

29th May 2023

CCCPL/TN/PTK /EC Compliance/ Oct'2022 - Mar'2023/22-23/

The Joint Director
Ministry of Environment, Forest & Climate Change
Government of India
IRO, 1st Floor, Additional Office Block for GPOA,
Shastri Bhawan, Haddows Road, Nungambakkam
Chennai - 600 006.

Sir,

Sub: Submission of Environmental Clearance (EC) Compliance Report (Oct'2022 - Mar'2023)
Chettinad Cement Corporation Private Limited - Periyathirukonam Limestone Mine
(32.295 ha) of Limestone & Marl at Periyathirukonam Villages, Ariyalur Taluk & District,
Tamilnadu

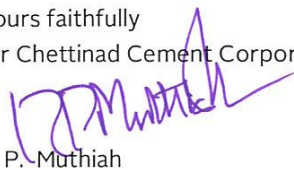
Ref: Environmental Clearance granted by SEIAA-TN/F No.-6283/ALR/1(a)/EC - 4020/2019
dt. 19.08.2019

We submit herewith the Six Monthly Environmental Clearance Compliance Report pertaining to
Periyathirukonam Limestone Mine (32.295 ha) at Periyathirukonam Villages, Ariyalur Taluk & District,
Tamilnadu, for the period from Oct'2022 - Mar'2023.

- a. Environmental Clearance Compliance Report Annexure 1
- b. Environmental Monitoring Report comprising of
 - i. Ambient Air Quality Monitoring - Consolidated Report - Annexure 2
 - ii. Noise Level Monitoring - Consolidated Report - Annexure 3
 - iii. Ground Water Quality Monitoring Report- Annexure 4
 - iv. Environment & Safety Management Cell Committee - Annexure 5
 - v. TNPCB AAQ survey report - Annexure 6
 - vi. Ban Plastic Awareness - Annexure 7

Kindly Acknowledge the receipt of the same.

Yours faithfully
for Chettinad Cement Corporation Private Limited


R. P. Muthiah
Vice President (Works)

Copy to ;
Zonal Office, CPCB, Bangalore
Member Secretary, TNPCB, Chennai.
JCCCL, TNPCB, Trichy
DEE, TNPCB, Ariyalur

Chettinad Cement Corporation Private Limited
Ariyalur - Trichy Road
Keelapalur -621707.Ariyalur Dist.

Periyathirukonam Limestone Mines
(Area: 32.295 hectares)

Environmental Clearance (EC) Compliance Report (October-22 to March-23)

Environmental Clearance: Lr.No.SEIAA-TN/F No.-6283/ALR/1(a)/EC - 4020/2019
dt. 19.08.2019

Conditions for Pre-Construction phase:

S.No.	Pre-Construction phase	Compliance status
1	Any appeal against this environmental clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Complied. No Appeal is lying with National Green Tribunal against this Environmental Clearance.
2	Consent for Establishment" shall be obtained from the Tamil Nadu Pollution Control Board and a copy shall be submitted to the SEIAA, Tamil Nadu before taking up any construction activity at the site.	Complied. We have obtained Consent for Establishment (Air & Water) from TNPCB vide Ref. No: Air- 1901228088887, dated : 18.10.19 and Water- 1901128088887, dated 18.10.19, A Copy of CTE (Air & Water) was submitted to SEIAA, Tamil Nadu before taken any construction activity at the site.
3	"Consent to Operate" should be obtained from the Tamil Nadu pollution Control Board before the start of the operation of the project and copy shall be submitted to the SEIAA TN.	Complied. We have obtained Consent to Operate -CTO (Air & Water) from TNPCB vide ref. No: Air: 2004229421491, dated 28.01.2020 and Water: 2004129421491, dated 28.01.2020 A Copy of CTO (Air & Water) was submitted to SEIAA, Tamil Nadu.
4	Safety distance of 50m shall be provided from the vari course to the mining lease boundary and this should be monitored continuously by the District Level Task Force.	Complied. The necessary safety distance of 50 meter is being provided from the vari course to the mining lease boundary.
5	The proponent shall carry out mining activities for the 5 years only for 1874401 Tonnes of Limestone &	Complied. Mining activities will be carried out for 5



	325371 Tonnes of Marl as per the mining plan furnished by the proponent. The EC is valid only if the mining plan (including Progressive Mine Closure plan) is approved by the Indian Bureau of Mines or any officers nominated on his behalf.	<p>years only for 1874401 tonnes of Limestone & 325371 Tonnes of Marl.</p> <p>As per the Mining plan, Mining operations are carried out. The mining plan was approved by IBM vide letter no. TN/ALR/MP/LST – 2063 dated 15.11.2019</p> <table><tr><th colspan="5">As per Mining Plan Proposal [Ton]</th><th colspan="3">Actual Quantity</th></tr><tr><th>S. No.</th><th>Year</th><th>Lime Stone</th><th>Marl</th><th>TOTAL</th><th>Lime Stone</th><th>Marl</th><th>TOTAL</th></tr><tr><td>1</td><td>2019-20</td><td>190679</td><td>10038</td><td>200717</td><td>61100.32</td><td>0</td><td>61100.32</td></tr><tr><td>2</td><td>2020-21</td><td>480541</td><td>19814</td><td>500355</td><td>496571.98</td><td>0</td><td>496555</td></tr><tr><td>3</td><td>2021-22</td><td>425034</td><td>74961</td><td>499995</td><td>413918.3</td><td>12452.74</td><td>426371.04</td></tr><tr><td>4</td><td>2022-23</td><td>404741</td><td>95165</td><td>499906</td><td>287765.98</td><td>67067.18</td><td>354833.16</td></tr><tr><td>5</td><td>2022-24</td><td>478094</td><td>22170</td><td>500264</td><td>-</td><td>-</td><td>-</td></tr></table>	As per Mining Plan Proposal [Ton]					Actual Quantity			S. No.	Year	Lime Stone	Marl	TOTAL	Lime Stone	Marl	TOTAL	1	2019-20	190679	10038	200717	61100.32	0	61100.32	2	2020-21	480541	19814	500355	496571.98	0	496555	3	2021-22	425034	74961	499995	413918.3	12452.74	426371.04	4	2022-23	404741	95165	499906	287765.98	67067.18	354833.16	5	2022-24	478094	22170	500264	-	-	-
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6	For the extension of the Environmental Clearance the proponent shall apply for extension of EC within the valid period for the next scheme of mining.	<p>Complied.</p> <p>Application for the extension of EC will be submitted within the valid period.</p>																																																								
7	In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAL/SEIAA shall be obtained. No change in mining technology and scope of working should be made without prior approval of the State Environmental Impact Assessment Authority. No change in the calendar plan including excavation, quantum of mineral limestone & Marl and waste should be made.	<p>Complied.</p> <p>No change in mining technology and scope of working has been envisaged.</p> <p>No change in the calendar plan including excavation, quantum of mineral limestone & Marl and waste</p>																																																								
8	The Environmental clearance is subject to obtaining prior clearance from Forestry and wildlife angle including clearance from the standing committee of the National Board for Wildlife as applicable before issue of permit/Consent to establish by the Competent Authority"/before starting any activity at site.	<p>Complied.</p> <p>No objection certification from district forest officer vide letter No; C.No. 2928/2017/P dated 23.03.2018, stating that and "No forest land is involved and the project site is located more 10 km from karaivetti bird sanctuary" was obtained.</p> <p>Hence, NOC from NBWL and Forest Clearance is not applicable.</p>																																																								
9	Project proponent shall comply with all the guidelines and notifications issued by MoEF&CC, New Delhi regarding Mining of Minerals and comply with orders of Hon'ble NGT from time to time regarding mining of minerals under 1(a).	<p>Complied.</p> <p>We comply with the conditions as per guidelines and notifications issued by MoEF&CC, New Delhi from time to time.</p>																																																								
10	A copy of the clearance letter shall be sent by the proponent to the Local	<p>Complied.</p>																																																								



