CHETTINAD CEMENT CORPORATION LIMITED
Sangem (K) & Kallur Villages,
Gulbarga District,
Karnataka

MoEF EC Conditions - Compliance Status

Integrated cement plant (2.5 MTPA), Captive Power Plant(1 x 30 MW)
&
Captive Limestone mine (4.0 MTPA, 422.940 ha.)

A . SPECIFIC CONDITIONS

S.No	Specific Conditions	Compliance Status
1	No construction work at the proposed project site should be started without obtaining prior clearances / approvals for the linked mining component from the Indian Bureau of Mines (IBM) and State Government of Karnataka. A copy of the mining lease approval from the Indian Bureau of Mines (IBM) and State Government of Karnataka should be submitted to the Ministry and its Regional Office at Bangalore before initiating any construction work at site related to mining.	No construction was started prior to getting Clearances/Approvals from Indian Bureau of Mines and State Government of Karnataka. The following prior clearances / approvals had been obtained submitted to MoEF Regional Office at Bangalore and MoEF, Delhi on 12.10.2010. A copy of the letter enclosed herewith as **Annexure 1.** a. Mining Lease from State Government of Karnataka b. Mining Plan from Indian Bureau of Mines
2	Rehabilitation and Resettlement plan for the project affected population including tribals, if applicable, should be implemented as per the policy of the state Government in consultation with the State Govt. of Karnataka. Compensation paid in any case should not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy, 2007.	No person/house was displaced. Hence, there is no Rehabilitation and Resettlement involved in this project.
3	Permission and Recommendations of the State Forest Department regarding impact of cement plant and mining activities on the surrounding Chincholi reserve forest should be obtained and implemented. Further, conservation plan for the conservation of wild fauna in consultation with the State Forest Department should be prepared and implemented.	Conservation plan for wild fauna submitted to State Forest Department vide our letter dated 07-07-2011 . The recommendations of the State Forest Department received vide letter A4-Forest department/Chettinad/ limestone/ Kallur/CR-21/2010-11 dated 18-01-2012 had been incorporated in the Conservation Plan and submitted to Forest Department vide our letter dated 21-02-2012.The conservation measures like Soil and Moisture Conservation (SMC) measures, Forest Fire Control measures like maintenance of fire lines, deployment of fire watchers, running of two numbers of fire patrolling camps and greenbelt plantation etc. have been implemented in consultation with Forest Department.

A . SPECIFIC CONDITIONS

S.No	Specific Conditions	Compliance Status
4	The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the Karnataka Pollution Control Board. At no time particulate emissions from the cement plant including kiln, coal mill, cement mill cooler and captive power plant (CPP) should not exceed 50 mg/Nm^3. Continuous on-line monitors for particulate emissions should be installed. Pyritess, Fluoride and Hg emissions should also be monitored. Interlocking facility should be provided in the pollution control equipment so that in the event of the pollution control equipment not working the respective unit (s) is shut down automatically.	Efficient Bag house, ESP's and Pulse Jet Bag Filters had been provided for the stacks/transfer points. The emission levels are found to be less than 50 mg/Nm^3. At no point of time, the emissions have exceeded the norms prescribed .Online monitors have been provided to the Raw Mill/Kiln Stack, Clinker Cooler Stack, Coal Mill Stack and Cement Mill Stack. Interlocking facility had been provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically. As there will not be any Pyritess, Fluoride and Hg emissions from cement and power plant, monitoring of these parameters is not required.
5	Possibilities should be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report should be prepared and submitted to the Ministry and its Regional Office at Bangalore within 3 months from the date of issue of the letter.	Feasibility report on utilization of gases generated from the kiln in Waste Heat Recovery Boiler (WHRB) had been prepared and submitted to MoEF, Delhi and MoEF Regional Office at Bangalore on 28.09.2010. A copy of the letter enclosed herewith as **Annexure 2.** WHRB is under installation.
6	Data on ambient air quality (PM 10, SO2, NOx) should be regularly submitted to the Ministry including its Regional office located at Bangalore and the State Pollution Control Board/ Central Pollution Control Board once in six months. The critical parameters such as PM10, NOx in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer should be monitored periodically. Further, quality of discharged water should also be monitored [(TDS, DO, PH) and total suspended solids (TSS)]. The monitored data should 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.	Ambient Air Quality Data (PM_{10}, $PM_{2.5}$, SO_2, NOx) are being monitored by a recognized laboratory, covering the core & buffer zones and reports are being submitted once in six months to the MoEF, Delhi, MoEF, Bangalore, KSPCB & CPCB. As the nearest habitation from the present mine working location is Kallur village and 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 habitation the peak particle velocity will be monitored regularly. As per the numerical estimation done, the peak particle velocity calculated at a distance of 500m is only 4.5 mm/sec, which is within the permissible limits prescribed by DGMS as 10 mm/sec. The monitored data being uploaded on the website and being displayed on a display board near the main gate of the company.

