# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### MCDR INSPECTION REPORT

### Chennai regional office

Mine file No: TN/ALR/LST-9/MDS. Mine code: 38TMN38025

(i) Name of the Inspecting: N@O1 ) N.SUBRAHAMAANYAM

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : Mr. Karuppusamy, rep of Owner,

Official with Designation

(iv) Date of Inspection : 15/10/2017

(v) Prev.inspection date :

PART-I : GENERAL INFORMATION

.. (a) Mine Name : CHINNAPATTAKADU(4.93HA)

(b) Registration NO. :

(c) Category : B Manual
(d) Type of Working : Opencast

(e) Postal address

State : TAMIL NADU
District : ARIYALUR

Village : CHINNAPATTAKADU

Taluka : ARIYALUR

Post office : CHINNAPATTAKADU

Pin Code : FAX No. : E-mail : Phone :

(f) Police Station

(g) First opening date : 01/10/2011

(h) Weekly day of rest : SUN

2. Address for : KARIAMANICKAM ROAD, S.PUDUR

correspondance SAMAYAPURAM,

TRICHY-621 112.

3. (a) Lease Number : TMN1567
(b) Lease area : 4.93
(c) Period of lease : 30

(d) Date of Expiry : 13/09/2041

4. Mineral worked : LIMESTONE Main

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5. Name and Address of the

Lessee : DHANDAPANI CEMENTS (P) LTD

69, GANAPATHY NAGAR TIRUVANAIKOIL TRICHY

TIRUCHIRAPALLI TAMIL NADU

Phone:0431-2670042 CELL 9842410040

FAX :0431-2670364,2670164,2670224 &2670045

Owner : M/S. DHANDAPANI CEMENT PVT. LTD

KARIAMANICKAM ROAD S. PUDUR-SAMAYAPURAM- TRICHY

ARIYALUR TAMIL NADU

Phone: FAX:

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 03/03/2016

Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

| Sl.No. | Item   | Proposals   | Actual work   | Remarks      |
|--------|--|---|---|--------------|
| 1a     | Backlog of previous year   | Two BH up to 10m depth from surface.                                  | Drilled 4 BH up to 10m depth from surface.                        | No comments. |
| 1b     | Exploration over lease area for geological axis 1 or 2                         | Geological axis -1.   | ML area was proved by drilling 4 BH up to 10m depth from surface. | No comments. |
| 1c     | Exploration Agencies and Expenditure in lakh rupees during the year            | RQP & his<br>Geological<br>team &<br>Lessees.                         | Rs. 16,000/   | No comments. |
| 1d     | Balance area to<br>be explored to<br>bring Geological<br>axis in 1 or 2        | Covered entire ML area up to a depth of 10m from surface.             | Covered entire ML area up to a depth of 10m from surface.         | No comments. |
| 1e     | Balance reserve<br>as on 01/04/20  | 496970 tones<br>(111), 73500<br>tones (222) &<br>258075<br>tones(221) | 496970 tones (111),<br>73500 tones (222) &<br>258075 tones(221)   | No comments. |
| 1f     | General remarks<br>of inspecting<br>officers on<br>geology,<br>exploration etc | Nil.  | Nil.  | No comments. |

# Development :

| Sl.No. | Item   | Propasals                                 | Actua  | al work      | Remarks      |
|--------|--|---|--------|--------------|--------------|
| 2a     | Location of development w.r.t.lease area                                   |   | Same a | as proposed. | No comments. |
| 2b     | Separate benches<br>in topsoil,<br>overburden and<br>minerals (Rule<br>15) | benches have made for                     | Same a | as proposed. | No comments. |
| 2c     | Stripping ratio or ore to OB ratio   | 1:0.7                                     | Same a | as proposed. | No comments  |
| 2d     | Quantity of topsoil generation in m3                                       | 15000 m3 of<br>Topsoil cum<br>overburden. | Same a | as proposed. | Nil.         |

| 2e | Quantity of overburden generation in m3  | 15000 m3 of<br>Topsoil cum<br>overburden. | Same as proposed. | No comments |
|----|--|---|-------------------|-------------|
| 2f | General remarks<br>of inspecting<br>officers on<br>development of<br>pit w.r.t. type<br>of deposit etc | Nil.                                      | nil.              | No comments |

## Exploitation:

| Sl.No. | Item  | Propasals                        | Actual work       | Remarks |
|--------|---|----------------------------------|-------------------|---------|
| 3a     | Number of pit proposed for production   | One                              | One               | Nil.    |
| 3b     | Quantity of ROM mineral production proposed   | 79600 tones                      | Same as proposed. | Nil.    |
| 3с     | Recovery of sailable/usable mineral from ROM production   | 85% of ROM production.           | Same as proposed. | Nil.    |
| 3d     | Quantity of mineral reject generation   | No mineral reject are generated. | Same as proposed. | Nil.    |
| 3e     | Grade of mineral rejects generation and threshold value declared.                               | Not applicable.                  | Nil               | Nil     |
| 3f     | Quantity of sub grade mineral generation.   | Not applicable.                  | Nil               | Nil     |
| 3g     | Grade of sub<br>grade mineral<br>generation   | Not applicable.                  | Nil               | 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. | Not applicable.                  | Nil               | Nil     |

