# REPORT ON CHECK INSPECTION OF PUDUPALAYAM NORTH LIMESTONE MINE OF M/s. The RAMCO CEMENTS LIMITED, GOVINDAPURAM WORKS IN ARIYALUR DISTRICT OF TAMILNAD STATE [PREPARED IN THE FORMAT, PRESCRIBED VIDE CCOM'S LETTER NO. 11013/35/MP/MISC/89-CCOM (Vol. III)]

Name and designation of inspecting officer : Shri.G.C.SETHI, Regional Controller of Mines

Date of Inspection : 13/02/2023

1. General information of the mine

(i) Name of the mine : Pudupalayam North Limestone Mine (38TMN38010)

(ii) Owner : Shri.P.R. Venketrama Raja,

(iii) Nominated owner : -

(iv) Mining Engineer : Shri.E.Thangakumar

(v) Agent : Shri. Madhusudan Kulkarni

(vi) Mine Manager : Shri. A.Rambabu,

(vii) Lease area : 26.07.5 Hectares

(viii) Location : Pudupalayam & Periyanagalur Villages,

Ariyalur Taluk & District

(ix) Lease period : 20 years

(xiv) Production (Year 2021-22)

(x) Date of Expiry : 23.03.2029

(xi) Date of approval of Mining Plan : Mining plan vide letter no. TN/PBR/MP/LST-1653-SZ

dated 07.08.2006

(xii) Date of approval of Review of Mining Plan : Modification to the approved Review of Mining Plan

vide Letter No: TN/ALR/LST/MMP-2067.MDS dated

18.08.2020

(xiii) Period of Mining Plan/ Review of Mining Plan : MMP for the Period – 2020-21 to 2023-24

| Year    | Proposed in Tonnes | Actual in Tonnes |  |
|---------|--------------------|------------------|--|
| 2021-22 | 99980              | 99959.980        |  |

### 2. Brief description of the mine:

#### Geology of the Area:

The Limestone deposit in the area granted under mining lease forms a part of Kallankurichi limestone formations of Middle Ariyalur stage of Cretaceous beds in South India. These deposits are geologically called the Maestrichian Limestones. This limestone bed is sandwiched between two sandstone beds. It can be traced continuously for more than 9 K.ms in North - South direction starting from Srinivasapuram in the North through Kairulabad, Ameenabad, Periyanagalur, Hasthinapuram, Kattupiringium, Pudupaalyam, Nerunchikorai, vilipiringium, and further South up to Idaiathankudi on the banks of Marudaiyar river.

The area granted under Mining lease comprises the Ariyalur Group of Kallankurichi formation. The contact of Ariyalur Group with the underlying Trichinopoly beds is mostly concealed by Recent Alluvium. A critical examination shows that the regional dips of the Ariyalur formation is 3 to 5 degrees towards north-east. The fossiliferous Ariyalur beds were laid down in the regressional sea. The Ariyalur carbonate rock hosts forums, miliotids, pelicypods, gastropods, echnoides, ammonites, nautiloids etc. Ariyalur Group of rocks are more compact and stratified as contrasted to the Niniyurs. Moreover, the Ariyalur Group of rocks, especially the Kallankurichi Formation (shelly limestone, arenaceous limestone and ferrugenous limestones) sprawl over larger extent and width.

Longitude & Latitude (N) 11<sup>0</sup> 06' 07''- 11<sup>0</sup> 06' 27''
Longitude (E) 79<sup>0</sup> 08' 52''- 79<sup>0</sup> 08' 57''

#### Order of succession:-

Top soil - 0 to 2.00 Meters

Overburden - 2.00 to 18.00 Meters

Buff shell limestone - 18.00 to 46.00 Meters

(3) Problems associated with mining of the deposit etc. : Nil

(b) Description on deployment of mining machinery

| Sl. | Machineries                        | Capacity   | Number   | In  | Idle | Percentage of | Brief description     | Remarks            |
|-----|------------------------------------|--|----------|-----|------|---------------|-----------------------|--------------------|
| No. | deployed                           |  | of units | use |      | utilization   |                       |                    |
| 1   | 2                                  | 3  | 4        | 5   | 6    | 7             | 8                     | 9                  |
| 1   | Dipper Shovels                     | -  | -        | -   | -    | -             | -                     | -                  |
| 2   | Back Hoes                          | 1.20 Cu.M  | 1        | 1   | -    | 100           | Tata Hitachi          | Excavator          |
| 3   | Front End Loader                   | -  | -        | -   | -    | -             | -                     | -                  |
| 4   | Water Sprinkler/<br>Water Tanker   | 10000 Litre  | 1        | 1   | -    | 100           | Ashok Leyland         | Water<br>Tanker    |
| 5   | Dumpers/Tippers                    | 10 Cu.M  | 10       | 10  | -    | 100           | Tarus                 | Tippers            |
| 6   | Drills / Blast<br>Holes            | No Drilling & Blasting as the mine is proposed under Non- Conventional Method of Operation |          |     |      |               |                       |                    |
| 7   | <del>Bull Dozers</del> /<br>Ripper | -  | -        | -   | -    | -             | -                     | -                  |
| 7   | Dozer/XCentric<br>Ripper           | 1.80 Cu.M  | 1        | 1   | -    | 100           | Tata Hitachi<br>XR-40 | Xcentric<br>Ripper |
| 8   | Motor Graders                      | -  | -        | -   | -    | -             | -                     | -                  |
| 9   | Crushers                           | -  | -        | -   | -    | -             | -                     | -                  |
| -   |                                    | -  | -        | -   | -    | -             | -                     | -                  |
| 10  | Cranes                             | -  | -        | -   | -    | -             | -                     | -                  |
|     |                                    | -  | -        | -   | -    | -             | -                     | -                  |
| 11  | Air Compressor                     | -  | -        | -   | -    | -             | -                     | -                  |

