## Chettinad Cement Corporation Private Limited Kallur Limestone Mine

Kallur Village, Chincholi Taluk, Kalaburagi District, Karnataka

# Environmental Clearance (EC) Compliance Report (Apr '17 – Sep '17) (Mine Expansion)

(EC granted vide letter F. No. J-ll015/29/2011-IA.II (M) dated 8<sup>th</sup> Mar 2016 for Expansion of Mining Capacity from 4 to 10 million tons per annum & Mining Lease Area of 422.94 ha)

#### (Expansion Programme not yet implemented)

#### **A. Specific Conditions**

S.No	Specific Condition	Compliance status
i	The water table is dropping In the area as	Steps will be taken to improve the rain
	indicated by the data from November 2014	water harvesting structures by providing
	– March 2015. Therefore the additional	additional catch drains, garland drains to
	conservation measures shall be taken to	divert the rainwater from the Mine Area
	protect/conserve the ground water table.	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	Required precautions will be taken to
	nallah shall not Interfere with the natural	prevent disturbance to the natural drainage
	drainage of the area.	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 will be
	50 m non-mining safety barriers on both	provided on both side of nallah to protect
	side of nallah to protect from any siltation	from any siltation. Also, protective
	is proposed. Protective measures like	measures like gully plugs will be erected
	gully plugs shall be erected across the water	across the water course to enable settling of

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	course to enable settling of any silt. Grass	silt.
	species and leguminous plants shall be	Grass species and leguminous plants will be
	cultivated for binding the loose soil and	cultivated on the slopes of the bunds formed
	improve the soil fertility.	for binding the loose soil and improve the
		soil fertility.
iv	Environmental Clearance is granted	Noted and agreed.
	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.	
V	Environmental clearance is subject to	Guidelines noted.
	obtaining NBWL clearance from Standing	
	Committee of NBWL.	
vi	No mining activities will be allowed in	There is no forest land involved within the
	forest area, if any, for which the Forest	Mining Lease. Hence, this condition is not
	Clearance is not available	applicable.
vii	Proponent shall appoint an occupational	A qualified Medical Officer is available.
	Health Specialist for Regular and	Regular and Periodical medical examination
	Periodical medical examination of the	are being conducted for the workers of the
	workers engaged in the Project and records	existing Mine and records are also
	maintained; also, Occupational health	maintained. Also, Occupational Health
	check-ups for workers having some	Check-ups are conducted for the workers
	ailments like BP, diabetes, habitual	once in a year. Necessary remedial/
	smokers, etc. shall be undertaken once in	preventive measures will be taken, if
	six months and necessary	required. Health care facilities under CSR
	remedial/preventive measures taken	initiative, are extended to the
	accordingly. Recommendations of	surrounding villages, which will cover
	National Institute for Labour for ensuring	the old age people also.
	good occupational environment for mine	
	workers would also be adopted; All the	The above mentioned practices will be
	old age people of the surrounding villages	continued for the proposed expansion
	may be provided medical facilities.	also.

S.No	Specific Condition	Compliance status
		Recommendations of National Institute for
		Labour for ensuring good occupational
		environment for mine workers will also be
		adopted.
viii	The project proponent shall obtain	Consent to Establish has been obtained
	Consent to Establish and Consent to	(Consent Order No : CTE-301659 Date : 16 <sup>th</sup>
	Operate from the Karnataka State Pollution	Dec 2016). Consent to Operate from the
	Control Board and effectively implement all	Karnataka State Pollution Control Board will
	the conditions stipulated therein.	be obtained and the conditions stipulated
		in the Consent Orders will be effectively
		implemented.
ix	The prior permission from CGWA shall be	The application has been submitted to
	obtained before intersecting the	Karnataka Ground Water Authority, for
	groundwater table.	getting the permission for the additional
		ground water drawl and for the intersection
		of ground water.(Karnataka is one of the
		States, authorized to deal with regulation of
		ground water and management as notified
		by the Central Ground Water Authority).
x	To avoid adverse impact of mining	There are no habitations and villages within
	operations on habitations/villages, the	the proposed Mining Lease Area.
	Proponent shall comply with conditions	
	provided In OM no. Z-11013/57/2014-	The nearest habitation is at Kallur and
	IA.II(M) dated 29.10.2014 on Impact of	Sangam Villages. The control measures
	mining activities on Habitations Issues	detailed in the EMP will be implemented to
	related to the mining Projects wherein	minimize the impact of mining operations.
	Habitations and villages are the part of	
	mine lease areas or Habitations and villages	
	are surrounded by the mine lease area.	

