

Ref: CCCPL/ KAL/ENV/2023-24/ Plant 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 – 560 034

Dear Sir,

Sub: Submission of Six Monthly Environmental Clearance Compliance & Environmental Monitoring Reports (October'2022 to March'2023) 2nd Half for Proposed expansion of Cement Plant (2.5 to 8.25 million tons per annum) & Waste Heat Recovery Boiler (Power Generation using Kiln hot gases, 7 to 27 MW) and Captive Power Plant (30 to 160 MW) at Sangem K & Kallur Villages, Chincholi Taluk, Kalaburagi District, Karnataka.

Ref: MoEF&CC letter. F.No.J-11011/57/2011-IA.II (I) dated 31st Jan 2017 -Reg

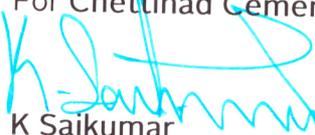
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This is with reference to the above cited subject matter; we are here by submitting the Half yearly compliance report of Proposed expansion of Cement Plant, WHR and CPP at Kallur Village, Chincholi Taluk, Kalaburagi District, Karnataka for the period October'2022 to March'2023 (2nd Half) along with Annexures-1 to 3.

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

Yours faithfully

For Chettinad Cement Corporation Private Limited



K Saikumar
Unit Head

Chettinad Cement Corporation Private Limited

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Cc:

1. Director-IA Division,
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhavan,
Jor Bagh Road, New Delhi - 110 003
2. The Member Secretary,
Central Pollution Control Board,
Parivesh Bhavan,
East Arjun Nagar,
Delhi -110 032
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

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

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



S.No.	EC Number and Date
Plant	
1	F-No-J-11011-57-2011-IA-II dated 20 th October 2015 & 09 th March 2020

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) Plant Expansion Compliance Report (October-2022 to March -2023)

EC granted by MoEF & CC vide letter F.No.J-11011/57/2011 IA.II (I) dated 20th Oct 2015 for the Expansion of Cement Plant from 2.5 to 8.25 million tons per annum & Waste Heat recovery Boiler (Power Generation from 7 to 27 MW) and Captive Power Plant (Power Generation from 30 to 160 MW)

(Expansion Activities are under progress)

Specific Conditions

S.No	Specific Condition	Compliance Status
i.	Prior clearance from the standing committee of the National Board for wildlife shall be obtained due to location of the plant at a distance of 5.8 km from Chincholi Wildlife Sanctuary (as prior clearance of NBWL is required for a project if it is located in 10 KM of a protected area / sanctuary or Eco Sensitive Zone as per the Hon'ble Supreme Court order dated 04.12.2016 in W.P. 460 / 2004), before commencing any activity relating to the project at site/ All the conditions stipulated by the Standing Committee shall be effectively implemented in the project. It shall be noted that this clearance does not necessarily implies that wildlife clearance shall be granted to the project and that your proposal for wildlife clearance shall be considered by the competent authorities on its merit and decision taken. The investment made in the project, if any based on environmental clearance granted to the project, in anticipation of the clearance from wildlife angle shall be entirely at the cost and risk of the project proponent and Ministry of Environment, Forest and Climate Change shall not be responsible in this regard, in any manner.	NBWL clearance is exempted due to our Integrated Cement Plant does not falls under Eco sensitive area of Chincholi Wild life Forest. The conditions stipulated by the Standing Committee will be effectively implemented. Other guidelines noted and agreed.
ii.	The project proponent should install 24 x 7 air monitoring devices to monitor air emission, as provided by CPCB and submit report to Ministry and its Regional Office.	Two Continuous Ambient Air Quality Monitoring Stations have already been installed and the monitored online data are being sent on real time basis to Karnataka Pollution Control Board and Central Pollution Control Board.