A . SPECIFIC CONDITIONS

S.No	Specific Conditions	Compliance Status
7	The company should install low NOx burner with kiln/calciner for control of NOx emissions below 400 mg/Nm^3	High efficiency low NOx burner and In-line Calciner (ILC) have been provided with a facility of secondary firing to control NOx emissions.
8	Secondary fugitive emissions should be controlled within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard should be followed.	Secondary Fugitive Emissions are being controlled and by providing appropriate control measures as indicated below. Regular monitoring is also ensured. a. Ensuring concrete roads for truck movement b. Use of closed trucks/bulkers/trucks covered with tarpaulin for transporting materials c. Providing closed storage for Gypsum, Coal d. Providing closed silos for Fly Ash, Cement e. Providing Water Sprinkling arrangements f. Providing Bag Filters at Transfer Points g. Maintaining the equipment in good condition h. Developing Green Belt along the boundary of the plant & Mine premises i. Monitoring of fugitive emissions at three locations every quarter
9	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 should be followed.	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 is being followed.
10	Efforts should be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash should be transported in the closed containers only and should not be overloaded. Vehicular emissions should be regularly monitored	All the raw materials are being transported in the closed trucks/trucks covered with tarpaulin. The Fly Ash generated from our Captive Power Plant is pneumatically conveyed through pipelines to the Cement Plant and the Fly Ash procured from nearby Thermal Power Plants is transported to our Cement Plant t in bulkers only. No overloading of trucks permitted. Vehicles with Pollution Under Control Certificate only being permitted inside the premises. All the contractors are ensuring that all their vehicles are having PUC certificate and the company is ensuring that all company vehicles are having PUC certificates.
11	Fly ash should be utilized as per Fly Ash Notification, 1999 subsequently amended in 2003. Fly Ash should be stored in ash silo and 100% used in the cement manufacturing.	Fly Ash generated from our Captive Power Plant is being stored in silo and 100% used in the Portland Pozzolana Cement (PPC) manufacturing in our Cement Plant itself.
12	The company should make the efforts to utilize the high calorific hazardous waste in the cement kiln and necessary provisions should be made accordingly. The company should keep the record of the waste utilized and shall submit the details to ministry's Regional Office at Bangalore, CPCB and SPCB.	Latest and high efficiency multi channel burner has been provided to handle the high calorific hazardous waste in the Cement kiln. After obtaining permission from CPCB, the hazardous waste will be co-processed. As advised, the records will be maintained for the waste utilized and the details will be submitted to MoEF Regional Office, Bangalore, CPCB and KSPCB.