	Body, Ariyalur Taluk, Ariyalur District, and the Local NGO, if any, from whom suggestions /representations, if any, have been received while processing the proposal. The clearance letter shall also be put on the website of the Proponent. letter shall also be put on the website of the Proponent.	A copy of the Environmental clearance letter was sent to Local Body, Ariyalur Taluk, Ariyalur District on 24.08.2019 and also displayed in the company website. https://www.chettinad.com/cements_plants.php?site=Ariyalur
11	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire and Rescue, Services. Department, Hill Area Conservation Authority (HACA), Civil Aviation Department, 'Forest Conservation Act, 1980 and Wild Life (Protection) Act, 1972, State / Central Ground Water Authority, Coastal Regulatory Zone Authority, other statutory and other authorities as applicable to the project shall be obtained by project proponent from the concerned competent authorities.	Complied. All applicable statutory clearances are obtained. No objection certification from district forest officer vide letter No C No. 2928/2017/P dated 23.03.2018, stating that and "No forest land is involved and the project site is located more 10 km from karaivetti bird sanctuary" was obtained. At Present, Mining Activity has not intersected the ground water table.
12	All required sanitary and hygienic measures should be in place before starting construction activities and they have to be, maintained throughout the construction phase.	Complied. All required sanitary and hygienic measures was followed during the starting of construction activities and maintained throughout the construction phase.
13	The company shall stress upon the preventive aspects of occupational health.	Complied. Workers are trained in safety on the need to use Personal Protective Equipment viz Safety Helmet, Safety Shoe, goggles, Nose Mask etc. to safe safeguard against possible Occupational health issues.
14	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied. Only the construction of Office Shed, Toilet & Septic Tank was involved in this project. The workers from nearby the villages have engaged for the same. Hence, housing for the construction laborer is not envisaged. However, safe drinking water, medical health care etc., has ensured for the laborer.
15	The project authorities should advertise with basic details at least in	Complied.



	two widely circulated local newspapers, one of which shall be in the vernacular language of the-: locality concerned, within 7 days of the issue of clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at website of SEIAA, SEIAA-TNTN and a copy of the same should be forwarded to the Regional Office of the Ministry of Environment and Forests located at Chennai.	Advertised in Dinamani, (Tamil News paper), in Indian Express,(English News paper) on 29.08.2019 .The advertisement copy in both Tamil & English were uploaded online.
16	A separate environment and safety management cell with qualified staff shall be set up before commissioning of construction activities and shall be retained throughout the lifetime of the industry, for implementation of the stipulated environmental safeguards.	Complied. A Separate Environment and Safety Management Cell has been constituted for implementation of the environmental safeguards and enclosed Annexure-5
17	The State Pollution Control Board should display a copy of the Environmental Clearance issued to the project at the Regional office, District Industry Centre and the Collector's office/Tahsildar's office for 30 days. The Project Proponent has to conduct Ambient Air Quality survey twice in a week (104 times) in a year and monitor the PM 10& PM 2.5.	Condition Noted. Complied. We have conducted AAQ monitoring survey as per the conditions stipulated for PM 10 & PM 2.5 TNPCB report letter no. 68/AAQS/20202-23 DT. 19.01.2023 furnished report of analysis of ambient air quality level in the mining area and mentioned data shows that the values are within the limits. and enclosed as Annexure-6
18	A scientific site/ ecological rehabilitation and restoration plan on long term basis should be drawn to carryout restoration With native species and Bio diversity.	Complied. A scientific site/ ecological rehabilitation and restoration was carried out as per the Progressive Mine Closure Plan (PMCP), which was duly approved by the Indian bureau of Mines.
19	The Green/Blue plan should guide the restoration of the site. There habilitation restoration plan should be submitted to SEIAA-TN within one month. If applicable.	Not Applicable.
20	The existing water bodies should not be disturbed to ensure sustainable environment for aquatic life forms.	Complied. Existing Water bodies are not disturbed to ensure the sustainable environment.



21	The proponent should completely implement all environmental pollution control measures as detailed in the EIA report and in the additional report.	<p>Complied.</p> <p>We have implemented all environmental pollution control measures as detailed in the EIA report.</p>
22	Additional sprinklers to be effectively added along the route for transporting limestone from the mines to the plant	<p>Complied.</p> <p>Sprinklers are installed at suitable places for dust suppression for transporting limestone from the mines to the plant.</p>
23	Avenue plantation wherever needed has to be carried out along the route for dust suppression.	<p>Complied.</p> <p>To avoid dust suppression, apart from green belt development, avenue Plantation has been carried out.</p>
24	The green belt developed for the prevention of dust pollution should not form a part of the larger green belt development envisaged in the EIA report.	<p>Complied.</p> <p>The green belt development and plantation undertaken to prevent dust pollution are being carried out separately and records are being maintained for the same.</p>
25	Regular monitoring and check up for pulmonary and carcinogenic diseases to be carried out regularly, not only for the workers involved in the mines but also to the people in the villages adjoining the mines. Interaction with the Primary Health Centre & district medical officer should be on regular basis to monitor the incidence of the diseases if any, and to provide suitable medical facility for the patients.	<p>Complied.</p> <p>Initial and Periodical Medical examinations are being carried out for all the mine employees and periodically as per the consultation with Primary Health Centre & district medical officer, medical camps conducted for the villagers.</p>
26	As mining operations are Conducted by deploying rock breakers which is bound to produce noise as well as vibration, a survey has to be undertaken for studying the vibrations and remedial action need to be taken to circumvent the noise pollution and dissemination from the source. Vibration studies need to be conducted by a reputed organization like Annamalai University, Anna University, NIT, Trichy. Green barrier needs to be provided between the mine boundary and the nearby habitation to minimize the noise pollution.	<p>Complied.</p> <p>We have carried out Vibration study Monthly/ Quarterly Monitoring through NABL Accredited Agency.</p> <p>Green barrier in the form of Afforestation were provided between the mine boundary and the nearby habitation to minimize the noise pollution.</p>