S.No	Specific Condition	Compliance Status
iii.	The expansion project shall comply with the new MoEF & CC standards vide GSR 612 (E) dated 25.08.2014 with respect to Particulate Matter, SO ₂ , NO _x for Cement Sector.	Applicable standards will be complied with.
iv.	After expansion, limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control system. Electrostatic Precipitators to Clinker Cooler, Bag House to Raw Mill / Kiln and Bag Filters to Coal Mill. Low NO _x burners shall be provided to control NO _x emissions. Regular calibration of the instruments must be ensured.	Adequate air pollution control systems will be provided to meet prescribed standards at Electrostatic Precipitators to Clinker Cooler, Bag House to Raw Mill / Kiln Coal Mill and Cement Mill. Low NO _x burners will be provided. Regular calibration of the instruments is being ensured.
v.	All the pollution control devices/equipment in Raw Mill / Kiln Feeding System, Clinker Cooler, Coal Mill, Cement Mill and Cement Silo, shall be interlocked so that in the event of the pollution control devices / systems not working, the respective unit(s) shut down automatically.	Interlock facilities will be provided to the pollution control devices.
vi.	Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in Waste Heat Recovery Boiler (WHRB) and a feasibility report shall be prepared and submitted to the Ministry and Regional office at Bangalore within 3 month from the date of issue of the letter.	The feasibility of installing Waste Heat Recovery Boiler (WHRB) to utilize hot waste gases generated from the Kiln and generate power is under process. The existing Plant has already been provided with WHRB. As similar equipment and processes are proposed to be followed for the expansion programme, the utilization of hot gases from the Kiln for the generation of power will be possible and the same has been included in the expansion proposal. The Environmental Clearance granted for this Expansion Proposal includes WHRB to utilize waste hot gases and generate 20 MW.
vii.	The proponent shall provide an interlocking system to ensure that whenever the ESP is not in operation, the raw material feeder will automatically stop and restart only with the restart of ESP.	Similar to the interlock facilities provided for the ESPs in the existing Plant, the Interlocking system will be provided for the ESPs proposed to be installed during expansion to ensure that whenever the ESP is not in operation, the raw material feeder will automatically stop and restart only with the restart of ESP.
viii.	The proponent shall monitor the groundwater regime in the study area,	The groundwater regime in the study area is being monitored and the collected

S.No	Specific Condition	Compliance Status
	by installing piezometers in and around the impact zone of the project site and collected data of ground water (level as well characteristics) and the same shall be furnished as part of the compliance report to MoEF & CC, RO, Bangalore, in case of declining levels, proper approval shall be obtained from the state Ground Water Board.	<p>data of ground water level as well characteristics are being furnished as part of the compliance report to MoEF & CC, RO, and Bengaluru.</p> <p>Piezometers also been installed to monitor the ground water level continuously.</p> <p>Ground water quality and ground water level is enclosed as Annexure-2.</p> <p>In case of declining levels, proper approval will be obtained from the State Ground Water Board/Karnataka Ground Water Authority,</p>
ix.	The proponent shall obtain prior permission from the State Irrigation Department of Karnataka for use of water from River Mullamarri after undertaking a study of use of the river water by competing users and availability, particularly during season.	The permission from the State Irrigation Department of Karnataka for use of water from River Mullamarri has been obtained.
x.	The proponent shall obtain prior approval of the Karnataka ground Water Authority (KGWA) for drawl of ground water for the expansion project.	Ground water permission has been obtained vide letter no. DE0011145347012 on dated 22.12.2022 for the existing plant. If required Prior approval will be taken from the Karnataka ground Water Authority (KGWA) for with drawl of ground water.
xi.	The proponent shall create rainwater harvesting structures including creating of 6 ponds of a total combined capacity of 9,02,000 m ³ . The total water requirement for the Cement-cum-Power Plant shall be supplemented by the rainwater collected and from mine pit water, particularly during lean season period.	<p>3 No's of Rain water Harvesting ponds with a total combined capacity of 3,50,000 m³ have already been provided to serve as rainwater harvesting structure and remaining capacity will be created once the limestone is mined out to the required level.</p> <p>The total water requirement for the Cement-cum-Captive Power Plant will be supplemented by the rainwater harvested and from mine pit water, particularly during lean season period</p>
xii.	The proponent shall not change / modify the natural drainage of the Kulwala Nadhi, Dindi Vagu and Mullamarri River flowing within /close to the plant site.	The natural drainage of the Kulwala Nadhi, Dindi Vagu and Mullamarri River flowing close to the plant site will not be changed / modified.
xiii.	The proponent shall adopt the unit on	Similar to the existing Plant, which is

