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | NIL | Used for afforestation | NIL |

| 5d | Total area fully reclaimed and rehabilitated | NIL | NIL | NIL |
|----|--|-----|-----|-----------------------------------|
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | NA | The mine operated as per proposal |

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). | As proposed | Submitted | NIL |
| бb | Area available for rehabilitation (ha) . | NIL | NIL | NIL |
| 6c | afforestation done (ha). | NIL | NIL | NIL |
| 6d | No. of saplings planted during the year | NIL | NIL | NIL |
| бе | Cumulative no .of plants | NIL | NIL | NIL |
| 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 | NIL | NIL |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | NIL | NIL | NIL |

| 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 |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Quarterly as per norms | Being carried out | NIL |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | NIL | Being carried out | NIL |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
| | | | | |

| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | Not required | NIL | NIL |
|----|--|--------------|---------------------------|-----|
| 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 | NA | As per approved document. | NIL |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------|--|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | NIL | Stacked temporarily out side the ML area | NIL |
| 8b | Concurrent use or storage of topsoil | NIL | Used for afforestation | NIL |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | NIL | Dumped in the periphery and out side ML temporarily | NIL |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | NIL | back filling proposed after complete exhaustion of mineral | 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) | 500 Trees per year. | Upto March 2014 around 3000 saplings planted over dump area | NIL |
| 8g | Survival rate | 90% | 90% | NIL |
| 8h | Water sprinkling on roads to control airborne dust | By water tanker | Being practiced. | NIL |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | NIL | The Mine is systematic,clean. | On the day of inspection the mine was not in operation because of transport bottle neck. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------------------|---|---------|
| 9a | Status of submission of Monthly and Annual returns | UP TO MARCH | INFORMATION WERE FOUND CORRECT | NIL |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | have been | All details have been furnished. | NIL |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | information have been | The information were found to be correct. | NIL |
| 9d | Scrutiny of Annual return on afforestation | lease area) | The information was found correct. | NIL |

| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | NIL | CORRECT | NIL |
|----|---|--|--|-----|
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | | Data given were found correct. | NIL |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | production cost were | Ex mine price & production cost were found correct. | NIL |
| 9h | Scrutiny of Annual return on fixed assets | | The Value of Fixed asset given were found satisfactory | NIL |
| 9k | Scrutiny of Annual return on mining machineries | Mining machineries details given | Mining machineries details given were found correct. | NIL |

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| Details of violations observed during current inspection and compliance position of violation pointed out | | | | | |
|---|-------------------------|---------------------|-------------------------|--|--|
| Violat | cion observed | Show couse position | | | |
| Rule NO. | Issued on Compliance on | Rule NO. | Issued on Compliance on | | |

Date : (ANUPAM NANDI)

Indian Bureau of Mines