S.No	Specific Condition	Compliance status
xi	The loose solids should be kept	The loose solids are being separated from
	separately from flowing water and flow	flowing water by constructing garland
	of effluents to nearby areas outside the	drains/catch drains with gully plugs and
	leasehold shall be prevented. The paved	sumps in the existing Mine. There is no
	drains along with arrangements for Over	generation of industrial effluent from the
	Burden Dumps and their drainage may be	existing mining operations and the
	clearly depicted on a contoured map of the	domestic waste water is being treated in
	mining area.	septic tank followed by dispersion trench.
		Hence, there will not be any flow of
		effluents to nearby areas outside the
		leasehold.
		There is no over burden and hence there will
		not be any need to provide paved drains and
		depicting the same on the contour-map of
		Mining Lease area.
		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.
		These above practices will be continued for
		the proposed expansion also.
		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°.

S.No	Specific Condition	Compliance status
		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.
xii	The project proponent shall ensure that	No natural watercourse or water resource
	no natural watercourse and/or water	will be obstructed due to any mining
	resources shall be obstructed due to any	operations. Adequate measures like 50 m
	mining operations. Adequate measures shall	safety barriers and greenbelt will be
	be taken for conservation and protection of	provided to conserve and protect water
	the 1 <sup>st</sup> and 2 <sup>nd</sup> order streams, emanating	stream passing through the Mining Lease
	or passing through the mine lease during	Area.
	the course of mining operation.	
xiii	The top soil, if any shall temporarily be	In the existing Mine, the top soil ( Black
	stored at earmarked site (s)only and it	Cotton Soil) removed is being used for
	should not be kept unutilized for long. The	formation of bunds along the boundary of
	top soil shall be used for land reclamation	ML area and safety barriers. The top soil is
	and plantation.	also being used for greenbelt development
		also. These above practices will be continued
		for the proposed expansion also.
		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

S.No	Specific Condition	Compliance status
		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	The balance BCS, after using for bund
	taken to ensure stability and drainage of	formation and greenbelt development, will
	dump so that no solid waste/debris flows	be stacked at the designated location. The
	into the nallah.	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	As there is no overburden, this condition is
	mining operation shall be stacked at	not applicable.
	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	

S.No	Specific Condition	Compliance status
	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.	
xvi	Catch drains and siltation ponds of	In the existing Mine, catch drains with
	appropriate size shall be constructed for	gully plugs and siltation ponds of
	the working pit, temporary OB and	appropriate size have been constructed
	mineral dumps to arrest flow of silt and	for the working pit. The water collected is
	sediment directly into the adjoining River	being utilized for watering the mine
	and other water bodies. The water so	area, roads, greenbelt development etc.
	collected should be utilized for watering	The drains are being regularly desilted
	the mine area, roads, green belt	particularly after the monsoon and
	development etc. The drains should be	maintained properly.
	regularly desilted particularly after the	
	monsoon and maintained properly.	The same practices will be continued for the
		proposed expansion also.
		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.
xvii	Dimension of the retaining wall at the	As there is no overburden, this condition is
	toe of the OB dump(s) and the OB	not applicable.
	benches within the mine to check run-off	
	and siltation should be based on the rain	
	fall data.	
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S.No	Specific Condition	Compliance status
xviii	Plantation shall be raised in the specified	In the existing Mine, 7.5 m wide greenbelt
	area, Including a 7.5m wide greenbelt	along the boundary of the ML Area, along
	in the safety zone around the mining lease,	the roads, safety barrier, etc., is being
	OB dump(s), along the roads, etc. by	developed by planting the native species in
	planting the native species in consultation	consultation with the local DFO/Agriculture
	with the local DFO/Agriculture Department.	Department. So far, the greenbelt has been
	In addition, plantation shall also be raised in	developed over an area of 20.68 ha by
	the back filled and reclaimed area and	planting 39,812 saplings in the Mine area,
	around water body. The density of the	following the guidelines of CPCB.
	trees should be around 1500 plants per	
	ha.	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 1925 plants per ha.
xix	Effective safeguard measures, such as	In the existing Mine, regular water
	regular water sprinkling shall be carried	sprinkling is being carried out in areas
	out in critical areas prone to air pollution	prone to air pollution such as mining area,
	and having high levels of particulate matter	loading and unloading points. Extensive
	such as around crushing and screening	water sprinkling is being carried out on
	plant, loading and unloading point and all	haul roads. It will be ensured that the
	transfer points. Extensive water sprinkling	Ambient Air Quality parameters conform
	shall be carried out on haul roads. It	to the norms prescribed by the Central
	should be ensured that the Ambient Air	Pollution Control Board In this regard.
	Quality parameters conform to the norms	The same practices will be continued for the
	prescribed by the Central Pollution	proposed expansion also.
	Control Board In this regard.	ριορόσεα ελρατισίοτι αίσο.
		There are no crushing and screening plant
		and no conveyors/transfer points within
		the ML Area.

