

Ref: CCCPL/ KAL/ENV/2023-24/Mines Exp-ECC/2nd Half

24/05/2023

To
The Director
Ministry of Environment, Forest and Climate Change
Regional Office (SZ), Kendriya Sadan, 4th Floor,
E&F Wings, 17th Main Road, Koramangala, II Block,
Bangalore-560034

Dear Sir,

Sub: Submission of Six Monthly Environmental Clearance Compliance Report (October'2022 to March'2023) –Chettinad Cement Corporation Private Limited, Kallur Limestone Mine – Proposed expansion of Mining Capacity (4.0 to 10.0 million tons per annum) over the existing Mining Lease Area of 422.94 ha at Kallur Village, Chincholi Taluk, Kalaburagi District, Karnataka

Ref: MoEF & CC Letter F.No.J-11015/29/2011-IA.II (M) dated 8th Mar 2016

★★★★★

This is with reference to the above cited subject matter; we are here by submitting the Half yearly compliance report of Proposed expansion of Mining at Kallur Village, Chincholi Taluk, Kalaburagi District, Karnataka for the period **October'2022 to March'2023 (1st Half)** along with **Annexures-1 to 4**.

- A. All EC Compliance Report - **Annexure -1**
- B. Environmental Monitoring Report **October'2022 to March'2023** comprising of
 - a. Surface Water Quality Monitoring Report- **Annexure -2**
 - b. Ground Water Quality & Level Monitoring Report- **Annexure -3**
 - c. Ambient Air Quality Monitoring - Consolidated Report – **Annexure -4**

Yours faithfully
For Chettinad Cement Corporation Private Limited


K Saikumar
Unit Head

Chettinad Cement Corporation Private Limited

Kallur Works, Sangam K Village
Garagapalli Post, Chandapur (SO)
Chincholi (TK), Kalaburagi (Gulbarga) (DT)
Karnataka, Pin - 585305, India
T - 08475 - 295607
E - kallur@chettinadcement.com

CIN : U93090TN1962PLC004947
Head Office
4th Floor, Chittinad Towers,
603, Anna Salai, Chennai - 600 006
Tamilnadu, India
T +91 4428292727, 42149955
F +91 4428291558

E : info@chettinadcement.com
www.chettinadcement.com

Cc :

1. Director-IA Division,
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhavan,
Jor Bagh Road, New Delhi - 110 003
2. Director (Non-Coal Mining),
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhavan,
Jor Bagh Road, New Delhi - 110 003
3. The Member Secretary,
Karnataka State Pollution Control Board,
49, 4th & 5th floor,
Parisara Bhavana, Church Street,
Bangalore – 560 001.
4. Environmental officer,
Karnataka State Pollution Control Board,
Plot No 12/2, Sy.No 19/P, Mansafdar Layout,
MG Road, Santraswadi,
Kalburgi- 585 101
5. Member Secretary,
Central Pollution Control Board,
Parivesh Bhavan,
East Arjun Nagar,
Delhi -110 032

**HALF YEARLY COMPLIANCE REPORT
FOR
ENVIRONMENTAL CLEARANCES
(MINES)**

(October-2022 to March-2023)2nd Half



S.No.	EC Number and Date
	Mines
1	F-No-J-11015-29-2011-IA-II(M) dated 08 th March 2016

Chettinad Cement Corporation Pvt Ltd.

Unit: Kallur works

Chincholi Taluka,

Chandapur S.O

Dist: Kalaburagi, Karnataka-585305

CHETTINAD CEMENT CORPORATION PRIVATE LIMITED

Sangem K & Kallur Villages, Chincholi Taluk, Kalaburagi District, Karnataka

Environmental Clearance (EC) Mines Expansion Compliance Report (October-2022 to March-2023)

EC granted vide letter F. No. J-II015/29/2011-IA.II (M) dated 8th Mar 2016 for Expansion of Mining Capacity from 4.0 to 10.0 million tons per annum & Mining Lease Area of 422.94 ha.

