

**REPORT ON CHECK INSPECTION OF KARUPPUR KEELAPALUR LIMESTONE MINE OF M/S CHETTINAD CEMENT CORPORATION PRIVATE LTD IN ARIYALUR DISTRICT OF TAMILNADU 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 : G.C.SETHI, Regional Controller of Mines

Date of Inspection : 14.05.2023

**1. General information of the mine**

(i) Name of the mine : Karuppur Keelapalur Limestone Mine  
(ii) Owner : M/s Chettinad Cement Corporation Pvt Ltd  
(iii) Nominated owner : Shri. Mohan Muthukaruppan,  
M(iv) Mining Engineer : Shri.G.Raghavendra  
(v) Agent : ShriR.P.Muthiah  
(vi) Mine Manager : Shri.R.Ravikumar  
(vii) Lease area : 26.145 Ha  
(viii) Location : Latitude:11° 03' 48.6017" N to 11° 03' 28.9362" N  
Longitude 79°04'25.0955" E to 79°04'59.0453" E  
(ix) Lease period : 09.01.2017 to 08.01.2067  
(x) Date of Expiry : 08.01.2067  
(xi) Date of approval of Mining Plan : 08.07.2013  
(xii) Date of approval of Review of Mining Plan : 10/12/2020  
(xiii) Period of Mining Plan/ Review of Mining Plan : 2021-22 to 2025-26  
(xiv) Production (Year 2022-23) : 2022-23:  
LSt – 117361.26Ts  
Marl – 25890.66Ts

**2. Brief description of the mine:**

(a) A brief description of the mine covering location, geology, problems associated with mining of the deposit etc.

(1) Location:

Name of the Mine	Karuppur Keelapalur Limestone Mine.
GO & Date of Grant of Lease	G.O.Ms.133 industries (MMA2) department dated 17.10.2016 over an extent of 26.14.5 Hectares in Karuppur & Keelapalur villages, Ariyalur Taluk & District. Lease period: 09.01.2017 to 08.01.2067
Name of the Lease Holder	M/s. Chettinad Cement Corporation Pvt Ltd
Postal address	M/s. Chettinad Cement Corporation Pvt Ltd, Rani Seethai hall building, 603, Anna Salai, Chennai – 600 006
Nearest Town	Ariyalur
Nearest Railway station	Kailagam
Nearest police station	Keezhapalur
Nearest Airport	Trichy

Latitude:11° 03' 48.6017" N to 11° 03' 28.9362" N & Longitude 79°04'25.0955" E to 79°04'59.0453" E

**(2) Geology:**

The Karuppur Keelapalur limestone deposit falls in the Sillakudi formation of Ariyalur group of rocks of Cretaceous age. This limestone deposit, in the area under reference, forms a part of Sillakudi formation of Ariyalur stage belonging to upper Cretaceous. These deposits are geologically called the campanian (83.5 – 70.6 MY). The formation is generally flat striking northeast –south west and the regional dip of beds vary from 2° to 8° towards East and NE. Sillakudi formation consists of Upper member which is sandstone dominant and Lower member limestone / calc. Sandstone dominant. The limestone are inter bedded with marl of varying thickness ranging from few centimeters to few meters.

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

- 1) Variable thickness in Limestone
- 2) Quality constraint (High iron and low Lime.)

(b) Description on deployment of mining machinery

Sl. No.	Machineries deployed	Capacity	Number of units	In use	Idle	Percentage of utilization	Brief description	Remarks
1	2	3	4	5	6	7	8	9
1	Dozer	D10	1	1	-	100%	-	-
2	Back Hoes	0.9 cum	1	1	-	100%	Rock Breakers are used & utilized for loading	
3	Front End Loader	-	1	1	-	100%	-	-
4	Water Sprinkler	4000 lt	1	1	-	100%	-	-
5	Tippers	25mt	8	8		100%	-	-

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

Sl.No.	Proposal in the approved Review of Mining Plan (period from 2021-22 to 2025-26)	Observations regarding implementation of proposals given in approved Modified Mining Plan.		Remarks/ Reason for deviation
1	2	3		4
<b>(1)</b>	<b>CONSERVATION OF MINERALS</b>			
		<b>Proposal</b>	<b>Actual</b>	<b>2021-22</b>
(a)	Exploration	Nil	Nil	Nil
(b)	Utilization of sub-grade mineral	Nil	Nil	Nil
(c)	Any other proposal for monitoring	Nil	Nil	Nil
<b>(2)</b>	<b>SCIENTIFIC MINING</b>			
(a)	Mine Development and method of mining	Open cast Mechanized Mines –Non Conventional method of mining by using Rock breaker		Nil
(b)	Handling of Waste/ sub-grade material	Topsoil Proposal – 81262 tons	Topsoil achieved – 81045 tons	Nil
(c)	Area reclamation & restoration	1.26 hect	1.15 hect	Violation issued
(d)	Any other proposal for monitoring	Nil	Nil	Nil
<b>(3)</b>	<b>PROTECTION OF ENVIRONMENT</b>			
(a)	Afforestation	5250 nos of saplings	5400 Nos of saplings.	Nil
(b)	Quality of air	Air Quality standards within the limits.		Nil
(c)	Quality of Water	Water Quality standards within the limits.		Nil
(d)	Noise level	Noise level standards within the limits.		Nil
(e)	Vibration	-		Nil
(f)	Any other proposal for monitoring.	Nil		Nil

**4. History of Violations after approval of Mining Plan or Scheme of Mining: 2021-22 to 2025-26**

SL No.	Date of Inspection	Name of inspecting officer	Violations of MCDR, 1988 observed and pointed out	Rectification of violations	Remarks
1	2	3	4	5	6
1	05.09.2022	Shri . Mathiul Islam, ACOM	Not achieved the proposed quantity & Drone data	Complied on 09.11.2022	-

**5. Socio-Economic Development Plan:**

Sl. No.	Proposed Action Plan towards socio-Economic Development	Expenditure proposed ( In Rs. Lakh )	Expenditure Incurred ( In Rs. Lakh)	Remarks
1	2	3	4	5
(1)	General Development in the area	-	-	
	(i) Housing	-	-	
	(ii) Water Supply	-	2.0	
	(iii) Sanitation	-	0.5	
	(iv) Health safety and Medical Facilities	-	1.0	
(2)	Education and Training	-	-	
(3)	Employment to local inhabitants	-	1.25	
(4)	Public Transportation and communication	-	-	
(5)	Recreation and other sports activities	-	0.1	
(6)	Expenditure for environment management	-	0.5	
(7)	Other	-	0	
<b>Total</b>		<b>-</b>	<b>5.35</b>	

**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. Mathiul Islam, ACOM

2) Date and Type of inspection: MCDR & Star Rating Inspection – 05.09.2022

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:

The violation has been pointed out for the deviation in backfilling proposal for the year 2021-22 under Rule 11(1) of MCDR 2017 on 29.05.2023.

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