Conditions for Construction /Mining phase :

No.	Conditions (Construction Phase)	Compliance Status
1)	The proponent shall plant the green belt area with more indigenous species for Biodiversity enhancement.	Complied. Green belt area is being developed by planting the more indigenous species like Pungan, Vembu, Malai Vembu, Mailkondrai for Biodiversity enhancement.
2)	A Report on quality and quantity of ground water to be generated during mining operations should be furnished to the TNPCB for every one year for effective monitoring.	Complied. The monitoring of ground water quality within the location is being carried out by NABL recognized third party laboratory. The monitored data show that the values are within the limits. The results are submitted to the regional office of the MOEF&CC, Chennai as part of six month compliance report to TNPCB and SEIAA.
3)	The Comparative statement on normal ground water and mined out water with respect to Qualities & Suitability for agriculture etc should be furnished to the TNPCB for every one year for effective monitoring.	Complied. A Comparative statement of normal ground water and mine water was furnished with respect to qualities & suitability for agriculture furnished to TNPCB.
4)	Monitoring of well water levels and water quality of the wells in the locations furnished in the EIA report shall be done during pre – monsoon period and results submitted to the regional office MoEF, Chennai and SEIAA.	Complied. The monitoring of water level and water quality of the wells in the location is being carried out by NABL recognized third party laboratory. The monitored data show that the values are within the limits. The results are submitted to the regional office of the MOEF&CC, Chennai as part of six month compliance report to TNPCB and SEIAA.
5)	Monitoring of water quality and air quality and around the project site in the selected	Complied.



	<p>monitoring points as mentioned in the EIA report shall be continued regularly involving Academic Institutions.</p>	<p>The monitoring of water quality and air quality of the project location is being carried out by NABL recognized third party laboratory.</p> <p>The monitored data show that the values are within the limits. The results are submitted to the regional office of the MOEF&CC, Chennai as part of six month compliance report to TNPCB and SEIAA.</p>
6)	<p>Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new Piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office, Chennai, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.</p>	<p>Complied.</p> <p>Regular monitoring of ground water level and quality carried out in and around the mine lease area by Constructing the Piezometers (2 Nos) during the mining operation. The periodic monitoring is carried out for four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) as per the MOEF & CGWB Norms.</p> <p>There is No depletion of groundwater table due to the mining activity.</p> <p>At Present, the mining activity has not intersected the ground water table.</p>
7)	<p>Hydro geological study including infiltration test shall be conducted by any reputed agency to estimate leachate quantity.</p>	<p>Complied.</p> <p>Hydro geological study including infiltration test was conducted by Anna University, Chennai and their recommendation is being implemented.</p>
8)	<p>The excess over burden shall not be disposed for any commercial purposes and shall be disposed within the mine lease area only.</p>	<p>Complied.</p> <p>At any case, No overburden is disposed for any commercial purpose and disposed only within the mine lease area.</p>



9)	The critical parameters such as RSPM (PM _{2.5} , PM ₁₀) and NO _x in the ambient air within the impact zone, peak particle velocity at 300 m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The Monitored data shall be uploaded on the website of the as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain.	Complied. All critical parameters given in the conditions were monitored through NABL accredited Laboratory. Monitored data were uploaded on the company website and displayed the main gate.
10)	Data on ambient air quality [RSPM and NO _x] shall be regularly submitted to the regional Office of MoEF at Chennai and the SEIAA / SPCB / CPCB once in six months.	Complied. Ambient air quality [RSPM and NO _x] data were submitted to the MoEF Chennai, SEIAA/SPCB/CPCB once in six months.
11)	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and at transfer points should be provided and properly maintained.	Complied. Fugitive dust emission sources are being controlled regularly by Water spraying arrangement on haul roads, loading and unloading points and all transfer points.
12)	Pre – Placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	Complied. Pre– Placement medical examination and periodical medical examination for the workers were carried out and records are being maintained.
13)	Regular medical checkup for mine workers and nearby residents around the project site involving community medical centre / NIMH shall be conducted.	Complied. Regular medical check-up for mine workers and nearby residents around the mining site are being conducted.
14)	As per norms, the health study should be conducted through competent / approved health organization and report submitted for one year.	Complied. As per norms, the health study is being conducted through competent / approved health organization by



		CCCPL and report are submitted for one year.
15)	Corpus fund created should be prioritized and utilized for health issues.	Complied. A separate corpus fund was created and utilized for health issues.
16)	Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all transfer points shall also have efficient dust control arrangement. These should be properly maintained and operated.	Complied. In Mineral Handling, loading and unloading area, water sprinkling arrangements are provided at frequent intervals.
17)	Vehicular emissions shall be kept under control and regularly monitored. Measured shall be taken for maintenance of vehicle used in mining operations and in transportation within the mine lease shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.	Complied. The vehicle entering in the Mine is checked at the entry point for Pollution under control Certificate. Use of vehicle for mining Operations, transportation of mineral and maintenance of vehicle are envisaged only during mining operations. Regular maintenance of vehicle is used in mining operations and in transportation of mineral is ensured. Vehicle transporting limestone from mines to the factory are covered with tarpaulin properly.
18)	The effective safe guard measures shall be provided to control particulate dust level in Critical areas, transfer points and haul road in the mine area.	Complied. Water Sprinkling is being done on haul roads, loading areas etc. at frequent interval to control fugitive dust emission.
19)	At least four ambient air quality – monitoring stations should be established in the core zone as well as in the buffer zone for monitoring of RSPM ($PM_{2.5}$, PM_{10}) and NO_x . Location of the stations should be decided in consultation with Tamil Nadu pollution Control Board Based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring etc.	Complied. Monitoring of ambient air quality at four different locations in the core zone as well as in the buffer zone is being carried out in consultation with Tamil Nadu pollution Control Board.
20)	NOC from the state GWA for drawing ground water shall be obtained, if ground water table is intersected.	Complied. At present the mining activity has not