S.No	Specific Condition	Compliance Status
	zero-discharge basis. No effluents shall be discharged outside the premises. The proponent shall adopt water conservation measures including reuse and recycle of water at every stage / process in the plant (cement / power) operations.	operated on zero-discharge basis, the proposed additional production facilities will also operated on zero discharge basis. No effluents will be discharged outside the premises. Appropriate water conservation measures, including reuse and recycle of treated waste water within the plant premises, will be implemented for the proposed expansion also, as practiced in the existing Plant.
xiv.	The proposed Cement Plant Kiln will be provided with a flexible fuel feeding system to enable use of hazardous wastes such as oil sludge, cut tyres etc.,	The proposed Cement Plant Kiln will be provided with a flexible fuel feeding system enable to use hazardous wastes such as oil sludge, cut tyres etc.,
xv.	The proponent shall examine and prepare a plan for utilization of high calorific wastes such as chemical wastes, distillation residues, refuse derived fuels, etc as alternate fuels based on availability and composition. For this purpose, the proponent shall identify suitable industries with such wastes and enter into an MOU for long-term utilization of such wastes as per the EPA Rules, 1986 and with necessary approvals.	We have identified few Industries for utilizing their high calorific wastes in the existing Kiln with a long-term MOU and necessary approvals have been taken from CPCB/KSPCB. The current practice will be implemented for the proposed system also for utilizing the high calorific wastes i.e., chemical wastes, distillation residues, refuse derived fuels, etc will be identified. Based on the availability and composition of wastes.
xvi.	The proponent shall implement a plan for 100% utilization the fly ash from the Power Plant in the Cement Plant.	100% fly ash is utilized in the Cement Plant.
xvii.	The proponent shall prepare detailed CSR plan for every next 5 years for the existing-cum-expansion project, which includes village-wise (Health, Education, Sanitations, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created	CSR activities under the head of Health, Education, Sanitations, Health, Skill Development and infrastructure are being taken in the surrounding villages and detailed CSR plan will be prepared for every next 5 years for the expansion project. 2% of the average net profits of previous 3 years will be earmarked towards CSR activities are being complied The amount spent towards CSR Activities for the existing unit during the period April-22 to March-23 is 16.34 Lakhs. The details of the CSR an activity is being uploaded on the company website and

S.No	Specific Condition	Compliance Status
	and the annual and revenue expenditure on various activities of the plan shall be submitted as part of the Compliance Report to RO, Bangalore. The details of the CSR plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.	also be provided in the Annual Report of the company.
xviii.	Landless labour and small farmers also require to be compensated and details of these to be submitted as part of the Compliance report submitted of MoEF & CC RO, Bangalore.	As this proposal is for expansion of production facilities within the existing premises, no additional land is required. Hence, the payment of compensation and the need to report the same to MoEF & CC, RO, and Bangalore are not envisaged.
xix.	The proponent shall implement a Wildlife Conservation Plan prepared in consultation with the Wildlife Department, Government of Karnataka. A separate budget head shall be created and the annual capital and revenue expenditure of the plan shall be submitted as part of the Compliance Report to RO. Bangalore. The details of the WL Conservation Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.	Conservation Plan for wild fauna has been submitted to State Forest Department, vide our letter dated 7 th Jul 2011, subsequently 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 and separate plan with budget of 56.80 Lakhs towards afforestation and vegetation improvement in Unclassified forest for 5 Years + Rs. 50.00 Lakhs towards green belt development between WLS&CCCPL, 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 2022.we have paid an amount of Rs. 450.807 Lakhs towards implementation of above said plans.

