

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

MCDR INSPECTION REPORT

Chennai regional office

Mine file No : TN/PBR/LST-47.MDS

Mine code : 38TMN24046

- (i) Name of the Inspecting : **T003**) **S.THIRUNAVUKKARASU**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri.M.L Balashanugam Shr. M.M.Ramesh
Official with
Designation
- (iv) Date of Inspection : 18/08/2019
- (v) Prev.inspection date : 28/02/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **UNJINI_20.965HA**
- (b) **Registration NO.** : **IBM/4681/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **TAMIL NADU**
- District : **PERAMBALUR**
- Village :
- Taluka :
- Post office :
- Pin Code :
- FAX No. : **NIL**
- E-mail : **arymines@chettinadcement.co**
- Phone : **04329250011**
- (f) **Police Station** : **Sendurai**
- (g) **First opening date** : **20/09/2005**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **Shri. G. Raghunath Singh, Vice President**
Ariyalur Road, Trichy, Kilapaluvur.
621707, Tamil nadu
3. (a) **Lease Number** : **TMN0985**
- (b) **Lease area** : **20.96**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **26/02/2026**
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 : Mr. T. Venkatesan, Nominated Owner
 Dalmia Cement (Bharat)
 Limited Fagun Mansion, 4th
 floor, 26 C in C Road,
 Chennai CHENNAI CITY TAMIL
 NADU
 Phone: 044 - 28279933
 FAX : 044 - 28276508

Agent : R. A. KRISHNAKUMAR
 Executive Director Dalmia
 cements(B) Ltd.,
 Dalmiapuram TIRUCHIRAPALLI
 TAMIL NADU
 Phone: 04329-294632
 FAX : 04329-235111

Mining Engineer

Name : GANESHA BOOPATHY.P,Full Time
 Qualification : DME, MINING,
 Appointment/ : 02/07/2012
 Termination date

Geologist

Name : N BALAKANAN,Full Time
 Qualification : M.SE GEOLOGY
 Appointment/ : 16/10/2013
 Termination date

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|-------------------------------|---|--------------------------------|------------|
| 6. Date of approval of Mining | : | Fresh under rule 22 MCR1960 | 12/01/2004 |
| Plan/Scheme of Mining | : | Modif.of approved Mining Plan | 05/06/2009 |
| | : | Mining Scheme rule 12 MCDR1988 | 05/07/2011 |
| | : | Mining Scheme rule 12 MCDR1988 | 24/02/2016 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|-------------------|-------------------|--|
| 1a | Backlog of previous year | NIL | NA | Mine fully Explored in G1 Level. |
| 1b | Exploration over lease area for geological axis 1 or 2 | NIL | NA | Mine fully Explored in G1 Level. |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | NIL | Not applicable | Not applicable, Mine fully Explored . |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | NIL | NA | All area explored |
| 1e | Balance reserve as on 01/04/20 | 0.146Million Tons | 0.146Million Tons | nil |
| 1f | General remarks of inspecting officers on geology, exploration etc | ---- | --- | Geology, exploration is found satisfactory |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|---------------|-----------------------------|--|
| 2a | Location of development w.r.t.lease area | NE of ML area | As per the proposal | NIL |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | NIL | No proposal during the year | Separate benches in topsoil, overburden are being followed |
| 2c | Stripping ratio or ore to OB ratio | 1:0.17 | 1:0.14 | Slight change in the quantity of development. |
| 2d | Quantity of topsoil generation in m3 | NIL | Not available | No proposal for 2018-19 |
| 2e | Quantity of overburden generation in m3 | 25299m3 | 24090m3 | NIL |

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

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------|--------------------------------------|--|
| 3a | Number of pit proposed for production | one | one | |
| 3b | Quantity of ROM mineral production proposed | 243984 T | 243976 Ts | within the limit |
| 3c | Recovery of sailable/usable mineral from ROM production | 100% | 100% | NIL |
| 3d | Quantity of mineral reject generation | NIL | Not applicable | No mineral reject generation |
| 3e | Grade of mineral rejects generation and threshold value declared. | NIL | Not applicable | No mineral reject generation |
| 3f | Quantity of sub grade mineral generation. | NIL | Not applicable | No sub-grade mineral generation |
| 3g | Grade of sub grade mineral generation | NIL | NA | No quantity of sub-grade mineral generation |
| 3h | Manual / Mechanised method adopted for segregating from ROM | NIL | Total Mineral transported to factory | NIL |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | NIL | Not applicable | No beneficiation study proposed & carried out for sub-grade mineral and reject |
| 3j | Provision of drilling and blasting in mineral benches | NIL | Not applicable | Non-Conventional Mining by Rock |

| | | | | |
|----|--|-----------------------|-----------------------|--|
| 3k | Provision of mining machineries in mineral benches | Proposed | Provided | Non-Conventional Mining by Rock |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Height-6M Width-6M | Height-6M Width-6M | It is maintained |
| 3m | Total area covered under excavation/pits | 10.74 Ha | 10.74 Ha | NIL |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:0.17 | 1:0.14 | nil |
| 3o | Total area put in use under different heads at the end of year | 18.15Ha | 18.15Ha | nil |
| 3p | Production of ROM mineral during the last five year period as applicable | ---- | ----- | method of mining is found satisfactory |
| 3q | General remarks of inspecting officers on method of mining etc. | ---- | --- | method of mining is found satisfactory |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|----------------------------------|----------------------------------|---------------------------------------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | NIL | Not applicable | No topsoil generation during the year |
| 4b | Location of topsoil, OB and mineral reject dumps | NIL | Not applicable | Backfilling only |
| 4c | Number of dumps within lease area and outside of lease area | Within ML : 2 Outside ML: Nil | Within ML : 2 Outside ML: Nil | NIL |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | NIL | nA | Backfilling only |