| 3j | Provision of drilling and blasting in mineral benches  | Drilling & blasting is done by contract basis.  | Same as proposed   | Nil.   |
|----|--|---|--|--|
| 3k | Provision of mining machineries in mineral benches   | 10 ton Tipper for transportation of ROM to needy Industries.  | Same as proposed   | Nil  |
| 31 | Whether height<br>of benches in<br>overburden and<br>mineral suitable<br>for method of<br>mining proposed<br>in MP/SOM | OB bench 5m height and Width is more than the height.   | Same as proposed   | Nil.   |
| 3m | Total area<br>covered under<br>excavation/pits   |   | Same as proposed   | Nil.   |
| 3n | Ore to OB ratio for the pit/mine during the year.  | 1:0.5   | Same as proposed.  | Nil.   |
| 30 | Total area put in use under different heads at the end of year   | 4.54.3 ha   | Same as proposed.  | Nil.   |
| 3p | Production of<br>ROM mineral<br>during the last<br>five year period<br>as applicable                                   | 2012-<br>13:10125t,<br>2013-<br>14:10125t,<br>2014-<br>15:10125t,<br>2015-16:9338ts<br>2016-17:9338 t | 2012-13:888 t,<br>2013-14:20;<br>2014-15:13906t,<br>2015-16:125729ts<br>2016-17:350121 t | Deviation in production is due to flexib- ility of market demands. |
| 3q | General remarks of inspecting officers on method of mining etc.  | Nil.  | Nil.   | No comments  |

### Solid Waste Management - Dumping:

| Sl.No. | Item   | Propasals  | Actual work         | Remarks |
|--------|--|--|---------------------|---------|
| 4a     | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Separate dumps<br>made for<br>Topsoil cum<br>overburden. | s Same as proposed. | Nil.    |

| 4b         | Location of<br>topsoil, OB and<br>mineral reject<br>dumps                    | North-Eastern<br>side of ML<br>area.                        | Same as proposed.                                  | Nil.         |
|------------|--|---|--|--------------|
| 4c         | Number of dumps<br>within lease<br>area and outside<br>of lease area         | One dump with in ML area & no dump are outside of M.L.area. | Same as proposed.                                  | Nil.         |
| 4d         | Location of dumps w.r.t. ultimate pit limit (Rule 16)                        | North-Eastern<br>side of ML<br>area.                        | Same as proposed.                                  | Nil.         |
| 4e         | Number of active and alive dumps.  | Nil   | Nil  | Nil          |
| 4f         | Number of dead dumps.  | Nil   | Nil  | Nil          |
| <b>4</b> g | Number of dumps established.   | Nil   | Nil  | Nil          |
| 4h         | Whether Retaining wall or garland drain all along dumps are there.           | Not applicable.   | No retaining wall or garland drain all along dump. | Nil.         |
| 4i         | Length of<br>Retaining wall<br>or garland drain<br>all along dumps           | Not applicable  | Nil  | Nil          |
| 4j         | Number of settling ponds   | Not applicable  | Nil  | Nil          |
| 4k         | Specific<br>comments of<br>inspecting<br>officer on waste<br>dump management | Nil   | Nil  | No comments. |

## 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. | applicable, since the mine | Same as proposed. | Nil.    |
| 5b     | Area under<br>backfilling of<br>mined out area  | Nil                        | Nil               | Nil     |

| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | Topsoil is being used for afforestation purpose. | Same as proposed. | Nil. |
|----|---|--|-------------------|------|
| 5d | Total area fully reclaimed and rehabilitated  | Nil  | Nil               | Nil  |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc.                | Nil  | Nil               | Nil  |

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). | Annual report on PMCP is not submitted. | Nil.        | Nil.                  |
| 6b     | Area available for rehabilitation (ha) .                                     | 0.12ha                                  | 0.12ha      | No comments.          |
| 6c     | afforestation done (ha).   | 0.02 ha                                 | 0.02 ha     | Nil.                  |
| 6d     | No. of saplings planted during the year                                      | 25 nos                                  | 25 nos      | Nil.                  |
| бе     | Cumulative no .of plants   | 200 nos                                 | 200 nos     |                       |
|        |  |   |             | Due to water problem. |
| 6f     | Any other method of rehabilitation   | Nil.                                    | Nil.        | Nil.                  |
| бg     | 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 |

| бр | Compliance of environmental monitoring (core zone and buffer zone)  |     | Nil | Nil          |
|----|---|-----|-----|--------------|
| 6q | General remarks<br>of inspecting<br>officers on PMCP<br>compliance and<br>progressive<br>closure<br>operations etc. | Nil | Nil | No comments. |