General Conditions

S.No	General Condition	Compliance Status
i.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change.	No further expansion or modifications in the plant will be carried out without prior approval of the Ministry of Environment, Forest and Climate Change.
ii.	At least four ambient air quality monitoring stations should be established in the downward directions as well as where maximum ground level	7 numbers of Air Quality Monitoring Stations have already been installed for the existing plant in consultation with KSPCB.

S.No	General Condition	Compliance Status
	conservation of PM ₁₀ , PM ₂₅ , SO ₂ and NO _x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bangalore and the SPCB / CPCB once in six months.	The monitored data on Ambient Air Quality and Stack Emissions are being submitted to MoEF &CC, Regional Office of MoEF & CC, Bengaluru, KSPCB and Zonal Office of CPCB at Bengaluru once in six months. The same is being followed for the proposed expansion also. The monitoring reports is enclosed as Annexure-3 .
iii.	Industrial waste water shall be properly collected treated as to conform to the standards prescribed under (GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or amended from time to time. The treated wastewater shall be utilized for plantation purpose.	The industrial generated wastewater will be treated and conform to the standards prescribed by GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 and the treated wastewater will be utilized for plantation purposes
iv.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time)	Noise control measures like acoustic enclosures, silencers for noise generating sources in the existing Plant and ensuring good maintenance of the equipment, the noise level is controlled within the prescribed limits. For the proposed expansion also, similar control measures will be provided.
v.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational health surveillance of the workers is being done on a regular basis and records are also maintained as per the Factories Act, for the existing Plant and the same practice will be continued for the proposed expansion also.
vi.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	Harvesting structures like storm water drains and rainwater harvesting ponds, Ground water recharge pits have already been provided to harvest the rain water for utilization in the lean season besides recharging the ground water table.
vii.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	All the environmental protection measures and safeguards recommended in the EIA Report of proposed expansion will be implemented. The socio-economic development activities in the surrounding villages like community development programme, educational programme, drinking water supply and health care etc. will also be

S.No	General Condition	Compliance Status
		undertaken are being carried out.
viii.	<p>Requisite amount shall be earmarked towards capital cost and recurring cost / annum for environmental pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional office of the Ministry at Bangalore. The funds so provided shall not be diverted for any other purpose.</p>	<p>Requisite amount will be earmarked towards capital cost and recurring cost / annum for environmental pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government.</p> <p>The funds so provided will not be diverted for any other purpose. The conditions stipulated in the Environmental Clearance will be implemented for the proposed expansion as indicated in this compliance report against each condition.</p>
ix.	<p>A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zilla prashid / Municipal corporation, Urban local body and the local NGO, if any, from whom suggesting / representations, if any were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.</p>	<p>Environmental Clearance copy sent to Gram Panchayat of Miryan and two NGOs.</p> <p>The Environmental Clearance letter has also been put on the web site of the company.</p>
x.	<p>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 & CC at Bangalore. the respective zonal office of CPCB and the SPCB. The criteria pollution levels namely, PM₁₀, PM_{2.5}, SO₂, NO_x (ambient levels as well as tack emissions or critical sectoral 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.</p>	<p>The six monthly EC compliance reports on the status of stipulated conditions including results of monitored data is being submitted to the Regional Office of MoEF &CC, Bengaluru and CPCB, Bengaluru and KSPCB and the same is uploaded on the company website. In the existing Plant, the pollution levels namely, PM₁₀, PM_{2.5}, SO₂, NO_x (ambient levels) & Particulate Matter, SO₂, NO_x (stack emission) are being monitored and displayed at a location near the main gate of the company in the public domain. The same practices will be continued for the proposed expansion also.</p>
xi.	<p>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 Regional Office of MoEF & CC, the respective zonal office of CPCB and the SPCB. The Regional office of this Ministry at Bangalore / CPCB / SPCB shall monitor the stipulated</p>	<p>The six monthly EC compliance reports on the status of stipulated conditions including results of monitored data is being submitted by e-mail only to Regional Office of MoEF & CC, Bengaluru and CPCB, Bengaluru and KSPCB vide MoEF notification S.O 5845 (E) dated 26.11.2018.</p>