| | | | | |
|----|--|--|--|---|
| 4e | Number of active and alive dumps. | Backfilling progressive in wester side of ML | Backfilling progressive in wester side of ML | AS PER THE PROPOSAL |
| 4f | Number of dead dumps. | 1 | 1 | During the year dumps |
| 4g | Number of dumps established. | 1 | 1 | Stabilized |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | NIL | Garland drain made along the periphery dump | ---- |
| 4i | Length of Retaining wall or garland drain all along dumps | NIL | Garland drainage length 170 m | ---- |
| 4j | Number of settling ponds | NIL; | NA | Not proposed for the settling pond |
| 4k | Specific comments of inspecting officer on waste dump management | ---- | ---- | waste dump management is found 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. | 0.5 Ha | 0.5 Ha | As per the proposal |
| 5b | Area under backfilling of mined out area | 0.5 Ha | 0.5 Ha | --- |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | NIL | Not applicable | NIL |
| 5d | Total area fully reclaimed and rehabilitated | ----- | ----- | backfilling, reclamation is under progressive |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | | |

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). | Submitted | For the 18-19 Annual returns on PMCP submitted | Submitted in time |
| 6b | Area available for rehabilitation (ha) . | NIL | NA | NA |
| 6c | afforestation done (ha). | 0.5Ha | 0.5Ha | NIL |
| 6d | No. of saplings planted during the year | 1000 | 1000 | Verified |
| 6e | Cumulative no .of plants | 4000 | 6550 | NIL |
| 6f | Any other method of rehabilitation | NIL | NA | nother specific method of rehabilitation |
| 6g | Cost incurred on watch and care during the year | 37500Lakhs | 37500Lakhs | NIL |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | proposed | Backfilling prograssive | NIL |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | NIL | Not applicable | NIL |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area | NIL | NA | NIL |

| | | | | |
|----|--|------------------------|------------------------|--|
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | NIL | NA | NIL |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | NIL | NA | NIL |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | NIL | NA | No waste land within the lease area. |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | NA | NIL | No waste land within the lease area. |
| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | NA | NIL | No waste land within the lease area. |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Periodically Monitored | Periodically Monitored | ---- |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | ---- | ---- | PMCP compliance & progressive closure operations is found satisfactory |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-----------|-------------|--|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | NIL | NA | The excavated ore has been sent directly to factory. |

| | | | | |
|----|--|------------|------------|--|
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | No sorting | No sorting | No sorting |
| 7c | Different grade of mineral sorted out at mines. | NIL | NA | No grade of mineral sorted out at mines |
| 7d | Any beneficiation process at mines | NIL | NIL | No beneficiation process at mines |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | ----- | ----- | Mineral conservation & beneficiation is found satisfactory |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------------|-------------------------------------|--|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No proposal | Not applicable | During initial stage already removed and concurrently used for backfilling |
| 8b | Concurrent use or storage of topsoil | NIL | NA | No generation of top soil |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | NIL | NA | No generation of top soil |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | For backfilling | For backfilling as per the proposal | nil |

| | | | | |
|----|---|------------------|---|---|
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | For Backfilling | In progress | as per the proposal |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | 1000 sapling | 1000 sapling | ----- |
| 8g | Survival rate | 80% | 80% | NIL |
| 8h | Water sprinkling on roads to control airborne dust | Water sprinkling | Water sprinkling on haul roads to control airborne dust | NIL |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | ----- | ----- | aesthetic beauty in and around mines area is found satisfactory |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---------------------------------------|---|---------------------------------------|
| 9a | Status of submission of Monthly and Annual returns | submitted | submitted | A.R. submitted for 2018-19 examined |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Given Part-II employment & wages(i) | Mining Engineer- Shri.P.Ganesa Boopathi Geologist- Shri. N.Balakannan, | Found as per the record submit to IBM |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Given in Part-I para 11 &12 | As per the proposal | nil |
| 9d | Scrutiny of Annual return on afforestation | Given in Part-V para-4.4 1000 Sapling | 1000 Sapling | Nil |

| | | | | |
|----|---|--|-----------------------------------|-----|
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Details given in Part-V para 4.2 Mineral reject-Nil | NIL | NIL |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Details given in Part-VI achieved 51000 tones of Limestone | achieved 51000 tones of Limestone | NIL |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Details given in Part-VI Para -4. rs-229 | Rs.229 | nil |
| 9h | Scrutiny of Annual return on fixed assets | Given in Part-III in Royalty and rent. fixed assets Rs-4560000/- | fixed assets Rs-4560000/- | nil |
| 9k | Scrutiny of Annual return on mining machineries | Part-V Para 5.0 | As per the proposal | NIL |

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

| Violation observed | | Show cause position | |
|--------------------|-------------------------|---------------------|-------------------------|
| Rule NO. | Issued on Compliance on | Rule NO. | Issued on Compliance on |

Date :

(S. THIRUNAVUKKARASU)

Indian Bureau of Mines