(Expansion Activities not yet commenced)

S.No	Specific Condition	Compliance status
i	The water table is dropping In the area as indicated by the data from November 2014 – March 2015. Therefore the additional conservation measures shall be taken to protect/conserve the ground water table.	Steps will be taken to improve the rain water harvesting structures by providing additional catch drains, garland drains to divert the rainwater from the Mine Area to the Rainwater Harvesting Ponds. The water harvested will help to improve the ground water table. Also, to the maximum extent possible, the harvested rain water will be used to reduce the dependency on ground water drawl.
ii	The bund constructed for protection of nallah shall not Interfere with the natural drainage of the area.	Required precautions will be taken to prevent disturbance to the natural drainage of the area while constructing the bund for protection of nallah.
iii	In order to protect the water stream, a 50 m non-mining safety barriers on both side of nallah to protect from any siltation is proposed. Protective measures like gully plugs shall be erected across the water course to enable settling of any silt. Grass species and leguminous plants shall be cultivated for binding the loose soil and improve the soil fertility.	50 m non-mining safety barriers will be provided on both side of nallah to protect from any siltation. Also, protective measures like gully plugs will be erected across the water course to enable settling of silt. Grass species and leguminous plants will be cultivated on the slopes of the bunds formed for binding the loose soil and improve the soil fertility.
iv	Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Karnataka and any other Court of Law, if any, as may be applicable to this project.	Noted and agreed.
v	Environmental clearance is subject to obtaining NBWL clearance from Standing Committee of NBWL.	NBWL clearance is exempted due to our project does not falls under Eco sensitive area of Chincholi Wild life Forest. We have obtained permission from PCCF linked with Wild Life conservation plan with budget of Rs. 10 Crores from State Forest Dept. for the span of 20 years(a) and separate plan with budget of 56.80 Lakhs towards afforestation and vegetation improvement in Unclassified forest for 5 Years (b) + Rs. 50.00 Lakhs towards green belt development between WLS&CCCPL(c), Subsequently we have paid a payment an amount of Rs.69.322 lakhs towards conservation plan AND Rs.6.314 lakhs towards

S.No	Specific Condition	Compliance status
		Afforestation and vegetation improvement and Rs.12.857 lakhs towards green belt development (in total Rs.88.493 lakhs(a+b+c)) during the period of April 2022 to Sep 2022 and so far i.e 2012 to 2022.we have paid an amount of Rs. 450.807 Lakhs towards implementation of above said plans.
vi	No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available	There is no forest land involved within the Mining Lease. Hence, this condition is not applicable.
vii	Proponent shall appoint an occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; All the old age people of the surrounding villages may be provided medical facilities.	<p>A qualified Medical Officer is available. Regular and Periodical medical examination are being conducted for the workers of the existing Mine and records are also maintained. Also, Occupational Health Check-ups are conducted for the workers once in a year. Necessary remedial/ preventive measures will be taken, if required.</p> <p>Health care facilities under CSR initiative, are extended to the surrounding villages, which will cover the old age people also. The above mentioned practices will be continued for the proposed expansion also.</p> <p>Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers will also be adopted.</p>
viii	The project proponent shall obtain Consent to Establish and Consent to Operate from the Karnataka State Pollution Control Board and effectively implement all the conditions stipulated therein.	Consent to Establish has been obtained Vide Consent Order No: CTE-301659 Date: 16 th Dec 2016 & Addendum 20 th October 2022. Consent to Operate from the Karnataka State Pollution Control Board will be obtained and the conditions stipulated will be implemented effectively.
ix	The prior permission from CGWA shall be obtained before intersecting the groundwater table.	We have taken ground water permission for the existing plant from Karnataka Ground Water Authority letter no. DE0011145347012 on dated 22.12.2022. If required we will take the permission from KGWA.
x	To avoid adverse impact of mining operations on habitations/villages, the Proponent shall comply with conditions provided In OM no. Z-11013/57/2014-IA.II(M) dated 29.10.2014 on Impact of mining activities on Habitations Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area.	<p>There are no habitations and villages within the proposed Mining Lease Area.</p> <p>The nearest habitation is at Kallur and Sangam Villages. The control measures detailed in the EMP will be implemented to minimize the impact of mining operations.</p>