A. SPECIFIC CONDITIONS

S.No	Specific Conditions	Compliance Status
13	Rainwater harvesting measures should be adopted for the augmentation of ground water at cement plant, colony including check dams at main site. The company must also collect rain water in the mined out pits of captive lime stone mine and use the same water for the various activities of the project to conserve fresh water and reduce the water requirement from the ground water. An action plan should be submitted to Ministry's Regional Office at Bangalore within 3 months from date of issue of this letter. Efforts should be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources.	Rainwater harvesting measures such as pits, gully plugs to filter solid particles and catch drains had been provided for harvesting rainwater , which will help us to augment ground water. The rain water collected is also being used for various activities like dust suppression, green belt development to conserve fresh water and reduce the water requirement from the ground water. An action plan to collect & use rain water and conserve water submitted to MoEF Regional Office at Bangalore on 28.09.2010. A copy of the letter enclosed herewith as **Annexure 2.** Five Rainwater Harvesting Ponds in Mine area and and one Rainwater Harvesting Ponds at Plant provided. The capacities are 6.0 lakh m^3, 1.0 lakh m^3 , 0.8 lakh m^3, 0.5 lakh m^3 and 0.45 m^3 in Mine Area and 0.25 m^3 in Plant Area. If needed, capacity of the reservoir will be enhanced to meet the maximum water requirement. Only balance water requirement will be met from other sources.
14	Total requirement of the ground water from bore wells should not exceed 900 m^3 /day. The water stored in the artificial reservoir made in the mine pit should be used maximum to reduce ground water consumption. No effluent should be discharged from the mine to any water body or nearby river.	The ground water drawl from bore wells being limited to 900 m^3 /day. • An average of 30 m^3 of water per day is being drawn for drinking purpose from borewells • An average of 350 m^3 of water per day (on plant operating days) is being drawn for plant operation from mine pit The water stored in the pond/ mine pit being used to a maximum extent to reduce ground water consumption for plant operations. No effluent will be discharged from the mine to any water body or nearby river.
15	Detailed hydrological study should be carried out since mining activities are likely to intercept ground water and implementation of recommendations of the detailed hydrological study should be ensured.	Detailed hydro-geological logical had been carried out.The recommendations of hydro-geological study are under implementation. Please refer **Annexure 3** for the status of implementation of recommendations.
16	Permission should be obtained for drawl of ground water form the State Ground Water Board/Central Ground Water Authority as may be applicable in this case.	Permission obtained from Central Ground Water Board for drawl of ground water. A copy of the letter received from CGWA is enclosed herewith as **Annexure 4.**

A. SPECIFIC CONDITIONS

S.No	Specific Conditions	Compliance Status
17	Top soil, if any, should be stacked with proper slope at earmarked site(s) only with adequate measures and should be used for reclamation and rehabilitation of mined out areas.	The top soil/Black Cotton Soil (BCS) removed is at present used for formation of bunds of the rainwater harvesting ponds and also for the formation of bunds along the boundary of the mine lease area and the safety zone . In future, any surplus BCS generated will be stacked with proper slope (30^{O}) at earmarked site only with adequate measures like retention wall, gully plugs and trenches and the same will be used for reclaiming mined out pits. The unreclaimed pits will be left as rainwater harvesting pits.
18	The project proponent should ensure that no natural water course should be obstructed due to any mining and plant operations. The company should make the plan for protection of the natural water course passing through the plant and mine area premises and submit to the Mininstry's Regional Office at Bangalore.	One seasonal water stream is passing through the plant area and one seasonal water stream is passing through the mine area have not been obstructed. The protection plan for the seasonal water streams submitted to the Regional Office of MoEF at Bangalore on 18.10.2010. A copy of the letter enclosed herewith as **Annexure 5.**
19	The inter burden and other waste generated should be stacked at earmarked dump site(s) only and should not be kept active for long period. The total height of the dumps should not exceed 30 m in three terraces of 10 m each and the over all slope of the dump should be maintained to 28°. The inter burden dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the minister of environment &forests and its regional office, Bangalore on six monthly basis.	There is no generation of inter-burden or other wastes from the mines. The top soil/Black Cotton Soil (BCS) removed is at present used for formation of bunds of the rainwater harvesting ponds and also for the formation of bunds along the boundary of the mine lease area and the safety zone . The slopes of the bunds of rainwater harvesting ponds, boundary and the safety zone will be planted with native species. In future, any surplus BCS generated from the mine area will be stacked at specified location adhering to the conditions stipulated by MoEF. The total height of the dumps will not exceed 30 m in three terraces of 10 m each and the over all slope of the dump would be maintained at 30 °C and the same will be used for reclaiming mined out pits. The unreclaimed pits will be left as rainwater harvesting pits. The balance BCS, if any, stacked as per MoEF guidelines will be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas will be ensured till the vegetation becomes self-sustaining. Compliance status is being submitted to the MoEF,Delhi and MoEF Regional office, Bangalore on six monthly basis.