S.No	General Condition	Compliance Status
	conditions.	
xii.	The environmental statement for each financial year ending 31 st March 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 office of the MoEF & CC at Bangalore by e-mail.	Environmental statement for each financial year ending 31 st March Form-V submitting regularly for the existing operations to the Karnataka State Pollution Control Board and the Regional office of the MoEF & CC at Bengaluru in hard copies as well as by e-mail and also uploaded in the company website. The same practices are also implemented to the proposed expansion.
xiii.	The project Proponent shall inform the public that the project accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at website of the Ministry of Environment, Forest and Climate Change at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bangalore.	News Paper Advertisement in Samyuktha Karnataka & New Indian Express published on 14.02.2017 and informed to the public that the proposed expansion programme has been accorded environmental clearance and a copy of the clearance letter is available with its Karnataka State Pollution Control Board and also can be seen at Website of the Ministry of Environment, Forests & Climate Change at http://envfor.nic.in . Copies of the advertisement submitted to MoEF & CC, Regional Office, Bengaluru vide our letter Chettinad/KW/EC/2017-1 dated 14.02.2017.
xiv.	Project authorities shall inform the Regional office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work	Funds have been invested internally accrued, so there is no need of financial approval of project by any authority and the financial closure. The date of commencement of ground work is being communicated as soon as the developmental work is taken up.

Other Conditions

S No	Other Condition	Compliance Status
15	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions, is not satisfactory.	Noted.
16	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner to implement these conditions.	Guidelines noted and the additional conditions will also be complied with.
17	The above conditions shall be enforced	Guidelines noted.

S No	Other Condition	Compliance Status
	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, Hazardous Waste (Management Handling, Transboundary Movement) Rules , 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	

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										
		Agreeable	Agreeable										
i	pH Value	7.5	7.12	7.59	7.35	7.43	7.43	7.44	7.43	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										
iv	Turbidity, NTU	<1.0	<1.0	<1.0	<0.1	<1.0	<0.1	<0.1	<1.0	<1.0	<0.1	1	5
v	Total Dissolved Solids, mg/L	942	922	942	912	572	558	588	572	554	572	500	2000
vi	Alkalinity as CaCO ₃ , mg/L	480	468	480	448	300	318	316	300	335	346	200	600
vii	Hardness as CaCO ₃ , mg/L	260	266	260	302	385	412	382	385	380	392	200	600
viii	Calcium as Ca, mg/L	56	63.2	56	80	102	107.2	99.2	102	90	92	75	200
ix	Magnesium as Mg, mg/L	29	26.2	29	24.7	32	34.56	32.56	32	38	38.88	30	100.0
x	Chlorides as Cl, mg/L	103	94	103	76	55	66	63	55	38	45	250	1000
xi	Sulphate as SO ₄ , mg/L	63	65	63	60	35	43	32	35	25	30	200	400
xii	Fluoride as F, mg/L	0.81	0.8	0.81	0.66	0.07	0.7	0.7	0.07	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	0.2	0.82	0.66	0.2	1.0	No Relaxation
xiv	Nitrate as NO ₃ -N, mg/L	39	12	39	5	32	6	7	32	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	No Relaxation
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

GW3 - Bore Water Near Batching Plant

GW4 -Bore Water Near Security Shed

GW1 - Bore Water Near Crusher Area

GW2 -Bore Water Near Yellamma Temple

GW5 - Bore Water North West (Store Back Side)

For Chettinad Cement Corporation Private Limited

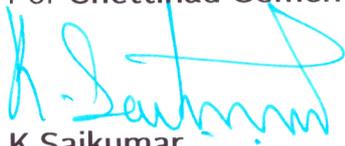
K Saikumae
K Saikumae
Unit Head

Annexure-2

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	Polkappalli 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