S.No	Specific Condition	Compliance status
xi	The loose solids should be kept separately from flowing water and flow of effluents to nearby areas outside the leasehold shall be prevented. The paved drains along with arrangements for Over Burden Dumps and their drainage may be clearly depicted on a contoured map of the mining area.	<p>The loose solids are being separated from flowing water by constructing garland drains/catch drains with gully plugs and sumps in the existing Mine. There is no generation of industrial effluent from the existing mining operations and the domestic waste water is being treated in septic tank followed by dispersion trench. Hence, there will not be any flow of effluents to nearby areas outside the leasehold.</p> <p>The generation of inter-burden or other wastes from the mines we have stored separately.</p> <p>In the existing Mine, the top soil (Black Cotton Soil- BCS) removed is being used for formation of bunds along the boundary of ML area and safety barriers. The top soil is also being used for greenbelt development also.</p> <p>These above practices will be continued for the proposed expansion also.</p> <p>The balance BCS, after using for bund formation and greenbelt development, will be stacked at the designated location. The maximum height of the top soil stack will be 10 m. The slope of the BCS Stack will be 38°. The BCS Stack will be provided with retention wall and garland drain with gully plugs. The run-off will be diverted to a sump to separate solid particles. The slope of the BCS will be dosed with plant nutrients and soil stabilizers. This will improve the fertility of the soil. The grass will be developed on the slope of BCS Stack.</p>
xii	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. Adequate measures shall be taken for conservation and protection of the 1 st and 2 nd order streams, emanating or passing through the mine lease during the course of mining operation.	No natural watercourse or water resource will be obstructed due to any mining operations. Adequate measures like 50 m safety barriers and greenbelt will be provided to conserve and protect water stream passing through the Mining Lease Area.
xiii	The top soil, if any shall temporarily be stored at earmarked site (s) only and it should not be kept unutilized for long. The top soil shall be used for land reclamation and plantation.	In the existing Mine, the top soil (Black Cotton Soil) removed is being used for formation of bunds along the boundary of ML area and safety barriers. The top soil is also being used for greenbelt development also. These above practices will be continued for the proposed expansion also.

S.No	Specific Condition	Compliance status
		The balance BCS, after using for bund formation and greenbelt development, will be stacked at the designated location. The maximum height of the top soil stack will be 10 m. The slope of the BCS Stack will be 38°. The BCS Stack will be provided with retention wall and garland drain with gully plugs. The run-off will be diverted to a sump to separate solid particles. The slope of the BCS will be dosed with plant nutrients and soil stabilizers. This will improve the fertility of the soil. The grass will be developed on the slope of BCS Stack.
xiv	Appropriate safeguard measures shall be taken to ensure stability and drainage of dump so that no solid waste/debris flows into the nallah.	The balance BCS, after using for bund formation and greenbelt development, will be stacked at the designated location. The maximum height of the top soil stack will be 10 m. The slope of the BCS Stack will be 38°. The BCS Stack will be provided with retention wall and garland drain with gully plugs. The run-off will be diverted to a sump to separate solid particles. The slope of the BCS will be dosed with plant nutrients and soil stabilizers. This will improve the fertility of the soil. The grass will be developed on the slope of BCS Stack.
xv	The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and their phase-wise stabilization shall be carried out. Proper terracing of OB dump(s) shall be carried out. The over burden dump(s) shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dumps. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office, Bangalore on six monthly basis.	<p>The details of mining and handling of top soil viz., Black Cotton Soil (BCS), as per Mining Plan has been included in the EIA Report submitted to the Ministry and its Regional Office at Bangalore.</p> <p>The average thickness of BCS is 1.7 m. The BCS removed will be used for forming bunds. The balance BCS, after using for formation of bunds of rainwater harvesting ponds, the safety barriers and bunds along the boundary of the Mining Lease area, will be stacked at specified location with adequate control measures. The total height of the dumps will not exceed 30 m in three terraces of 10 m each and the overall slope of the dump would be maintained at 38°C. The slopes of the bunds of rainwater harvesting ponds, boundary and the safety zone will be planted with native species.</p> <p>The balance BCS available will be used for reclaiming mined out pits. The unreclaimed pits will be left as rainwater harvesting pits.</p>
xvi	Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, temporary OB and mineral dumps to arrest flow of silt and sediment directly into the adjoining	In the existing Mine, catch drains with gully plugs and siltation ponds of appropriate size have been constructed for the working pit. The water collected is being utilized for watering the mine area, roads, greenbelt