A. SPECIFIC CONDITIONS

S.No	Specific Conditions	Compliance Status
20	The void left unfilled should be converted into water body. The higher benches of excavated void /mining pit should be terraced and plantation done to stabilize the slopes. The slope of higher benches should be made gentler for easy accessibility by local people to use the water body. Peripheral fencing should be carried out along the excavated area.	The void left unfilled will be finally converted into water body after completing excavation of limestone. At the final stage the top benches will be re-graded to form a gentle slope where plantation shall also be undertaken Peripheral fencing will be carried out along the excavated area after completing excavation. Considering the safety of the people, they will not be allowed inside the mines area. As a part of CSR initiative, the supply of water to the nearby villages will be taken up.
21	Catch drains and siltation ponds of appropriate size should be constructed for the working pit, inter burden and mineral dumps to arrest flow of silt and sediment. 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 monsoon, and maintained properly.	One number of catch drain of size of 1300 m x 1 m x 1.5 m with a slope of 1 in 85 with gully plugs instead of sedimentation tank to arrest flow of silt reaching pond has been provided . The water so collected being utilized for watering the mine area, roads, green belt development etc. The trenches/drains being regularly desilted, particularly after monsoon, and maintained properly. The silt so collected is used in the afforestation works.
22	Garland drain of appropriate size, gradient and length should be constructed for both mine pit and inter burden dumps and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 year data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper setting of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.	One garland drain of 0.7m width, 0.8m depth with a slope of 1 in 150 has been constructed, for the mine pit. Sedimentation pit has been constructed at the corner of the garland drain and desilted at regular intervals. There is no inter-burden waste generation. Hence, there is no need for garland drain. For the surplus BCS, going to be generated in future, the garland drain and sedimentation tank will be provided. Five Rainwater Harvesting Ponds of Capacities 6.0 lakh m^3, 1.0 lakh m^3 0.8 lakh m^3 ,0.5 lakh m^3 and 0.45 lakh m^3 provided in the mine area.
23	Dimension of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run-off and should be based on the rain fall data.	As there will not be any inter burden dumps/inter burden benches , this condiction is not applicable. For the surplus BCS, going to be generated in future, retaining wall will be provided at the toe of BCS dump.

A. SPECIFIC CONDITIONS

S.No	Specific Conditions	Compliance Status
24	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board. The frequency of monitoring should be four times a year-pre-monsoon (April/May), monsoon (August), post-monsoon (November), and winter (January). Data thus collected should be sent at regular intervals to Ministry of Environment and Forests and its Regional Office at Bangalore, Central Ground water Authority and State Ground Water Board.	Ground water quality and level are being monitored by a recognized laboratory at 7 locations. The data collected different seasons are being submitted to Ministry of Environment and Forests and its Regional Office at Bangalore, Central Ground water Authority and State Ground Water Board. The number borewells where the groundwater quality is being monitored is 7.
25	Wet drilling sequential and controlled blasting method and provision for the control air emissions during blasting using dust collectors etc. should be used. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Wet drilling is practiced. The blast holes are fired with Elect Detonators & Detonation Fuse adopting Trunk Line Detonation System . This system allows only one hole i.e. 80 kg, a fraction of the total explosives is blasted at a point of time which minimizes boulder generation, frequent toe occurrence, fly rock generation. The charge per delay in the mine will never exceed 400 kg. As per the numerical estimation done with this charge per delay, the peak particle velocity calculated at a distance of 500m is only 4.5 mm/sec, which is within the permissible limits prescribed by DGMS as 10 mm/sec .Water spray is provided for the control of air emissions during blasting.
26	Bench height, width and slope for individual bench should be properly assessed and implemented. Adequate measures should be adopted to stabilize the slope before abandonment. The fencing around the reservoir should be provided to prevent accidents.	Presently the zone of limestone mineralization has been delineated upto a depth of 27m (three benches of 9m height) below the soil cover of 1.7 m thick. The bench height for the limestone benches it is kept at 9m each and width will be about 12 m with a working pit slope angle around 36°.At the closure stage, adequate measures viz., gentle slope, terracing and plantation will be ensured to stabilize the slope before abandonment. Fencing around the rainwater harvesting reservoirs in the mine area will be provided after completion of excavation to prevent accidents.
27	Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area and mine closure should be submitted to the Ministry and its Regional Office at Bangalore.	IBM approved mining plan covering over burden (removal, storage, disposal etc.) and mine closure already submitted to the MoEF Regional Office at Bangalore and MoEF, Delhi on 12.10.2010. (**Annexure 1)**