		<p>intersected the ground water table.</p> <p>However, an application for NOC from water resources department, Tamilnadu GWA was applied on 29.03.2017.</p>
21)	Separate drain shall be constructed in between waste dump (bund) and nearby river course, if any to avoid silting in the water body.	<p>Complied.</p> <p>There are two overburden dumps (East and South) within the ML area, A Separate drain was constructed to avoid silting in the water body.</p>
22)	Garland drains and siltation ponds of appropriate Size shall be constructed around the mine working, soil and mineral dumps to prevent run off of water and flow of sediments. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after the monsoon, and maintained properly.	<p>Complied.</p> <p>Garland drain of appropriate size, around the mine working pit and siltation ponds were constructed to prevent runoff water and flow of sediments.</p> <p>The drains and siltation ponds were regularly desilted particularly after monsoon and maintained properly.</p>
23)	The rain water accumulation in the mine during rainy seasons shall be treated by Providing settling tanks in the periphery of the mining lease area and the overflow clean water from the settling tanks shall be allowed to discharge through the first order streams to join nearby natural drains. The settling tanks shall be cleaned periodically for removal of sediments and such records of cleaning shall be maintained properly.	<p>Complied.</p> <p>Garland drains / catch drains of appropriate size around the mine working pit and siltation ponds were constructed to prevent runoff water and flow of sediments.</p> <p>The sediments in garland drains and siltation ponds were cleared periodically and records of cleaning are being maintained.</p>
24)	Garland drains proposed on the non moving sides of the Dump yards shall be connected to settling tanks to arrest any wash off sediments from the dumps and only overflowing clean water shall be allowed to discharge through the first order streams. The settling tanks shall be of sufficient dimensions to hold the wash offs in one rainy season and has to be cleaned before every rainy season.	<p>Complied.</p> <p>Garland drains of appropriate size were constructed along the mine working area to prevent run off of water of flow of sediments.</p>
25)	Conservation plan furnished to protect	Complied.



	the scheduled flora and fauna in the core and buffer zone of the project site shall be implemented. Scheduled species of fauna found in the study area shall be monitored closely.	No Scheduled fauna /flora exist in the core and buffer zone of the project. Hence, no Conservation Plan is envisaged.
26)	Annual monitoring on Bio-diversity around the project site shall be conducted and a report shall be furnished.	Complied. Annual monitoring on Bio-diversity around the project site is conducted.
27)	Greenbelt shall be raised including a 7.5 m wide statutory barrier all around the mining lease, reclaimed and rehabilitated areas around water body, roads etc. by planting the Native species in consultation with the local DFO / Agriculture Department. The ultimate area to be planted afforested shall not be less than 15.993 ha. Greenbelt shall be developed all along the mine lease area in a phased manner as per the approved mining plan.	Complied. Greenbelt raised for a 7.50m width all around the mining lease in a phased manner from the year of January 2020.
28)	Green belt shall be provided as per norms of MoEF& CC, GOI in consultation with local DFO.	Complied. Green belt is developed as per norms of MoEF & CC, GOI in consultation with local DFO.
29)	The project authority shall implement suitable water conservation measures including rain water harvesting system to augment ground water resources in the area in consultation with the Regional Director, State Ground Water Board.	Complied. The rain water is being collected in the sump at the bottom most bench of the Mine Pit. The water stored in the sump itself is help to augment ground water recharge.
30)	The Company shall submit within 3 months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/ procedure to bring into focus any infringement/ deviation /violation of environmental or forest norms/ conditions, (ii) Hierarchical system or Administrative order of the company to deal with environmental issues and	Complied. The copies of Corporate Environmental Policy (CEP) and the salient features of the CEP have been submitted to MoEFCC, Delhi and the Regional Office of MoEFCC, Chennai. we have IMS (Integrated Management system), in which, Quality, Environment,



	ensuring compliance of EC conditions and (iii) System of reporting of non-compliance violation of environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.	Energy, Occupational health & safety were covered.
31)	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests, Government of India, New Delhi in advance of 5 years prior to the final mine closure for approval. Mine closure procedure shall be followed as per the approved mining plan.	Complied. A Final Mine Closure Plan along with details of Corpus Fund will be submitted to the SEIAA, TN , 5 years in advance, prior to the final mine closure for approval. Mine closure procedure will be followed as per the approved Mining Plan.
32)	Depth of water table of the wells located inside the mining area and wells located around the monitoring area shall be monitored regularly.	Complied. Two Borewells were sunk and installed the piezometer to monitor ground water level. Further, there is no extraction of ground water. At Present, the mining activity has not intersected the ground water table.
33)	Mining should be carried out taking into consideration all aspects of mineral conservation.	Complied. All the aspects of mineral conservation have been considered while carrying out the mining operation.
34)	The suitable measures to allow the existing drainage to flow to the nearby area or lake if any stream is found in the near vicinity of the mining area.	Complied. The suitable measures to allow the existing drainage to flow to nearby area are being made.
35)	Effective water quality management of the surface and ground water quality studies shall be carried out systematically in a sustainable manner to ensure that the ground water quality is neither depleted nor deteriorated.	Complied. Effective water quality management of the surface and ground water quality studies were carried out systematically in a sustainable manner to ensure that the ground water quality.
36)	The mining activity involves intersection ground water and it was reported that 173 cu.m/day mine seepage water will be	Complied. At Present the mining activity has not intersected the ground water



	Collected in the sump adequate capacity and allowed to settle in the pond. Clear water after meeting the permissible limit of Bureau of Indian standards for drinking and irrigation purpose, bailed out water will be discharged into nearby water bodies for irrigation. For bailing out 173 cu. m/day of mine seepage water, project proponent has to get necessary permission from central ground water authority. If applicable.	table.
37)	Necessary permission should be obtained from the competent authority for discharge of bailed out water into nearby water bodies for irrigation. After achieving permissible limits of Bureau of Indian standards for drinking and irrigation.	Complied. At Present the mining activity has not intersected the ground water table.
38)	All the condition imposed in the proceedings of the commissioner of geology and mining vide R.c.No.7135/MM1/2010 dated 09.01.2017 should be strictly followed.	Complied. All the condition imposed in the proceedings of the commissioner of geology and mining vide R.c.No.7135/MM1/2010 dated 09.01.2017 are strictly followed.
39)	The limestone & marl produced from the mining lease area will be for captive purpose only.	Complied. We are using the limestone & marl produced from the mining lease area is being used for captive purpose only.
40)	Scientific studies related to noise and ground vibration shall be carried out involving reputed government institutions like IIT, NIT, Anna University, Chennai for the usage of rock breakers and to carry out controlled blasting activities in the mine even if sporadically.	Complied. Scientific studies related to noise and ground vibration was carried out involving Anna University, Chennai.
41)	The executive engineer, PWD/WRD, Marudaiyar Basin Ariyalur vide letter number 37m/DB/F.14(A)/2018 dated 13.02.2018 states that the mining lease area and recommended with a condition of providing 50m for Uppuodai right bank boundary limit, 50m for Marudaiyar river	Complied. The safety distance of approximate 110 m against the 100 m has been provided from the Marudaiyar River course to the mining pit.