S.No	Specific Condition	Compliance status
	River and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after the monsoon and maintained properly.	<p>development etc. The drains are being regularly desilted particularly after the monsoon and maintained properly.</p> <p>The same practices will be continued for the proposed expansion also.</p> <p>The BCS Stack will be provided with retention wall and garland drain with gully plugs. The run-off will be diverted to a pond to separate solid particles to arrest flow of silt and prevent sediment from reaching the adjoining River and other water bodies. There is no over burden.</p>
xvii	Dimension of the retaining wall at the toe of the OB dump(s) and the OB benches within the mine to check run-off and siltation should be based on the rain fall data.	The generation of inter-burden or other wastes from the mines we have stored separately. After using the top soil viz., Black Cotton Soil (BCS) for various bund formation, the balance will be stacked at specified location. This top soil stack will be provided with toe wall / rubble walls of 1.50 m height and 1.50 m width.
xviii	Plantation shall be raised in the specified area, Including a 7.5m wide greenbelt in the safety zone around the mining lease, OB dump(s), along the roads, etc. by planting the native species in consultation with the local DFO/Agriculture Department. In addition, plantation shall also be raised in the back filled and reclaimed area and around water body. The density of the trees should be around 1500 plants per ha.	In the existing Mine, 15.00 m wide green belt along the boundary of the ML Area, along the roads, safety barrier etc., is being developed by planting the native species in consultation with the local DFO/Agriculture Department. So far, the greenbelt has been developed over an area of 37.04 ha by planting 58531 saplings in the Mine area, following the guidelines of CPCB. There is no over burden. In addition, plantation will be raised on the back filled and reclaimed area and around water body. The current density of the trees is 1580 plants per ha.
xix	Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board In this regard.	<p>In the existing Mine, regular water sprinkling is being carried out in areas prone to air pollution such as mining area, loading and unloading points. Extensive water sprinkling is being carried out on haul roads. It will be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board In this regard.</p> <p>The same practices will be continued for the proposed expansion also.</p> <p>There are no crushing and screening plant and no conveyors/transfer points within the ML Area.</p>
xx	Regular monitoring of water quality upstream and downstream of perennial nallahs falling in the impact zone shall be	Regular monitoring of water quality upstream and downstream of seasonal nallahs falling in the impact zone is being carried out and the

S.No	Specific Condition	Compliance status
	carried out and record of monitoring data should be maintained and submitted to Ministry of Environment, Forest and Climate Change, Its Regional Office, Bengaluru, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	record of monitoring data is being submitted to Ministry of Environment, Forest and Climate Change, Its Regional Office, Bengaluru, Central Groundwater Authority, Regional Director, Central Ground Water Board, Karnataka State Pollution Control Board and Central Pollution Control Board. Reports of Surface water quality upstream and downstream is enclosed as Annexure-2 .
xxi	Appropriate measures shall be taken for treatment of the upper catchment of the mine lease area.	In the existing Mine, the solid particles are getting separated from the water flow by the gully plugs provided in the garland drains & catch drains and the pond. The same practices will be continued for the proposed expansion also.
xxii	The project authority should implement suitable conservation measures to augment ground water resources in the area In consultation with the Regional Director, Central Ground Water Board.	In the existing Mine, the rainwater harvesting structures like garland/catch drains and rainwater harvesting ponds provided already are serving the purpose of groundwater recharge as well as ensuring water availability for use during lean season. Additional catch drains, garland drains to divert the rainwater from the Mine Area to the Rainwater Harvesting Ponds, will be provided In consultation with the concerned Authority to further improve the effectiveness of ground recharging and provide water for various purposes.
xxiii	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 Installing 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, Forest and Climate Change and its Regional Office Bangalore, 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	<p>Regular monitoring of ground water level and quality is being carried out in and around the existing mine lease area four times in a year, once in each season. Piezometers have been installed for continuous monitoring of water levels.</p> <p>The data collected are being sent to the Regional Office of MoEF & CC, Bengaluru and the Regional Director, Central Ground Water Board.</p> <p>If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures will be carried out.</p> <p>The same practices will be continued for the proposed expansion also.</p> <p>The ground water quality and water level reports is enclosed as Annexure-3.</p>

S.No	Specific Condition	Compliance status
	out.	
xxiv	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water, required for the project. Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.	<p>The permission from the competent authorities will be obtained for the additional water requirement for the expansion as well as for the intersection of ground water.</p> <p>In the existing Mine, the rainwater harvesting structures like garland/catch drains and rainwater harvesting ponds have already been provided. Additional catch drains, garland drains to divert the rainwater from the Mine Area to the Rainwater Harvesting Ponds, will be provided in consultation with the concerned Authority to further improve the effectiveness of ground recharging and provide water for various purposes.</p>
xxv	Suitable rain water harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground water Board.	Rainwater harvesting structures like garland/catch drains and rainwater harvesting ponds have already been provided in the existing Mine. Additional catch drains, garland drains to divert the rainwater from the Mine Area to the Rainwater Harvesting Ponds, will be provided in consultation with the concerned Authority to further improve the effectiveness of ground recharging and provide water for various purposes.
xxvi	Appropriate mitigative measures should be taken to prevent pollution of nearby River in consultation with the State Pollution Control Board.	<p>From the present mining operations, no industrial effluent is getting generated and there is no discharge of effluent to the nearby river as Zero Discharge Concept is adopted. The dust is controlled by regularly spraying the areas, likely to generate dust, with water to prevent the dust reaching nearby water sources. Greenbelt development is done along the boundary of the ML Area, safety barriers etc., The rainwater is harvested and stored in the ponds for using the same for various purposes within the Plant & Mine area.</p> <p>Thus, appropriate mitigative measures have been taken to prevent pollution of nearby River.</p> <p>The same practices will be continued for the proposed expansion also.</p>
xxvii	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered	In the existing Mine, the vehicles are being checked for PUC certificate at the mine entry point to ensure that emissions are kept under control. Regular maintenance of vehicles used in mining operations and in transportation of mineral are being ensured. The mineral transportation is carried out