A. SPECIFIC CONDITIONS

S.No	Specific Conditions	Compliance Status
28	As proposed, green belt should be developed in 48 ha in plant & township and 10 ha around the mining area as per the the CPCB Guidelines in consultation with DFO	The proposed area for Green Belt Development is 51.5 ha in the plant, 6.7 ha in colony and 10 ha in mine area. The current status of Green Belt Development is Plant :33.90 ha Colony : 2.0 ha Mine : 10.14 ha The details of plantation are provided in **Annexure 6**. The balance area will be developed with Green Belt progressively.
29	All the recommendations of the Corporate Responsibility for Environment Protection (CREP) for the Cement plants should be strictly followed.	CREP guidelines for Cement Plant are complied with. The details of CREP compliance are given in **Annexure 7**.
30	Vehicular emissions should be kept under control and regularly monitored. Measures should be taken for maintenance of vehicles used in mining operation and in transportation of mineral. The vehicles should be covered with a tarpaulin and shall not be overloaded.	Vehicles with Pollution Under Control Certificate only being permitted inside the premises. All the contractors are ensuring that all their vehicles are having PUC certificate and the company is ensuring that all company vehicles are having PUC certificates. Proper maintenance of vehicles also being ensured. Use of tarpaulin to cover the material to be transported has been made mandatory. No overloading of materials is permitted.
31	Risk and Disaster Management plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bangalore, KPCB and CPCB within 3 months of issue of environment clearance letter.	Details of Risk and Disaster Management plan along with the mitigation measures submitted to to CPCB,KSPCB and MoEF , Regional Office at Bangalore on 28.09.2010. A copy of the letter is enclosed herewith as **Annexure 2**.
32	Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	Will be complied with as stipulated, 5 years in advance of final mine closure.
33	The company should comply with the commitments made during public hearing held on 30th December,2009 and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional office at Bangalore.	The details of commitments made during Public Hearing and the Budget (Cost) submitted to the Ministry's Regional office at Bangalore on 15.10.2010. A copy of the letter is enclosed herewith as **Annexure 8.** The status of compliance with commitments made during Public hearing is enclosed herewith as **Annexure 9**.

A. SPECIFIC CONDITIONS

S.No	Specific Conditions	Compliance Status
34	At least 5% of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Officer at Bangalore. Implementation of such program should be ensured accordingly in a time bound manner.	5 % of the total cost of the project i.e ., Rs 30 crores had been earmarked towards corporate social responsibility. The annual outlay for CSR is Rs 1.5 crores per annum. A time bound action plan with item-wise details prepared and submitted to the Ministry's Regional Officer at Bangalore on 15.10.2010. A copy of the letter is enclosed herewith as **Annexure 8.** Implementation in a time bound manner is being ensured. The current status of implementation of CSR Plan is enclosed herewith as **Annexure 10.**
35	Provision should 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.	For the construction labour , within the site, all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. had been provided. The temporary structures (houses) had been removed after the completion of the project.