## Mineral Conservation:

| Sl.No. | Item   | Propasals  | Actual work       | Remarks |
|--------|--|--|-------------------|---------|
| 7a     | ROM Mineral<br>dispatch or<br>grade-wise<br>sorting within<br>lease area               | ROM Mineral is<br>grade-wise<br>sorting within<br>lease area | Same as proposed. | Nil.    |
| 7b     | Method of grade-<br>wise mineral<br>sorting i.e.<br>manual or<br>mechanical.           | Manual   | Same as proposed  | 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 | Nil  | Nil               | Nil     |

### Environment:

| Sl.No. | Item  | Propasals | Actual work      | Remarks |
|--------|---|-----------|------------------|---------|
| 8a     | Separate removal and utilization of topsoil (Rule 32) | removed & | Same as proposed | Nil.    |

| 8b     | Concurrent use or storage of topsoil  | Topsoil is removed & using for plantation purpose. | Same as proposed  | Nil.                 |
|--------|---|--|-------------------|----------------------|
| 8c     | Separate dumps<br>for overburden,<br>waste rock,<br>rejects and<br>fines (Rule 33)                          | Separate dumps proposed.                           | Same as proposed  | Nil.                 |
| 8d     | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use           | Nil  | Nil               | 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)                    | Few trees<br>planted by<br>Lessee                  | Same as proposed. | Nil.                 |
| 8g     | Survival rate   | 80%  | 50%               | due to water problem |
| 8h     | Water sprinkling<br>on roads to<br>control airborne<br>dust   | Nil  | Nil               | Nil                  |
| 8i<br> | General remarks<br>of inspecting<br>officer on<br>aesthetic beauty<br>in and around<br>mines area           | Nil  | Nil               | No comments.         |

Compliance of Rule 45:

 ${\tt Item}$ 

Propasals

Actual work

Remarks

Sl.No.

| Status of   | Monthly and   | No Violations are   | Nil.   |
|---|---|---|--|
| submission of<br>Monthly and<br>Annual returns  | -   |   | NII.   |
| Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager           | Nil   | S.Subramanian MSc(Geology) Part-time mining engineer appointed.   | Nil  |
| Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Nil   | Nil   | Nil  |
| Scrutiny of<br>Annual return on<br>afforestation  | Nil   | Nil   | Nil  |
| Scrutiny of Annual return on mineral reject generation (Grade and quantity)                   | Nil   | Nil   | Nil  |
| Scrutiny of<br>Annual return on<br>ROM stock and/or<br>graded ore                             | Nil   | Nil   | Nil  |
| Scrutiny of Annual return on sale value, Ex. Mine price and production cost                   | Nil   | Nil   | Nil  |
| Scrutiny of<br>Annual return on<br>fixed assets   | Nil   | Nil   | Nil  |
| Scrutiny of Annual return on mining machineries   | Tractor mounted and Portable compressor, and Excavator.   | Same as proposed.   | During the inspection no outstanding violations are observed. Since the mine is not working more than five months, violation of Rule 28(1) of MCDR 2017 is pointed out and violation letter is issued, follow up action is being taken up. The scheme of mining and PMCP is valid up to 31/03/2021.  |
|   | Monthly and Annual returns  Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager  Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.  Scrutiny of Annual return on afforestation  Scrutiny of Annual return on mineral reject generation (Grade and quantity)  Scrutiny of Annual return on ROM stock and/or graded ore Scrutiny of Annual return on sale value, Ex. Mine price and production cost Scrutiny of Annual return on fixed assets Scrutiny of Annual return on fixed assets Scrutiny of Annual return on fixed assets Scrutiny of Annual return on mining | Monthly and Annual returns submitted.  Scrutiny of Nil Annual return for information on Mining Engineer, Geologist and Manager  Scrutiny of Nil Annual return on land use pattern for area under pits, reclaimed area, dumps etc.  Scrutiny of Nil Annual return on afforestation  Scrutiny of Nil Annual return on mineral reject generation (Grade and quantity)  Scrutiny of Nil Annual return on ROM stock and/or graded ore  Scrutiny of Nil Annual return on sale value, Ex. Mine price and production cost  Scrutiny of Nil Annual return on fixed assets  Scrutiny of Nil Annual return on mounted and production cost  Scrutiny of Tractor Annual return on mounted and mining machineries compressor, | Monthly and Annual returns submitted.  Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager  Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.  Scrutiny of Annual return on afforestation  Scrutiny of Annual return on mineral reject generation (Grade and quantity)  Scrutiny of Annual return on sale value, Ex. Mine price and production cost  Scrutiny of Annual return on fixed assets  Scrutiny of Annual return on Sale value, Ex. Mine price and production cost  Scrutiny of Annual return on fixed assets  Scrutiny of Annual return on sale value, Ex. Mine price and production cost  Scrutiny of Annual return on fixed assets  Scrutiny of Annual return on mounted and mining Portable compressor, |

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

| Violation         | n observed              | Show       | couse position          |
|-------------------|-------------------------|------------|-------------------------|
| Rule NO.          | Issued on Compliance of | n Rule NO. | Issued on Compliance on |
| MCDR17 Rule 28(1) | 13/11/2017              |            |                         |

Date :

(N.SUBRAHAMAANYAM)

Indian Bureau of Mines