S.No	Specific Condition	Compliance status
	trucks only and the vehicles carrying the mineral shall not be overloaded.	after covering the same with tarpaulin. No overloading of trucks is allowed. The same practices will be continued for the proposed expansion also.
xxviii	Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	In the existing Mine, the controlled blasting techniques are being followed to control of ground vibrations and to arrest fly rocks and boulders as detailed hereunder. <ul style="list-style-type: none"> Carrying out blasting operations with low density explosives to have a heaving effect than an explosion Using Noiseless Trunk Delay to allow only one hole, with charge per hole, which is a fraction of the total explosives to blast at a point of time and ensure each hole will have one delay to minimize boulder generation, frequent toe occurrence, fly rock generation Ensuring that stemming column is more than burden to avoid blown out shots Providing stemming column with deck loading to reduce the noise levels & fly rock generation. The same practices will be continued for the proposed expansion also.
xxix	Drills shall either be operated with dust extractors or equipped with water injection system.	In the existing Mine, the wet drilling is being adopted. The same practice will be continued for the proposed expansion also.
xxx	Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	The mining area and the loading & unloading points are being sprayed with water to suppress dust in the existing Mine. The same practice will be continued for the proposed expansion also. There are no conveyors and transfer points in the ML Area.
xxxi	Sewage treatment plant shall be Installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.	Sewage treatment plant has already installed at colony. The vehicles and the mining machinery used for the existing mining operation are maintained by the mining contractor at the workshop in Chincholi. Hence, there is no waste water generation at the Mine. The domestic waste water is being treated in septic tank followed by dispersion trench.

S.No	Specific Condition	Compliance status
		<p>There will not be any discharge of effluents from the mine premises. Hence, the need for ETP at Mine does not arise.</p> <p>The same practices will be continued for the proposed expansion also.</p> <p>However, a Common Workshop will be provided with oil & grease trap in the Factory premises, adjacent to the Mining Lease Area and the same workshop will cater to the requirement of Mine also.</p>
xxxii	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.	In the existing Mine, pre-placement medical examination and periodical medical examination of the workers are being carried out and records are also maintained. For this purpose, the schedule of health examination of the workers is being drawn and followed accordingly. The same practices will be continued for the proposed expansion also.
xxxiii	Regular monitoring of free silica in the dust will be carried out and records maintained. It shall be ensured that the levels of silica do not exceed the prescribed limit. The workers will be provided with personal protective measures to guard against inhaling silica dust.	<p>The workers employed in the exiting Mine are provided with personal protective measures to guard against inhaling silica dust.</p> <p>The same practice will be continued for the proposed expansion also.</p> <p>Regular monitoring of free silica in the dust is being carried out once in 6 months and records are also being maintained. It will be ensured that the levels of silica do not exceed the prescribed limit.</p>
xxxiv	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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	As the proposal is for mining activity, no major construction work is envisaged. Toilet is already available. Only Office Shed will be constructed, which do not require any necessary infrastructure for the construction laborers. Hence, this condition is not applicable.
xxxv	The project proponent should take all precautionary measures during mining operation for conservation and protection of endangered flora as well as endangered fauna in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented In consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation	Precautionary measures will be taken during mining operation, Conservation plan has been prepared and submitted to the Chief Conservator of Forests, Gulbarga and we have obtained permission from PCCF linked with Wild Life conservation plan with budget of Rs. 10 Crores from State Forest Dept for the span of 20 years(a) and separate plan with budget of 56.80 Lakhs towards afforestation and vegetation improvement in Unclassified forest for 5 Years (b) + Rs. 50.00 Lakhs