B. GENERAL CONDITIONS

S.No	General Conditions	Compliance Status
i.	The project authority shall adhere to the stipulations made by Karnataka State Pollution Control Board (KPSB) and the State Government	Stipulations of Karnataka State Pollution Control Board (KSPCB)/State Government are complied with.
ii.	No further expansion or modernization of the plant shall be carried out without prior approval of this ministry	No further expansion or modernization of the plant will be carried out without prior approval of the Ministry of Environment & Forests. Cement Production(mtpa) Existing 2.5 Proposed 8.25 Power from WHRB (mw) 7 27 Power Generation (mw) 30 160 Limestone Mining (mtpa) 4 10 For the proposed production capacity, application submitted to MoEF , Delhi and Public Hearing completed after EIA Study.
iii.	Atleast four ambient air quality monitoring stations shall be installed in the downward wind direction as well as where maximum ground level concentration of PM 10, SO_2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emissions shall be regularly submitted to this Ministry including its Regional Office and SPCB and CPCB once in six months	7 number of air quality monitoring stations have been installed in consultation with KPCB as stipulated. Data on ambient air quality and stack emissions being regularly submitted to MoEF, Delhi, MoEF Regional Office and SPCB and CPCB once in six months.
iv.	Industrial Waste water shall be collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. The treated water shall be utilized for plantation purpose	The industrial waste water viz., Cooling Tower Blow Down, DM/RO plant Rejects etc., are being collected and treated in ETP. The quality of treated effluent will conform to standards prescribed. Treated water being used for plantation and dust suppression. The domestic waste water from the plant and the colony are treated in STP and reused for plantation.
v.	The overall noise levels in and around the plant shall be kept well within the standards (85dBA) by providing noise control measures including acoustic hoods, silencers,enclosures etc., on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental Protection Act 1986 viz., 75 dBA (day time) and 70 dBA (night time)	For all sources of noise generation, control measures viz., acoustic hoods, silencers, enclosures provided. Ambient Noise level is being monitored by a recognized laboratory at 7 locations . These ambient noise levels conform to the standards prescribed 75 dBA (day time) and 70 dBA (night time).

B. GENERAL CONDITIONS

S.No	General Conditions	Compliance Status
vi.	Proper housekeeping and adequate occupational health programme shall be taken up. Occupational health surveillance programme shall be done on a regular basis and records maintained properly atleast for 30 -40 years. The programme shall include lung function and sputum analysis test once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust	Good house keeping is being ensured. Occupational health surveillance programme as suggested being carried out on a regular basis and the records will be maintained for 30 -40 years. Sufficient preventive measures viz., Dust mask provided to employees to avoid direct exposure to dust apart from taking precautions and ensuring control measures to control dust.
vii.	The company shall undertake eco development measures including community welfare measures in the project area.	Eco Development measures like Rainwater Harvesting, Reuse of waste water after treatment (Zero Discharge System), Water Conservation Measures like use of Air Cooled Condensers etc., have been implemented. The Community Welfare measures as indicated in **Annexure 10** are being carried out .
viii.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP	The environmental protection measures and safeguards provided as recommended in EIA/EMP as detailed below. a. ESP, Bag Filters to control air emission b. Water Sprinkling , Dry Fog System to suppress dust c. Treatment and use of both industrial and domestic effluents for various purposes like dust suppression, plantation etc., d. Use of Fly Ash for Cement manufacturing e. Disposal of used oil to authorised dealers f. Noise Control Measures like enclosures, silencers g. Greenbelt in the plant, mine and colony
ix.	A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a senior executive	Separate environmental management cell and monitoring systems have been put in place.The Environmental Monitoring functions are provided by recongnised laboratory.
x.	Adequate fund shall be allocated to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government . Time bound implementation schedule for implementing all the conditions stipulated herein shall be submitted. The funds so provided shall not be diverted for any other purpose	The capital cost for EMP is Rs 15.75 crores. The annual recurring expenditure for EMP is Rs 5 crores. The status of implementation of the conditions is being submitted to the Regional Office of Banglore, once in six months. The funds so provided will not be diverted for any other purpose