S.No	Specific Condition	Compliance status
xx	Regular monitoring of water quality	Regular monitoring of water quality
	upstream and downstream of perennial	upstream and downstream of seasonal
	nallahas falling in the impact zone shall be	nallahas falling in the impact zone is being
	carried out and record of monitoring data	carried out and the record of monitoring
	should be maintained and submitted to	data is being submitted to Ministry of
	Ministry of Environment, Forest and Climate	Environment, Forest and Climate Change, Its
	Change, Its Regional Office, Bangalore,	Regional Office, Bengaluru, Central
	Central Groundwater Authority, Regional	Groundwater Authority, Regional Director,
	Director, Central Ground Water Board,	Central Ground Water Board, Karnataka
	State Pollution Control Board and Central	State Pollution Control Board and Central
	Pollution Control Board.	Pollution Control Board.
xxi	Appropriate measures shall be taken for	In the existing Mine, the solid particles are
	treatment of the upper catchment of the	getting separated from the water flow by
	mine lease area.	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	In the existing Mine, the rainwater
	suitable conservation measures to	harvesting structures like garland/catch
	augment ground water resources in the	drains and rainwater harvesting ponds
	area In consultation with the Regional	provided already are serving the purpose
	Director, Central Ground Water Board.	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.

S.No	Specific Condition	Compliance status
xxiii	Regular monitoring of ground water level	Regular monitoring of ground water level
	and quality shall be carried out in and	and quality is being carried out in and
	around the mine lease by establishing a	around the existing mine lease area four
	network of existing wells and Installing	times in a year, once in each season. Two
	new piezometers during the mining	
	operation. The periodic monitoring [(at	piezometers have been installed for continuous monitoring of water levels.
	least four times in a year- pre-monsoon	
	(April-May), monsoon (August),	The data collected are being sent to the
	post-monsoon (November) and winter	Regional Office of MoEF & CC, Bengaluru
	(January); once in each season)) shall be	and the Regional Director, Central Ground
	carried out in consultation with the State	Water Board.
	Ground Water Board/Central Ground	
	Water Authority and the data thus	If at any stage, it is observed that the
	collected may be sent regularly to the	groundwater table is getting depleted due
	Ministry of Environment, Forest and	to the mining activity, necessary corrective
	Climate Change and its Regional Ofice	measures will be carried out.
	Bangalore, the Central Ground Water	
	Authority and the Regional Director,	The same practices will be continued for the
	Central Ground Water Board. If at any	proposed expansion also.
	stage, it is observed that the	
	groundwater table is getting depleted	
	due to the mining activity, necessary	
	corrective measures shall be carried out.	
xxiv	The project proponent shall obtain	The permission from the competent
	necessary prior permission of the	authorities will be obtained for the
	competent authorities for drawl of	additional water requirement for the
	requisite quantity of water, required for	expansion as well as for the intersection of
	the project. Suitable rainwater harvesting	ground water.
	measures on long term basis shall be	
	planned and implemented in	In the existing Mine, the rainwater harvesting structures like garland/catch