S.No	Specific Condition	Compliance status
	plan shall be made and the funds so allocated shall be included in the project cost. Copy of action plan may be submitted to the Ministry and its Regional Office at Bangalore within 3 months.	towards green belt development between WLS&CCCPL(c), Subsequently we have paid a payment an amount of Rs.69.322 lakhs towards conservation plan, Rs.6.314 lakhs towards afforestation and vegetation improvement and Rs.12.857 lakhs towards green belt development (in total Rs.88.493 lakhs(a+b+c)) during the period of April 2022 to Sep 2022 and so far i.e 2012 to 2023. we have paid an amount of Rs. 450.807 Lakhs towards implementation of above said plans.
xxxvi	The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM ₁₀) and NOx in the ambient air within the impact zone, peak particle velocity at 300m 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 company 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. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance	<p>In the existing Mine, the critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM₁₀) and NOx in the ambient air within the impact zone are being monitored periodically. Ambient Air Quality Monitoring reports is enclosed as Annexure-4.</p> <p>There is no generation of industrial effluent from the mining operations and the domestic waste water is being treated in septic tank followed by dispersion trench. There will not be any discharge of effluents from the mine premises.</p> <p>The same practices will be continued for the proposed expansion also.</p> <p>As the nearest habitation from the present Mine working location is Kallur Village is 1500 m away, there will be no adverse effect due to blasting in the mine and therefore peak particle velocities are not being monitored. However, when the mine workings reaches 500 m to the boundary, the monitoring of peak particle velocity will be commenced. As per the numerical estimation done, the peak particle velocity calculated at a distance of 500 m is only 2.5 to 3.0 mm/sec, which is within the permissible limits prescribed by DGMS as 10 mm/sec.</p> <p>The monitored data are being uploaded on the website of the company and are also being displayed on a board near the main gate of the company.</p>
xxxvii	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment, Forest and Climate Change, 5 years in advance of final mine closure for	Final Mine Closure Plan along with details of Corpus Fund will be submitted to the Ministry of Environment, Forest and Climate Change for 5 years in advance of final mine closure for approval.

S.No	Specific Condition	Compliance status
	approval.	
xxxviii	The project proponent shall undertake all the commitments made during the public hearing and effectively address the concerns raised by the locals In the public hearing as well as during consideration of the project, while implementing the project	All the commitments made during the public hearing and the concerns raised by the locals in the public hearing will be undertaken.

B. General conditions

S. No	General Condition	Compliance Status
i	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment, Forest and Climate Change.	No changes in mining technology and scope of working without prior approval of the Ministry of Environment, Forest and Climate Change.
ii	No change in the calendar plan including excavation, quantum of mineral Limestone and waste should be made.	No change in the calendar plan including excavation, quantum of mineral Limestone and waste will be made.
iii	Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate Matter with size less than 10micron i.e., PM ₁₀) and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	<p>7 Ambient Air Quality-Monitoring Stations were provided in the core zone as well as in the buffer zone for RSPM (Particulate Matter with size less than 10 micron i.e., PM₁₀) and NOx monitoring, considering the meteorological data, topographical features and environmentally and ecologically sensitive targets. Ambient Air Quality Monitoring reports is enclosed as Annexure-4.</p> <p>The frequency of monitoring has been decided in consultation with the Karnataka State Pollution Control Board.</p>
iv	Data on ambient air quality RSPM (Particulate Matter with size less than 10 micron i.e., PM ₁₀) & NOx should be regularly submitted to the Ministry of Environment, Forest and Climate Change including Its Regional office located at Bangalore and the State Pollution Control Board / Central Pollution Control Board once In six months.	The data on RSPM (Particulate Matter with size less than 10 micron i.e., PM ₁₀) & NOx is being regularly submitted to the Ministry of Environment, Forest and Climate Change including Its Regional office located at Bengaluru, Zonal Office of Central Pollution Control Board, Bengaluru and the Karnataka State Pollution Control Board once in six months. Ambient Air Quality Monitoring reports is enclosed as Annexure-4.
v	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	<p>In the existing Mine, the fugitive dust emissions are being controlled by regularly water spraying on haul roads, loading and unloading points.</p> <p>The same practice will be continued for the proposed expansion also.</p> <p>There are no conveyors in the ML Area. Hence, no transfer points are available.</p>