B. GENERAL CONDITIONS

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xi.	The project proponent shall also submit six monthly reports on the status of compliance of stipulated EC conditions including results of monitored data (both in hard copies as well as by emails) to the respective Regional Office of MoEF and respective zonal office of CPCB and KPCB	Six monthly reports on the status of compliance of stipulated EC conditions including results of monitored data are being submitted to MoEF Regional Office, Bangalore and CPCB, Bangalore and KPCB.
xii.	The Regional Office of this Ministry /CPCB/KPCB shall monitor the stipulated conditions. The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information /monitoring reports. A six monthly compliance report and the monitored date along with statistical interpretation shall be submitted to them regularly	Full cooperation will be extended to the officer (s) of the Regional Office by furnishing the requisite data/information /monitoring reports. A six monthly compliance report and the monitored data are being submitted to the Regional Office of MoEF/CPCB/KSPCB.
xiii.	The 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	As internally accrued funds had been invested there was no need of financial approval of project by any authority and the financial closure. The date of commencement of ground work had been communicated to MoEF, Delhi & MoEF,Bangalore. The date of commencing the land development work communicated to Regional Office of MoEF,Bangalore on 12.08.10 . A copy of the letter is enclosed herewith as **Annexure 11.**
xiv.	No change in the mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests. No change in the calendar plan including excavation , quantum of limestone and waste shall be made.	No change in the mining technology and scope of working will be made without prior approval of the Ministry of Environment & Forests. No change in the calendar plan including excavation , quantum of limestone and waste will be made. The Calender Plan for Mines is enclosed herewith as **Annexure 12**.
	Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM etc., shall be provided with ear plugs/muffs	Noise Control Measures like Silencers , barriers, acoustic enclosures had been provided to control noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM etc., have been provided with ear plugs/muffs
xvi.	Industrial waste water from workshop and waste water from mine shall be properly collected ,treated so as to conform to the standards prescribed under GSR 422 (E) date 19th May 1993 and 31st Decemnber 1993 or a amended from time to time, Oil and grease trap shall be installed before discharge of workshop effluents	No waste water is generated from the mine. The mine water, after sedimentation is being used for afforestation, dust control etc., within the premises. The industrial waste water is collected & treated in ETP, & reused in dust suppression and in afforestation works. The treated effluents conform to the standards prescribed.

B. GENERAL CONDITIONS

S.No	General Conditions	Compliance Status
xvii.	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure of dust and take corrective measures ,if needed	Personnel working in dusty areas have been provided with masks Training and information on safety and health aspects have also been given to personnel working in dusty areas. Occupational health surveillance program of the workers in dusty area is being undertaken periodically .
xviii.	The project authorities shall inform to the Regional Office regarding date of final closures and final approval of the project by the concerned authorities and the date of start of land development work	As internally accrued funds had been invested there was no need of financial approval of project by any authority and the financial closure. The date of commencement of ground work had been communicated to MoEF, Delhi & MoEF,Bangalore on 12.08.2010. A copy of the letter is enclosed herewith as **Annexure 11.**
xix.	A copy of clearance letter shall be marked to the concerned Panchayat /local NGO, if any from whom suggestion /representation , if any was received while processing the proposal	Environmental Clearance copy sent to Gram Panchayat of Miryana and Anwar vide our letter Chettinad Cement/Kallur Proj/MoEF/1107 & 1108 dated 26.06.2010. A copy of the letter is enclosed herewith as **Annexure 13.**
xx.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad /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 put up on the website of the company by the proponent.	Environmental Clearance copy sent to Gram Panchayat of Miryana and Anwar vide our letter Chettinad Cement/Kallur Proj/MoEF/1107 & 1108 dated 26.06.2010. A copy of the letter is enclosed herewith as **Annexure 13.** The clearance letter has also been put up on the website of our company

B. GENERAL CONDITIONS

S.No	General Conditions	Compliance Status
xxi	The project authorities shall advertise atleast in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned within 7 days of the issue of clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with its Karnataka State Pollution Control Board and also at website of the Ministry of Environment and Forests at "http://enfor.nic.in and a copy of the same shall be forwarded to the Regional Office of this Ministry	Advertisement was released in **Kannada Prabha & New Indian Express , Bangalore on 26-06-2010 & Kannada Prabha, Gulbarga division on 27-06-2010** that the project has been accorded environmental clearance and a copy of the clearance letter is available with its Karnataka State Pollution Control Board. The copies of advertisement enclosed herewith as **Annexure 14**. Copies of the advertisement submitted to MoEF Regional Office, Bangalore vide our letter CHETTINAD CEMENT/MoEF/KAL.PROJ/538 dated 06.07.2010. A copy of the letter is enclosed herewith as **Annexure 15.**
xxii	The environment statement for each financial year ending 31st March in Form V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under Environmental (Protection) Rules 1986 as amended subsequently , shall also be put on the website of the company along with status of compliance of EC conditions and shall also be sent to the respective regional office of MoEF by email	Environment statement for the year 2012-13 in Form V submitted on 28.09.2013 to KSPCB and Regional Office of MoEF,Bangalore. A copy of the letter is enclosed herewith as **Annexure 16.** The status of compliance of EC conditions has been put in the website of our company.