## 3. Implementation of Mining Plan or Review of Mining Plan:

| Sl.<br>No | Proposal in the approved MMP for the period 2021-22 | Observations regarding in approved Mining P | Remarks/ Reason<br>for deviation |         |  |  |
|-----------|---|---|----------------------------------|---------|--|--|
| 1         | 2   |   | 4                                |         |  |  |
| (1)       | CONSERVATION  |   |                                  |         |  |  |
|           |   | Proposal                                    | Actual                           | 2021-22 |  |  |
| (a)       | Exploration   | Nil   | Nil                              | Nil     |  |  |
| (b)       | Utilization of sub-<br>grade mineral                | Nil   | Nil                              | Nil     |  |  |
| (c)       | Any other proposal for monitoring                   | Nil   | Nil                              | Nil     |  |  |
| (2)       | SCIENTIFIC MINI                                     | NG  |                                  |         |  |  |
| (a)       | Mine Development<br>and method of<br>mining         | 99980 tons                                  | 99959 tons                       | Nil     |  |  |
| (b)       | Handling of Waste/<br>sub-grade material            | Nil   | Nil                              | Nil     |  |  |
| (c)       | Area reclamation & restoration                      | Nil   | Nil                              | Nil     |  |  |
| (d)       | Any other proposal for monitoring                   | Nil Nil                                     |                                  | Nil     |  |  |
| (3)       | PROTECTION OF                                       | ENVIRONMENT                                 |                                  |         |  |  |
| (a)       | Afforestation                                       | 500 nos of saplings                         | 2000 Nos of saplings.            | Nil     |  |  |
| (b)       | Quality of air                                      | Air Quality standards within t              | Nil                              |         |  |  |
| (c)       | Quality of Water                                    | Water Quality standards within              | Nil                              |         |  |  |
| (d)       | Noise level   | Noise level standards within t              |                                  |         |  |  |
| (e)       | Vibration   |   |                                  |         |  |  |
| (f)       | Any other proposal for monitoring.                  |   |                                  |         |  |  |

## 4. History of Violations after approval of Mining Plan or Scheme of Mining:

| SL<br>No. | Date of<br>Inspection | Name of inspecting officer | Violations of MCDR,<br>1988 observed and<br>pointed out | Rectification of violations | Remarks |
|-----------|-----------------------|----------------------------|---|-----------------------------|---------|
| 1         | 2                     | 3                          | 4   | 5                           | 6       |
| 1.        | 17/08/2021            | Shri.S.Thirunavukkarasu,   | Regarding less  | Complied on 05.10.2021      |         |
|           |                       | Sr.Mining Geologist        | production  |                             |         |

5. Socio-Economic Development Plan:

| Sl.<br>No. | Proposed Action Plan towards socio-Economic Development | Expenditure proposed (In Rs. Lakh) | Expenditure<br>Incurred<br>(In Rs. Lakh) | Remarks   |
|------------|---|------------------------------------|--|---|
| 1          | 2   | 3                                  | 4  | 5   |
| (1)        | General Development in the area                         |                                    |  |   |
|            | (i) Housing   |                                    |  |   |
|            | (ii)Water Supply  | 0.10                               | 0.16                                     | Strengthened the Nalla Thaneer Eri  |
|            | (iii) Sanitation  | 2.10                               | 2.48                                     | Promoted Hygiene and Sanitation, public health to the Local Community.  |
|            | (iv) Health safety and Medical Facilities               | 0.30                               | 0.33                                     | Provided Oxygen Storage Tank to<br>Government Hospital  |
| (2)        | Education and Training                                  | 3.90                               | 3.87                                     | construction of Flooring, Fencing and Leveling of Ground in Government Schools & Promoted skill development to the local community  |
| (3)        | Employment to local inhabitants                         |                                    |  |   |
| (4)        | Public Transportation and communication                 |                                    |  |   |
| (5)        | Recreation and other sports activities                  | 0.20                               | 0.24                                     | Sponsored Gift for the sports activities during Pongal festival for the local communities and supported to the local Temples etc.,  |
| (6)        | Expenditure for environment management                  | -                                  | -  | -   |
| (7)        | Other   | 6.40                               | 6.83                                     | Chain link fencing and MS gate in and around Pudhupalayam panchayath office under CSR Activity & Renovated DSP Camp office and provided safety barricade to Police Department |
|            | Total   | 13.00                              | 13.92                                    | 1   |

6. Observations/ remarks on the earlier inspection carried out by sub-ordinate officer(s) with specific thrust on systematic and scientific mining, mineral conservation and environmental protection and other sensitive/important aspects pertaining to the mine area or surroundings (CRZ/ Western Ghats/ Wildlife Sanctuaries etc.):

- 1) Name of inspecting officer: Shri. A.S.Sanjeeva Rao, JMG
- 2) Date and Type of inspection: MCDR & Star Rating Inspection 13.12.2022
- 3) Observations/ Remarks w.r.t. the inspection carried out by the sub-ordinate officer(s) and shortfalls in the inspection report, if any, thereof: Nil

Name of the Officer: G.C.Sethi Designation: Regional Controller of Mines