S.No	Specific Condition	Compliance status
	consultation with the Regional Director,	drains and rainwater harvesting ponds
	Central Ground Water Board.	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.
xxv	Suitable rain water harvesting measures	Rainwater harvesting structures like
	on long term basis shall be planned and	garland/catch drains and rainwater
	implemented in consultation with the	harvesting ponds have already been
	Regional Director, Central Ground water	provided in the existing Mine. Additional
	Board.	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	From the present mining operations, no
	be taken to prevent pollution of nearby	industrial effluent is getting generated and
	River in consultation with the State	there is no discharge of effluent to the
	Pollution Control Board.	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

S.No	Specific Condition	Compliance status
		purposes within the Plant & Mine area.
		Thus , appropriate mitigative measures
		have been taken to prevent pollution of
		nearby River.
		The same practices will be continued for the
		proposed expansion also.
xxvii	Vehicular emissions shall be kept under	In the existing Mine, the vehicles are
	control and regularly monitored.	being checked for PUC certificate at the
	Measures shall be taken for maintenance	mine entry point to ensure that emissions
	of vehicles used in mining operations and	are kept under control. Regular
	in transportation of mineral. The mineral	maintenance of vehicles used in mining
	transportation shall be carried out	operations and in transportation of
	through the covered trucks only and the	mineral are being ensured. The mineral
	vehicles carrying the mineral shall not be	transportation is carried out after covering
	overloaded.	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.	In the existing Mine, the controlled
	The mitigative measures for control of	blasting techniques are being followed to
	ground vibrations and to arrest fly rocks	control of ground vibrations and to arrest
	and boulders should be implemented.	fly rocks and boulders as detailed
		hereunder.
		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 a fraction of the total

S.No	Specific Condition	Compliance status
		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	In the existing Mine, the wet drilling is
	extractors or equipped with water	being adopted.
	injection system.	
		The same practice will be continued for the
		proposed expansion also.
xxx	Mineral handling area shall be provided	The mining area and the loading &
	with the adequate number of high	unloading points are being sprayed with
	efficiency dust extraction system. Loading	water to suppress dust in the existing
	and unloading areas including all the	Mine .
	transfer points should also have efficient	
	dust control arrangements. These should	The same practice will be continued for
	be properly maintained and operated.	the proposed expansion also.
		There are no conveyors and transfer
		points in the ML Area.
xxxi	Sewage treatment plant shall be Installed	Sewage treatment plant has been Installed
	for the colony. ETP shall also be provided	for the colony.
	for the workshop and wastewater generated	
	during the mining operation.	

S.No	Specific Condition	Compliance status
		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. There will not be any discharge of
		effluents from the mine premises. Hence, the
		need for ETP at Mine does not arise.
		The same practices will be continued for
		the proposed expansion also.
		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.
xxxii	Pre-placement medical examination and	In the existing Mine, pre-placement
	periodical medical examination of the	medical examination and periodical
	workers engaged in the project shall be	medical examination of the workers are
	carried out and records maintained. For	being be carried out and records are also
	the purpose, schedule of health	maintained. For this purpose, the schedule
	examination of the workers should be	of health examination of the workers is
	drawn and followed accordingly.	being drawn and followed accordingly. The
		same practices will be continued for the
		proposed expansion also.

S.No	Specific Condition	Compliance status
xxxiii	Regular monitoring of free silica in the	The workers employed in the exiting Mine
	dust will be carried out and records	are provided with personal protective
	maintained. It shall be ensured that the	measures to guard against inhaling silica
	levels of silica do not exceed the prescribed	dust.
	limit. The workers will be provided with	
	personal protective measures to guard	The same practice will be continued for
	against inhaling silica dust.	the proposed expansion also.
		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.
xxxiv	Provision shall be made for the housing of	As the proposal is for mining activity, no
	construction labour within the site with all	major construction work is envisaged. Toilet
	necessary infrastructure and facilities such	is already available. Only Office Shed will
	as fuel for cooking, mobile toilets, mobile	be constructed, which do not require any
	STP, safe drinking water, medical health care,	staying facilities for the construction
	creche etc. The housing may be in the	labourers. Hence, this condition is not
	form of temporary structures to be	applicable.
	removed after the completion of the	
	project.	
xxxv	The project proponent should take all	The conservation plan has been prepared
	precautionary measures during mining	and submitted to the Chief Conservator of
	operation for conservation and	Forests, Gulbarga , Karnataka along with
	protection of endangered flora as well as	the application for getting the clearance
	endangered fauna in the study area.	form NBWL. The Conservation Plan has
	Action plan for conservation of fora and	been incorporated in the EIA Report and a
	fauna shall be prepared and	copy of the EIA Report (including the
	implemented In consultation with the	Conservation Plan) has already been
	State Forest and Wildlife Department.	submitted to the Regional Office of
	Necessary allocation of funds for	MoEF& CC , Bengaluru.