	<p>left bank boundary limit, 50m for Periyapadayatcheri boundary limit, 50m for poonkudikuttai boundary limit. However the SEAC felt that the 50m, safety distance is not sufficient for Marudaiyar River. Hence, the project proponent has to provide a total of 100m safety distance from boundary of the Marudaiyar River Course this should be ensured by the District level task force.</p>	
42)	<p>The study recommended for hydrological modeling and water quality analysis through the centre for water resources (CWR) Anna University, Chennai should be strictly followed. The recommendation are detailed below:</p> <p>a. The mine seepage water will be collected in the sump located in the bottom of the mine pit. This sump will act as the settling pond also. Supernatant clear water confirming to the limit will be pumped out to the nearby tanks.</p> <p>b. Carrying out regular monitoring of mine discharge water quality before discharging into nearby tanks.</p> <p>c. Water chemistry of mine discharge must be carefully considered and suitable in situ water treatment methods should be adopted for the controlling the turbidity, pH and total hardness if needed.</p> <p>d. Piezometer of two numbers (at least) shall be installed by CCCPL in different directions for regular monitoring of the ground water level and its quality during the actual course of mining operations.</p>	<p>Complied.</p> <p>Hydrological modeling and water quality analysis study was conducted through CWR, Anna University, Chennai</p> <p>a. At Present, the mining activity has not intersected the ground water table. The mine seepage water collected the sump located in the bottom of the mine pit & settling pond also.</p> <p>Supernatant clear water was used for domestic purpose, dust suppression on roads and green belt development.</p> <p>b. Regular monitoring of water quality being are being carried out.</p> <p>c. Water chemistry of mine discharge are being carefully monitored.</p> <p>d. Piezometers (2 nos) are installed in two directions for regular monitoring of ground water level.</p>
43)	<p>Ground water quality monitoring should be conducted every month and the report should be submitted to TNPCB.</p>	<p>Complied.</p> <p>Ground water quality monitoring is conducted every month by NABL accredited Laboratory and the same submitted to TNPCB.</p>
44)	<p>The operation of the quarry should no way impact the water bodies, agricultural activity, and habitation surrounding the</p>	<p>Complied.</p> <p>No impact on the water bodies,</p>



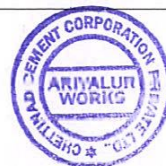
	project site.	agricultural activity, and habitation due to Mining.
45)	Transportation of the quarried materials shall not cause any hindrance to the Village people/Existing Village road.	Complied. No hindrance is caused by transportation of the quarried materials to the Village people/ Existing Village road.
46)	All the commitment made in the proposal with respect to bailing out of water, rain water harvesting, installation of Piezo meter monitoring of ground water quality, green belt development, etc should be strictly followed	Complied. Piezometers installed in two directions for regular monitoring of ground water level. Green belt development being done regularly and ground water quality being monitored regularly.
47)	The Project Proponent shall comply with the mining & other rules and regulations where ever applicable.	Complied. All Mining and other rules and regulations are being complied and will be complied till the end of mining Operations.
48)	The quarrying activity shall be stopped if the entire quantity indicated in the mining plan is quarried even before the expiry of the quarry lease period and the same shall be monitored by the District Authorities.	will be complied.
49)	To Ensure safety measures along the boundary of the quarry site, security guards are to be engaged during the entire period of mining operation.	Complied. Security guards are being engaged during the entire period of mining operation.
50)	The mining Closure plan submitted by the project proponent shall be strictly followed after the mine activity is lapsed as reported.	Complied. Mining closure plan will be submitted and strictly followed as per the guidance.

Conditions for Post-Construction / Operation phase & Entire life of the project:

No.	Conditions (Post Construction Phase)	Compliance Status
-----	--------------------------------------	-------------------



1)	The pits left unfilled in an area shall be converted into water body. The higher benched of excavated void/ mining shall be terraced and plantation shall be done to stabilize the slopes.	Complied. As per the approved mining plan, Mined out area left will be converted as water reservoir, at the end of the life of mine. The Plantations were carried out in benches and properly fenced to avoid un-authorized entry into the pit.
2)	There should not be any impact to the nearby water bodies due to seepage from the proposed mine.	Complied. The water bodies including natural drainage system areas are not disturbed due to seepage from the proposed mine. Further there is no extraction of ground water.
3)	There should not be any disturbance to the plantation in and around the mining area due to the proposed activity.	Complied. No disturbance to the plantation in and around the mining area due to the mining activity.
4)	The proponent shall plant the green belt area with more indigenous species for bio diversity enhancement in consultation with local DFO. a. The mutual agreement signed between M/s.Chettinad Cement Corporation Private limited & M/s. Dalmia cement Bharat Limited shall be registered before commencement of the mining operation. This should be ensured by the District Collector.	Complied. Green belt area being developed by planting the more indigenous species like Pungan, Vembu, MalaiVembu, and Maikondrai for Biodiversity enhancement in consultation with Local DFO. ML area : 32.295 ha Saplings planted so far : 15272 Extent of existing greenbelt area : 7.50 ha Tree Density : 2000 /ha
5)	As far as possible, the mining should be on sustainable basis, ensuring the reserves are not unduly over harvested and mining should spread over the years, ensuring sustainable mining.	Complied. Mining has been carried out by systematic and scientific manner with sustainability for the proposed rate of average production of 0.5 Million MT per annum. (As per the approved mining Plan)
6)	The Mining site shall be monitored during entire mining period by establishing at least two stations and the Air quality shall be monitored twice in a week.	Complied. The monitoring of ambient air quality and fugitive emissions is being carried out regularly through the NABL Accredited Laboratory.
7)	Pumping of water if available in the common	Complied.



	storm water area should not impact the neighboring agricultural activities nor affect the ground water availability and alter the ground after flow by any means.	At present, the mining activity has not intersected the ground water table.
8)	Any storm water leaving the site shall be settled within the mining area by providing adequate settling tank so that there shall not be any carryover of residue to the surrounding land or water bodies.	Complied. The rain water accumulated during monsoon period in the mine pit during plan period pumped out into the settling pond on the south eastern side and ultimately after settling the water utilized for green belt development and dust suppression activities.
9)	There has to be a thorough risk assessment and disaster assessment plan in place.	Complied. We have prepared thorough risk assessment and disaster assessment plan for all mining operations.
10)	Preventive measures and problems due to occupational mine diseases should be displayed in vernacular language for understanding to the workers.	Complied. Preventive measures and problems due to occupational mine diseases, is displayed in vernacular language.
11)	Workers shall be examined every month by practiced physician, results shall be documented and required medical facilities shall be extended to labour force at the cost of the proponent.	Complied. We have provided the required medical facilities to all workers every month by practiced physician, results are being documented.
12)	Anti vibration devices shall be provided to the vibrating tools and equipments to be used by workers during mining and its usage shall be ensured by maintaining safe limit of vibration impact.	Complied. Heavy Earth Moving Machinery (HEMM) is equipped with ergonomically designed to maintain safe limit of vibration impact.
13)	All the precautions are to be followed for safety and security. Face masks, helmets, safety shoes, etc., shall be provided to all the workers working in the mining area.	Complied. All the safety precautions are being followed and all the personal protective equipments are provided to all the persons employed in mines.
14)	Appropriate fencing and manning of lease area and mine out area shall be done.	Complied. We have provided appropriate fencing and security for lease area and mined out area.
15)	All the recommendations made in the EIA report of the project shall be effectively	Complied. All the recommendations made in the EIA