S. No	General Condition	Compliance Status
vi	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.	Adequate control measures like acoustic enclosures, silencers, controlled blasting and good maintenance of Mining Machinery & Vehicles are being ensured in the existing Mine for controlling noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. are provided with ear plugs / muffs. The same practices will be continued for the proposed expansion also.
vii	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May,1993 and 31 st December, 1993 or as amended from time to time. Oil and grease trap should be Installed before discharge of workshop effluents.	No waste water is getting generated from the existing Mine. The vehicles and the mining machinery used for the existing mining operation are maintained by the mining contractor at the workshop in Chincholi. However, a Common Workshop will be provided with oil & grease trap in the Plant premises, adjacent to the Mining Lease Area and the same workshop will cater to the requirement of Mine also. There will be no generation of industrial effluent from the mining operations on expansion and the need for Oil & Grease trap and the ETP are not envisaged for the Mine.
viii	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	In the existing Mine, personnel working in dusty areas are provided with protective respiratory devices and the use of the same by them are also being ensured. The workers are given adequate training and information on safety and health aspects. Occupational health surveillance program for the workers is carried out periodically to find out whether any impact due to exposure to dust is there, Corrective measures, if needed, will be taken. The same practices will be continued for the proposed expansion also.
ix	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	A separate environmental management cell with qualified personnel has already been set-up under the control of a Senior Executive, who is reporting directly to the Head of the Organization.
x	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment, Forest and Climate Change and Its Regional Office located at Bangalore.	For the existing mine, the funds earmarked for environmental protection measures proposed for the expansion is kept in separate account and is not getting diverted for other purpose. Year wise expenditure is being reported to the Ministry of Environment, Forest and Climate Change and Its Regional Office located at Bengaluru.
xi	The project authorities should inform the Regional Office located at Bangalore regarding date of financial closures and final approval of the project by the	As internally accrued funds will be used for this proposed expansion, the need to communicate the date of financial closure and final approval of the expansion project is not envisaged. The date

S. No	General Condition	Compliance Status
	concerned authorities and the date of start of land development work.	of commencement of developmental work will be informed to the Regional office of MoEF & CC, Bengaluru as soon as the same is taken up.
xii	The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / Information / monitoring reports.	<p>Full cooperation is being extended to the Officers of the Regional Office of the MoEF & CC located at Bengaluru by furnishing the requisite data / Information / monitoring reports pertaining to existing Mine.</p> <p>The same practice will be continued for the proposed expansion also.</p>
xiii	The project proponent shall submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions Including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment, Forest and Climate Change, its Regional Office Bangalore, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the 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 Ministry of Environment, Forest and Climate Change, Bangalore, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.	<p>The six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data are being submitted (both in hard copies as well as by e-mail) to the Ministry of Environment, Forest and Climate Change, Regional Office of MoEF & CC, Bengaluru, the Zonal Office of Central Pollution Control Board, Bengaluru and Karnataka State Pollution Control Board and also being uploaded in the company website.</p> <p>The same practice will be continued for the proposed expansion also.</p>
xiv	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	<p>Environmental Clearance copy has been sent to Gram Panchayat of Miryan and Anwar and two NGOs.</p> <p>The Environmental Clearance letter has also been put up in the website of our company.</p>
xv	The State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and the Collector's Office/ Tehsildar's Office for 30 days.	This is the responsibility of Karnataka Pollution Control Board.
xvi	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	Environmental statement for each financial year ending 31 st March in Form-V as mandated has been submitted regularly for the existing Mine to the Karnataka State Pollution Control Board and the Regional Office of the Ministry of

S. No	General Condition	Compliance Status
	under the Environment (Protection) Rules, 1986, as amended subsequently, shall be put on the website of the company along with the status of compliance of Environmental Clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment, Forest and Climate Change, Bangalore by e-mail.	Environment, Forest and Climate Change, Bengaluru as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently in hard copy as well as by e-mail and also put in the website of the company along with the status of compliance of Environmental Clearance conditions. For the proposed expansion of Mine also, the same practices will be continued.
xvii	The project authorities should advertise at least in two local newspapers of the District or State widely circulated in which the project is located and one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded Environmental Clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bangalore.	Advertisement in Samyuktha Karnataka & New Indian Express published on 13.03.2016 informed to the public that the project has been accorded environmental clearance and a copy of the clearance letter is available with Karnataka State Pollution Control Board. The same Copies of the advertisement have been submitted to MoEF & CC Regional Office, Bengaluru vide our letter CHETTINAD /KW/EC/2016-1 dated 14.03.2016.

Other Conditions

S.NO	Other Condition	Compliance Status
12	The Ministry or any other Competent Authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Noted.
13	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Guidelines noted.
14	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 and the Public Liability Insurance Act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Andhra Pradesh and any other Court of Law	Guidelines noted.

S.NO	Other Condition	Compliance Status
	relating to the subject matter.	
15	Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Guidelines noted.