S.No	Specific Condition	Compliance status
	implementation of the conservation plan	Allocation of funds as indicated in the
	shall be made and the funds so allocated	conservation plan will be made and the
	shall be included in the project cost.	funds so allocated will be included in the
	Copy of action plan may be submitted to	project cost.
	the Ministry and its Regional Office at	
	Bangalore within 3 months.	The detailed action plan for implementing
		the conservation measures to protect
		endangered flora as well as endangered
		fauna in the study area will be prepared
		and implemented by Forest Department.
		The funds committed will be released by
		the project proponent.
xxxvi	The critical parameters such as RSPM	In the existing Mine, the critical
	(Particulate matter with size less than10	parameters such as RSPM (Particulate
	micron i.e., PM <sub>10</sub> ) and NOx in the	matter with size less than 10 micron i.e.,
	ambient air within the impact zone,peak	$PM_{10}$ ) and $NOx$ in the ambient air within
	particle velocity at 300m distance or	the impact zone are being monitored
	within the nearest habitation, whichever	periodically.
	is closer shall be monitored periodically.	
	Further, quality of discharged water shall	There is no generation of industrial
	also be monitored [(TDS, DO, PH and	effluent from the mining operations and
	Total Suspended Solids (TSS)). The	the domestic waste water is being treated
	monitored data shall be uploaded on the	in septic tank followed by dispersion
	website of the company as well as	trench. There will not be any discharge of
	displayed on a display board at the	effluents from the mine premises.
	project site at a suitable location near	
	the main gate of the Company In public	The same practices will be continued for
	domain. The Circular No.	the proposed expansion also.
	J-20012/1/2006-IA.II(M) dated 27.05.2009	
	issued by Ministry of Environment, Forest	The need to monitor the effluent quality and
	and Climate Change, which is available	uploading of the same in the company
	on the website of the Ministry	website do not arise as there will be no

S.No	Specific Condition	Compliance status
	www.envfor.nic.inshall also be referred in	discharge effluent from the Mine Area.
	this regard for its compliance	
		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 boundary, the
		monitoring of peak particle velocity will be
		will be commenced . As per the numerical
		estimation done, the peak particle velocity
		calculated at a distance of 500 m is only2.5
		to 3.0 mm/sec, which is within the
		permissible limits prescribed by DGMS as 10
		mm/sec.
		The monitored data are being uploaded
		on the website of the company and are
		also being displayed on a board near
		the Mine entrance.
xxxvii	A Final Mine Closure Plan along with details	Final Mine Closure Plan along with details of
	of Corpus Fund should be submitted to the	Corpus Fund will be submitted to the
	Ministry of Environment, Forest and	Ministry of Environment, Forest and Climate
	Climate Change, Syears in advance of final	Change , 5 years in advance of final mine
	mine closure for approval.	closure for approval.
xxxviii	The project proponent shall undertake all	All the commitments made during the public
	the commitments made during the public	hearing and the concerns raised by the locals
	hearing and effectively address the	in the public hearing as well as during
	concerns raised by the locals In the public	consideration of the project, will be fulfilled
	hearing as well as during consideration of	effectively, while implementing the project.
	the project, while implementing the project	