	implemented.	report of the project are being implemented.
16)	A booklet containing the Dos and Don'ts shall be prepared in vernacular languages for the use of the mine engineers/ managers and the workers to ensure that all necessary environmental, safety and health measures are undertaken.	Complied. A booklet containing the Do's and Don'ts in the form of Safe operating Procedure is prepared in Tamil language and same issued to all the employee of the mine.
17)	CER funds of Rs. 6.6o lakhs shall be spent for Karaivetti Bird Sanctuary, Ariyalur District for maintenance and beatification purpose. The aforesaid amount shall be paid in the form of Demand Draft to District forest officer, Ariyalur. The above said amount shall be spent before applying Consent from TNPCB.	Complied. CER funds of Rs.6.6o Lakhs already been paid in the form of Demand draft vide no. 077494, dt: 28.08.2019 to DFO, Ariyalur for maintenance and beautification of Karaivetti Bird sanctuary.
18)	The proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and Forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.	Complied. Use of one time throwaway plastics is completely banned in our Mines boundary. Awareness sign board were kept within ML area enclosed as Annexure-7
19)	It is mandatory for the project proponent to furnish to the SEIAA, Half yearly compliance report in hard and soft copies on 1st June and 1st December of each calendar year in respect of the conditions stipulated in the prior Environmental clearance, and also before commencement of production.	Complied. Half yearly (Six month) compliance report is being submitted in hard and soft copies .
20)	No expansion or modernization in the project shall be carried out without prior approval of the SEIAA-TN. In case of any deviations or alterations in the project proposal from those submitted to this Authority for clearance, a fresh reference shall be made to the SEIAA-TN to assess the adequacy of conditions imposed and to add additional environmental protection measures required if any.	Complied. No expansion or modernization was carried out in site. No deviations or alterations in the proposed mining lease are considered.
21)	All the environmental protection measure and safeguards as recommended in the EIA report shall be complied with.	Complied. All the environmental protection measure and safeguards as recommended in the EIA report were implemented.
22)	The implementation of the project vis-a-vis environmental action plans shall be monitored by the Regional Office of MoEFat Chennai/TNPCB/CPCB. A six monthly	Complied. Six monthly compliance status report is being submitted regularly to MOEF &CC at



	compliance status report shall be submitted to monitoring agencies regularly.	Chennai, TNPCB & CPCB.
23)	Data on ambient air, stack and fugitive emissions shall be regularly submitted online to the Regional Office of MoEF at Chennai. TNPCB and Central Pollution Control Board as well as hard copy once in six months and display data on RSPM, SO ₂ and NO _x outside the premises at the appropriate place for the general public.	Complied. The monitoring of quality of ambient air and fugitive emissions taken up and the data on ambient air and fugitive emissions regularly submitted to the Regional office of MOEF &CC at Chennai, TNPCB and CPCB in both hard copies as well as in soft copy once in six months. The Monitoring data is displayed outside the premises at the appropriate place for the general public.
24)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Mines Act.	Complied. Occupational health surveillance of the workers is done on a regular basis and records also is maintained as per Mines Act.
25)	The first aid facilities in the occupational health centre shall be strengthened and the medical records of each employee should be maintained separately.	Complied. First aid room and facilities provided in Mine entrance and medical records also be maintained separately for each person.
26)	The overall noise levels in and around the mining area shall be kept well within the standards prescribed for by providing noise control measures on all sources of noise generation. The ambient noise level should conform to the standards prescribed under EPA Rules, 1989 viz. 55 dBA (day time) and 45 dBA (night time).	Complied. Monitoring of ambient noise levels is being carried out. Workers engaged in Operators of HEMM are provided with Ear plugs/muffs.
27)	Hydro geological study of the area shall be reviewed annually and report submitted to the Authority.No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the operation of the Mining activity.	Complied. Hydro geological study of the area is reviewed annually and report submitted to the Authority. No water bodies including natural drainage system in the area is disturbed due to mining activities.
28)	CSR activity shall be implemented as committed by drawing a scheme for social up liftmen in the surrounding villages with reference to contribution in road construction, providing sanitation facilities, drinking water supply in the government schools nearby, community awareness, establishment of health centers, water supply to nearby villages and employment to local people whenever and wherever	Complied. CSR activity implemented as committed by drawing a scheme for social up liftment in the surrounding villages with reference to the contribution in road construction providing sanitation facilities, drinking water supply in the government schools nearby , community awareness etc.



	possible both for technical and non-technical jobs and protection of water sources around the project site etc. Funds earmarked for CSR activity shall be used for that purpose only and separate account shall be maintained and report on implementation shall be furnished regularly.	Funds earmarked for CSR activity used for that purpose only and separate account is being maintained.
29)	A separate Environmental Management Cell equipped with full fledged laboratory facilities to carry out the various Environmental Management and Monitoring functions shall be set up under the control of a Senior Executive.	Complied. A Separate environmental and safety arrangement cell is created to take care of EHS function and head of the cell is directly reporting to head of the organization for complying the environmental and safety regulation and implementing pollution control and occupational health & Safety measures.
30)	The requisite amount earmarked forwards capital cost and recurring cost/annum for implementing pollution control measures shall be used judiciously to implement the Environment Management Plan as furnished in the EIA report. The funds so provided shall not be diverted for any other purposes.	Complied. The funds earmarked for environmental protection measures are kept in separate account and used to implement the Environment Management Plan as furnished in the EIA report.
31)	The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF at Chennai, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely, RSPM, SO ₂ , NO _x or critical sector parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied. The status of compliance of the environment clearance conditions is being uploaded in the company website and will be updated periodically. The same is being simultaneously be sent to the regional office of the Ministry of Environment and Forest & Climate change , Chennai , the zonal office of central pollution control board , Bengaluru and the Tamilnadu pollution control board. The pollutant levels namely RSPM, SO ₂ , NO _x (in the ambient air) being monitored and uploaded in the company website periodically. The environmental monitoring data displayed at a convenient location near the main gate of the company in the public domain.
32)	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of	Complied. Six monthly report on the status of compliance of the environmental clearance (both in hard copies as well as by e-mail) is being submitted to the SEIAA , TN & the regional office of the MoEF& CC Chennai ,