Surface Water Quality Monitoring Report

[illegible]

for Chettinad Cement Corporation Private Limited

K. Saikumar
Unit Head

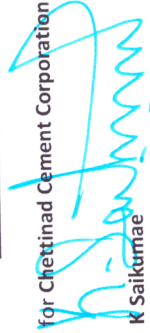
Chettinad Cement Corporation Private Limited (Kallur Works & Mine)

Sangam K & Kallur Villages, Kalaburagi District, Karnataka

Ground Water Quality Monitoring Report (October'2022 to March' 2023)

S. No	Parameter	GW1		GW2		GW3		GW4		GW5		Desirable Limits	Permissible Limits
		Oct-22	Dec-22	Oct-22	Dec-22	Oct-22	Dec-22	Oct-22	Dec-22	Oct-22	Dec-22		
i	pH Value	7.5	7.12	7.59	7.35	7.43	7.43	7.43	7.44	7.69	7.55	6.5-8.5	-
ii	Colour, Hazen units	2	2	2	2	3	3	4	4	4	4	5	15
iii	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
iv	Turbidity, NTU	<1.0	<1.0	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	1	5
v	Total Dissolved Solids, mg/L	942	922	942	912	572	558	572	588	554	572	500	2000
vi	Alkalinity as CaCO ₃ , mg/L	480	468	480	448	300	318	300	316	335	346	200	600
vii	Hardness as CaCO ₃ , mg/L	260	266	260	302	385	412	385	382	380	392	200	600
viii	Calcium as Ca, mg/L	56	63.2	56	80	102	107.2	102	99.2	90	92	75	200
ix	Magnesium as Mg, mg/L	29	26.2	29	24.7	32	34.56	32	32.56	38	38.88	30	100.0
x	Chlorides as Cl, mg/L	103	94	103	76	55	66	55	63	38	45	250	1000
xi	Sulphate as SO ₄ , mg/L	63	65	63	60	35	43	35	32	25	30	200	400
xii	Fluoride as F, mg/L	0.81	0.8	0.81	0.66	0.07	0.7	0.07	0.7	0.06	0.6	1	1.5
xiii	Iron as Fe, mg/L	0.09	0.12	0.09	0.1	0.82	0.6	0.82	0.2	0.66	0.2	1.0	No Relaxation
xiv	Nitrate as NO ₃ -N, mg/L	39	12	39	5	32	6	32	7	11	8	45	No Relaxation
xv	Ammonia as NH ₃ , mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.5	No Relaxation
xvi	Boron as B, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.5	2.4
xvii	Residual Chlorine, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	1
GW1 - Bore Water Near Crusher Area		GW3 - Bore Water Near Batching Plant											
GW2 - Bore Water Near Yellamma Temple		GW4 - Bore Water Near Security Shed											
GW5 - Bore Water North West (Store Back Side)													

For Chettinad Cement Corporation Private Limited



K. Saikumar

Unit Head

GROUND WATER LEVEL FLUCTUATIONS

S.No	Location Details		Water level (mbgl)	
	Bore Hole No	Area of Location	(October-22)	(January-23)
Piezometer				
1	PW1	Near Switch Yard	1.98	4.71
2	PW2	Near WTP	3.6	4.2

For Chettinad Cement Corporation Private Limited

K Saikumar
Unit Head

Chettinad Cement Corporation Private Limited (Kallur Works & Mine)													
Sangem K & Kallur Villages, Kalaburagi District, Karnataka													
Ambient Air Quality Monitoring- Consolidated Report (October'2022 to March' 2023)													
S.No	Location	PM ₁₀ (µg/m ³)			PM _{2.5} (µg/m ³)			SO ₂ (µg/m ³)			NOx (µg/m ³)		
		Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	Factory Area	63.0	73.0	67.4	25.6	36.0	29.6	12.8	16.3	13.6	14.6	18.6	16.7
2	Near CPP	46.0	73.0	70.8	29.2	38.0	33.5	11.2	15.2	13.3	13.8	21.0	17.1
3	Nera ML Area	44.0	74.3	66.7	27.0	34.0	31.2	11.6	15.2	13.6	13.4	22.8	17.2
4	Colony	41.0	70.8	61.4	11.3	44.8	27.0	10.3	15.4	12.5	11.7	20.3	15.4
5	Miryan Village	42.0	60.0	56.1	20.5	26.5	23.8	9.2	14.1	10.9	11.4	16.9	13.2
6	Polkampalli Village	48.0	57.2	55.0	21.0	31.6	23.8	8.6	11.5	10.0	9.8	14.3	11.8
7	Bhaktampalli Village	46.0	56.0	52.7	18.0	30.7	22.7	8.0	12.2	10.1	10.1	13.6	12.3
8	Somalingadhalli Village	48.6	59.2	54.2	16.0	26.5	22.3	9.5	13.3	11.0	10.6	15.9	12.3
9	Kallur Village	52.6	58.0	56.0	24.00	29.7	26.4	10.1	12.5	11.2	11.1	15.1	12.9
Limit		100 µg/m ³			60 µg/m ³			80 µg/m ³			80 µg/m ³		

for Chettinad Cement Corporation Private Limited



K Saikumar
Unit Head