### **B.** General conditions

S. No	General Condition	Compliance Status
i	No change in mining technology and scope	No change in mining technology and scope
	of working should be made without prior	of working will be made without prior
	approval of the Ministry of Environment,	approval of the Ministry of Environment,
	Forest and Climate Change.	Forest and Climate Change.
ii	No change in the calendar plan including	No change in the calendar plan including
	excavation, quantum of mineral Limestone	excavation, quantum of mineral Limestone
	and waste should be made.	and waste will be made.
iii	Four ambient air quality-monitoring	7 Ambient Air Quality-Monitoring Stations
	stations should be established in the core	provided in the core zone as well as in the
	zone as well as in the buffer zone for RSPM	buffer zone for RSPM (Particulate Matter
	(Particulate Matter with size less than	with size less than 10 micron i.e., PM <sub>10</sub> ) and
	10micron i.e., PM1o) and NOx monitoring.	NOx monitoring , considering the
	Location of the stations should be decided	meteorological data, topographical features
	based on the meteorological data,	and environmentally and ecologically
	topographical features and	sensitive targets.
	environmentally and ecologically sensitive	
	targets and frequency of monitoring	The frequency of monitoring has been
	should be undertaken in consultation with	decided in consultation with the Karnataka
	the State Pollution Control Board.	State Pollution Control Board.
iv	Data on ambient air quality RSPM	For the existing Mine, the data on RSPM
	(Particulate Matter with size less than 10	(Particulate Matter with size less than 10
	micron I.e., PM <sub>10</sub> ) & NOx should be	micron I.e., PM <sub>10</sub> ) & NOx are being
	regularly submitted to the Ministry of	regularly submitted to the Ministry of
	Environment, Forest and Climate Change	Environment, Forest and Climate Change
	including Its Regional office located at	including Its Regional office located at
	Bangalore and the State Pollution Control	Bengaluru, Zonal Office of Central Pollution
	Board / Central Pollution Control Board	Control Board, Bengaluru and the Karnataka
	once In six months.	State Pollution Control Board once In six
		months. The same practice will be continued
		for the proposed expansion also.

S. No	General Condition	Compliance Status
V	Fugitive dust emissions from all the	In the existing Mine, the fugitive dust
	sources should be controlled regularly.	emissions are being controlled by regularly
	Water spraying arrangement on haul	water spraying on haul roads, loading and
	roads, loading and unloading and at	unloading points.
	transfer points should be provided and	
	properly maintained.	The same practice will be continued for the
		proposed expansion also.
		There are no conveyors in the ML Area.
		Hence, no transfer points are available.
vi	Measures should be taken for control of	Adequate control measures like acoustic
	noise levels below 85 dBA in the work	enclosures, silencers, controlled blasting and
	environment. Workers engaged in	good maintenance of Mining Machinery &
	operations of HEMM, etc. should be	Vehicles are being ensured in the existing
	provided with ear plugs / muffs.	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
vii		proposed expansion also.
VIII	Industrial waste water (workshop and	No waste water is getting generated form the
	waste water from the mine) should be	existing Mine. The vehicles and the mining
	properly collected, treated so as to	machinery used for the existing mining
	conform to the standards prescribed under	operation are maintained by the mining
	GSR 422 (E) dated 19th May,1993 and	contractor at the workshop in Chincholi.
	31" December, 1993 or as amended from	However, a Common Workshop will be
	time to time. Oil and grease trap should be	provided with oil & grease trap in the Plant
	Installed before discharge of workshop	premises, adjacent to the Mining Lease Area
	effluents.	and the same workshop will cater to the
		requirement of Mine also. There will be no

S. No	General Condition	Compliance Status
		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	In the existing Mine, personnel working in
	wear protective respiratory devices and	dusty areas are provided with protective
	they should also be provided with	respiratory devices and the use of the same
	adequate training and information on	by them are also being ensured. The workers
	safety and health aspects. Occupational	are given adequate training and information
	health surveillance program of the workers	on safety and health aspects. Occupational
	should be undertaken periodically to	health surveillance program for the
	observe any contractions due to exposure	workers is carried out periodically to find
	to dust and take corrective measures, if	out whether any impact due to exposure to
	needed.	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	A separate environmental management cell
	cell with suitable qualified personnel	with suitable qualified personnel has already
	should be set-up under the control of a	been set-up under the control of a Senior
	Senior Executive, who will report directly	Executive, who is reporting directly to the
	to the Head of the Organization.	Head of the Organization.
х	The funds earmarked for environmental	For the existing mine, the funds earmarked
	protection measures should be kept in	for environmental protection measures
	separate account and should not be	proposed for the expansion is kept in
	diverted for other purpose. Year wise	separate account and is getting diverted for
	expenditure should be reported to the	other purpose. Year wise expenditure is
	Ministry of Environment, Forest and	being reported to the Ministry of
	Climate Change and Its Regional Office	Environment, Forest and Climate Change and
	located at Bangalore.	Its Regional Office located at Bengaluru.