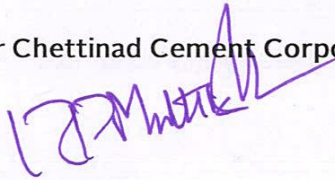


	MoEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Chennai/CPCB/SPCB shall monitor the stipulated conditions.	the Zonal office of Central Pollution Control Board , Bengaluru and the Tamilnadu Pollution Control Board.
33)	The environmental statement for each financial year ending 31st March in Form - V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MoEF& CC by e-mail.	Complied. The environmental statement for financial year ending 31 st March 2023 in Form – V is submitted to the Regional office of MOEF, forest & Climate change, Chennai on 25.05.2023. The same will be displayed on the website of the company and sent to the respective regional office of the Ministry of Environment, Forest & Climate change, Chennai by e-mail. The Status of compliance of Environment clearance conditions are submitted to the respective Regional Offices of the MoEF& CC.
34)	Environmental Clearance is being issued without prejudice to the action initiated under Environment (Protection) Act, 1986 or any court case pending or any other court order shall prevail.	Assured to abide by this condition.
35)	The SEIAA, TN may alter/modify the above conditions or stipulate any further conditions in the interest of environment protection.	Assured to abide by this condition.
36)	The SEIAA/SEAC reserves the right to add any further condition(s) on receiving reports from the project authority. The above condition shall be monitored by the Regional Office of MoEF& CC located at Chennai.	Assured to abide by this condition.
37)	The SEIAA, TN may revoke or suspend the Environmental clearance, if implementation of any of the above conditions is not satisfactory.	Assured to abide by this condition.
38)	The SEIAA, TN may cancel the environmental clearance granted to this project under the provisions of CIA Notifications, 2006, if, at any stage of the validity of this environmental clearance, if, it is found or if it comes to the knowledge of this SEIAA, TN that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the environmental clearance.	Assured to abide by this condition.



39)	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	Assured to abide by this condition.
40)	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, along with their amendments , draft Minor Mineral Conservation & Development Rules , 2010 framed under MMDR Act 1957, National Commission for protection of Child Right Rules, 2006 and Rules made there under and also any other orders passed by Hon'ble Supreme Court of India /Hon'ble High Court of Madras and any other Courts of Law relating to the subject matter.	Assured to abide by this condition.
41)	This clearance is issued with respect to only environmental considerations and it does not imply that SEIAA approved the way which lease is granted to the project. While granting lease , the concerned authority shall ensure compliance of relevant rules, Regulations, Notification, Government resolutions, circulars, Judgment/orders of Hon'ble Court and NGT,etc.,	Assured to abide by this condition.

For Chettinad Cement Corporation Private Limited


R. P. Muthiah
Vice President (Works)



ANNEXURE 2

Chettinad Cement Corporation Private Limited -Periyathirukonam Limestone Mine													
Periyathirukonam Village , Ariyalur District, Tamilnadu State													
Ambiant Air Quality Monitoring- Consolidated Report (Oct 2022 -Mar 2023)													
S.No	Location	PM ₁₀ (µg/m ³)			PM _{2.5} (µg/m ³)			SO ₂ (µg/m ³)			NOx (µg/m ³)		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	Near PTK Mines Office	66.7	60.4	63.4	33.3	28.7	30.7	11.4	10.1	10.7	25.9	21.8	23.6
2	Haul Road - PTK Mines	68.3	63.9	65.6	34.0	30.5	32.1	11.8	10.8	11.3	25.6	23.0	24.1
3	Chettithirukonam Village	58.5	55.2	56.7	26.9	23.8	25.3	9.9	8.0	9.0	21.1	18.0	19.4
4	Periyathirukonam Village	60.7	58.3	59.2	28.4	25.3	27.3	10.8	8.0	9.7	22.2	19.4	21.0
5	Ambalavar Village	58.3	58.3	58.3	28.5	28.5	28.5	9.4	9.4	9.4	22.1	22.1	22.1
6	Idaiyathankudi Village	55.4	55.4	55.4	26.0	26.0	26.0	8.7	8.7	8.7	19.0	19.0	19.0
7	Valaikkuzhi Village	59.2	59.2	59.2	27.3	27.3	27.3	10.9	10.9	10.9	20.4	20.4	20.4
8	Muniyankurichi Village	57.3	57.3	57.3	29.0	29.0	29.0	10.3	10.3	10.3	19.7	19.7	19.7
Norm		100 µg/m ³			60 µg/m ³			80 µg/m ³			80 µg/m ³		

for Chettinad Cement Corporation Private Limited

R.P. Muthiah
Vice President (Works)



Chettinad Cement Corporation Private Limited -Periyathirukonam Limestone Mine								
Periyathirukonam Village , Ariyalur District, Tamilnadu State								
Noise Level Monitoring- Consolidated Report (Oct 2022 -Mar 2023)								
S.No	Location	UoM	Day			Night		
			L _{min}	L _{max}	L _{eq}	L _{min}	L _{max}	L _{eq}
Within the Premises								
1	View Point	dB(A)	56.7	58.7	57.6	50.1	51.9	51.0
2	Loading Area	dB(A)	58.6	58.9	59.6	51.1	52.7	51.9
Limit (L _{eq})		dB(A)	85			85		
S.No	Location	UoM	Day			Night		
			L _{min}	L _{max}	L _{eq}	L _{min}	L _{max}	L _{eq}
Outside the Premises								
1	Periyathirukonam Village	dB(A)	50.8	52.3	51.6	40.7	43.3	42.0
2	Vellipirngiyam Village	dB(A)	50.2	51.8	51.0	40.7	43.3	42.1
Limit (L _{eq})		dB(A)	55			45		

for Chettinad Cement Corporation Private Limited

R.P. Muthiah
Vice President (Works)



Chettinad Cement Corporation Private Limited -Periyathirukonam Limestone Mine						
Periyathirukonam Village , Ariyalur District, Tamilnadu State						
Ground Water Quality Monitoring Report(Oct 2022 -Mar 2023)						
S.No	Parameter	UoM	GW1	GW2	SW3	Limit
1	pH	-	7.48	7.605	7.65	5.5 - 9.0
2	Temperature	Deg C	30.535	30.525	30.40	40
3	Particle size for TSS	-	100%	100%	100%	Shall pass 850 micron IS Sieve
4	TSS	mg/l	BDL(DL:1.0)	BDL(DL:1.0)	BDL(DL:1.0)	100
5	TDS	mg/l	676.5	657	974.00	2100
6	Chloride as Cl	mg/l	202.5	191.5	306.00	1000
7	Sulphide as S	mg/l	BLQ	BLQ	BLQ	2
8	Sulphate as SO ₄	mg/l	54	55.5	75.50	1000
9	Fluride as F	mg/l	0.3	0.3	0.35	2
10	Sodium	mg/l	68	64.5	68.50	-
11	Copper	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	3
12	Zinc as Zn	mg/l	BLQ	BLQ	BLQ	1
13	Phenolic compounds as C ₆ H ₅ OH	mg/l	BDL(DL:0.001)	BDL(DL:0.001)	BDL(DL:0.001)	1
14	Oil & Grease	mg/l	BLQ	BLQ	BLQ	10
15	Boron as B	mg/l	BLQ	BLQ	BLQ	2
16	BOD 3 days 27°C	mg/l	BLQ	BLQ	BLQ	30
17	COD	mg/l	BLQ	BLQ	BLQ	250
18	Total Residual Chlorine	mg/l	BLQ	BLQ	BLQ	1
19	Arsenic as As	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	0.2
20	Cadmium as Cd	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	2
21	Total Chromium as Cr	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	2
22	Hexavalant Chromium	mg/l	BLQ	BLQ	BLQ	0.1
23	Lead as Pb	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	0.1
24	Selenium as se	mg/l	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	BLQ(LOQ:0.002)	0.05
25	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	BLQ(LOQ:0.0005)	BLQ(LOQ:0.0005)	0.01
26	Pesticides	mg/l	BLQ	BLQ	BLQ	---
27	Free Ammonia as NH ₃	mg/l	BDL(DL:0.5)	BDL(DL:0.5)	BDL(DL:0.5)	5
28	Dissolved Phosphate as P	mg/l	BLQ	BLQ	BLQ	5
29	Total Kieldahl Nitrogen as N	mg/l	BLQ	BLQ	BLQ	100
30	Cyanide as CN	mg/l	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL
31	Nickel as Ni	mg/l	BLQ	BLQ	BLQ	3
GW 1 Periyathirukonam Village & GW 2 Chettithirukonam Village,						
SW 3.Mines Sump Water						

for Chettinad Cement Corporation Private Limited

R.P. Muthiah
Vice President (Works)



Dt.: 01.08.2022



Chettinad Cement Corporation Private Limited, Ariyalur Works
Cement Plant, Captive Power Plant & Lime Stone Mines

Internal Circular

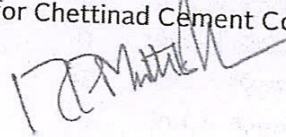
Sub: Environment & Safety Management Cell committee

Environment & Safety Management cell members is formed to take care of Environment safe guards measures in the Plant & Lime Stone Mines area. Now, the committee members are revised and listed below.

S.No.	Name of the Executive	Designation
1	Shri. R.P. Muthiah	Chairman & Plant Head
2	Shri. M. Jagadeesan	Vice Chairman & Operation Head
3	Shri. V. Ramesh	Secretary & Environment Head
4	Shri. Sivaji Samineni	Instrumentation Head
5	Shri. M.A. Rajavel	HR Head
6	Shri. M. Rajamohan	QUAS Head
7	Shri. L.V. Senthil Kumar	Electrical Head
8	Shri. S. Ramesh	Mines Head
9	Shri. P. Kanakaraj	Mech-Pre Clinkerisation Head
10	Shri. M. Radhakrishnan	Mech-Post Clinkerisation Head
11	Shri. K. Girisan	CPP Head
12	Shri. J. Meenakshi sundaram	Civil Head
13	Shri. S. Ashok Kumar	Safety Head
14	Shri. V. Palaniappan	Accounts Head
15	Shri. Dr. C. Vinoth	Medical Officer
16	Shri. M. Raja Chidambaram	Public Relations Officer(PRO)

Note- Committee will be revised after three years. Changes in the members if any to be replaced with new members within 15 days period.

for Chettinad Cement Corporation Private Limited


R. P. Muthiah
Vice President [Works]

Copy to: Team Members

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Annexure-6



Tamil Nadu Pollution Control Board

Ambient Air Quality Survey Report

Report No:72 /AAQS/2022-2023 Dated:19.01.2023

- 1.Name and Address of the Industry : M/s.Chettinad Cements Corporation Private Limited,
Periyathirukonam Limes Stone Mine,
Periyathirukonam Village,
Ariyalur TK,
Ariyalur District.
- 2.Date of Survey : 09.12.2022
- 3.Duration of Survey : Eight Hours
- 4.Category : Red/Small
- 5.Consent Order No. : 2004229421491

Ambient Temperature (°C)	Min	Max	Relative Humidity (%)	Min	Max
	26	34		32	65
Weather Condition	Clear		Rain Fall (mm)	Nil	
Predominant Wind Direction	NE to SW		Mean Wind Speed (Km/hr)	12.0	

Sl. No	Location of Sampling Stations	From Source			Pollutants in µg/m3		
		Dire.	Dist. (m)	Ht. from gl (m)	PM ₁₀	SO ₂	NO ₂
1.	On the top of scaffolding near NE corner of the Mines	NE	275	2.0	67	6.3	8.6
2.	On the top of scaffolding near SE corner of Mines	SE	300	2.0	70	8.9	10.5
3.	On top of scaffolding near SW corner of the Mines	SW	250	2.0	79	13.9	15.0
4.	On top of scaffolding near NW Corner of the Mines	NW	350	2.0	74	10.7	12.1

K. Jeyaraj
19/1/23
Environmental Scientist,

[Signature]
19/1/23
Assistant Director,
AEL, TNPCB, Trichy-15.





Tamil Nadu Pollution Control Board
Ambient Noise Level Survey Report of Analysis

Report No: 72/AAQS/2022-2023 Dated:19.01.2023

1	Name of the Industry	M/s.Chettinad Cements Corporation Private Limited,
2.	Address of the Industry	Periyathirukonam Limes Stone Mine, Periyathirukonam Village, Ariyalur TK, Ariyalur District.
3.	Date of Survey	09.12.2022
4.	Consent Order No.	2004229421491
5.	Category	Red/Small
Type of Survey		Ambient
Time of Survey		Day
Meteorological Conditions		Calm

Logging Parameters

Instrument Used	Casella	Serial No.	0499485
Logging Interval	10 Minutes in each Point	Measuring Range	50-110dB(A)
Weighting	"A"	Time Weighting	Fast
Sound Incidence	Random	Time of Survey in Hrs.	11.00 to 12.20

SI No	Location	Duration (m)	Distance (m)	Direction	Sound Level -dB(A)		
					L _{eq}	L _{Min}	L _{Max}
1.	Near North East corner of mines	10	275	NE	50.7	48.0	57.5
2.	Near South East corner of mines	10	300	SE	46.0	43.5	56.1
3.	Near South side of the mines	10	250	S	45.0	39.9	51.0
4.	Near SW corner of the mines	10	250	SW	48.7	46.2	51.1
5.	Near NW corner of mines	10	350	NW	53.0	49.0	63.3

K. Jeyaraj
19/1/23
Environmental Scientist,

[Signature]
19/1/23
Assistant Director,
AEL, TNPCB, Trichy-15.



Periyathirukonam Lime Stone Mines [32.295 Ha]
Compliance of Notification published by MoEF&CC on 12.08.2021
Single Use Plastic Ban Awareness Board installed



Single Use Plastic Ban Awareness for Periyathirukonam Mines Employees & Workers