S. No	General Condition	Compliance Status
		The same practices will be continued for the
		proposed expansion also.
		The expenditure incurred for
		environmental protection and monitoring for
		the year 2017 -18 upto Sep '17 was
		Rs 17.91 lakhs.
xi	The project authorities should inform the	As internally accrued funds will be used for
	Regional Office located at Bangalore	this proposed expansion, the need to
	regarding date of financial closures and	communicate the date of financial closure
	final approval of the project by the	and final approval of the expansion project is
	concerned authorities and the date of start	not envisaged. The date of commencement
	of land development work.	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	Full cooperation is being extended to the
	at Bangalore shall monitor compliance of	Offcer (s) of the Regional Office of the MoEF
	the stipulated conditions. The project	& CC located at Bengaluru by furnishing the
	authorities should extend full cooperation	requisite data / Information / monitoring
	to the offcer (s) of the Regional Office by	reports pertaining to existing Mine.
	furnishing the requisite data / Information	
	/ monitoring reports.	The same practice will be continued for the
		proposed expansion also.
xiii	The project proponent shall submit six	The six monthly reports on the status of
	monthly reports on the status of	compliance of the stipulated Environmental
	compliance of the stipulated	Clearance conditions including results of
	Environmental Clearance conditions	monitored data are being submitted (both in
	Including results of monitored data (both	hard copies as well as by e-mail) to the
	in hard copies as well as by e-mail) to the	Ministry of Environment, Forest and Climate
	Ministry of Environment, Forest and	Change, Regional Office of MoEF & CC,
	Climate Change, its Regional Office	Bengaluru, the Zonal Office of Central

S. No	General Condition	Compliance Status
	Bangalore, the respective Zonal Office of	Pollution Control Board, Bengaluru and
	Central Pollution Control Board the State	Karnataka State Pollution Control Board and
	Pollution Control Board. The proponent	also being uploaded in the company website.
	shall upload the status of compliance of	
	the Environmental Clearance conditions,	The same practice will be continued for the
	including results of monitored data on	proposed expansion also.
	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 Ofice of	
	Central Pollution Control Board and the	
	State Pollution Control Board.	
xiv	A copy of the clearance letter shall be sent	Environmental Clearance copy sent to
	by the proponent to concerned Panchayat,	Gram Panchayat of Miryan and Anwar and
	Zila Parisad/ Municipal Corporation, Urban	two NGOs.
	Local Body and the Local NGO, if any, from	
	whom suggestions/ representations, if any,	The Environmental Clearance letter has also
	were received while processing the	been put up in the website of our company.
	proposal. The clearance letter shall also be	
	put on the website of the Company by the	
	proponent.	
xv	The State Pollution Control Board should	This is the responsibility of Karnataka
	display a copy of the clearance letter at the	Pollution Control Board.
	Regional Offce, District Industry Centre	
	and the Collector's Office/ Tehsildar's	
	Office for 30 days.	
xvi	The environmental statement for each	The environmental statement for each
	financial year ending 31st March in	financial year ending 31 <sup>st</sup> March in Form-V as
	Form-V as is mandated to be submitted by	is mandated is being submitted for the
	the project proponent to the concerned	existing Mine to the Karnataka State

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

## Other Conditions

S No	Other Condition	Compliance Status
12	The Ministry or any other Competent	Guidelines noted and the additional
	Authority may alter/modify the above	condition stipulated will also be complied
	conditions or stipulate any further	with.

S No	Other Condition	Compliance Status
	condition in the interest of environment	
	protection.	
13	Concealing factual data or submission of	Guidelines noted.
	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.	
14	The above conditions will be enforced	Guidelines noted.
	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	
3	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 relating to the	
,	subject matter.	
15	Any appeal against this Environmental	Guidelines noted.
	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.	

for Chettinad Cement Corporation Private Limited

C Janaradhana Reddy, Joint President (Works)

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