

**VASAVADATTA CEMENT, SEDAM**

**Point Wise Compliance Report to Ministry Of Environment and Forests**

**MoEF Consent letter No: J-11011/11/95-IA.II (I) Dt. September 6 1995**

<b>S. No</b>	<b>Conditions</b>	<b>Compliance statement</b>
i.	The project authority must strictly adhere to the stipulations made by the State Government and Karnataka State Pollution Control Board.	All the stipulations laid down by State Pollution Control Board have strictly been adhered.
ii.	Any further expansion of the plant or process modifications having bearing on pollution potential can be taken up only with the prior approval of this Ministry.	Complied.
iii.	The project authorities should commission a post expansion comprehensive EIA study within six months of commissioning of plant covering one year data (4 seasons) and submit the report to this Ministry within 15 months of commissioning of the study.	Complied. The report has been submitted vide our letter Nos. VC/WS/ENV/CKJ/00/756C, Dt.02.03.2000 and VC/ ENV/CKJ/ 99/ 422C, Dt. 29.10.99.
iv.	The Project authorities should control fugitive emissions in the existing plant to keep them within the prescribed limits including clinker cooling section and cement packing units.	Complied.
v.	Particulate emissions from various units should conform to the standards prescribed by the competent authorities or in the EPA 1986 or as will be prescribed from time to time. At no time emission of particulates from the stacks of Unit-II should exceed the limit of 50 mg/Nm <sup>3</sup> . A confirmation is required in this respect from the project proponent that the pollution control equipment will be designed to achieve operation efficiency of 50 mg/Nm <sup>3</sup> in respect of emissions of dust from the various stacks.	Noted and will be complied.
	Interlocking arrangement should be provided so that in the event of non-functioning of the pollution control equipment (s), the main plant gets automatically shutdown. Also in the event of failure of any pollution control system adopted by the unit, the respective unit should be put out of operation immediately and should not be restarted until the control systems are rectified to achieve the desired efficiency.	Arrangement of power from various sources like TG's is provided to all pollution control equipments to facilitate uninterrupted operation in case of KPTCL power cut. Interlocking arrangement was incorporated in all the units.
vi.	The project authority should not change any design of stacks without the permission of the State Pollution Control Board.	Complied. Stack height is provided as per the KSPCB consent.
vii.	At least three air quality monitoring stations for measuring of particulate matters should be set up in the down wind direction, as well as where maximum ground level concentration is anticipated, in consultation with State Pollution Control Board.	Complied. 1. Six AAQ stations are installed in consultation with KSPCB. 2. AAQ is being monitored and data collected is being submitted monthly to the State Pollution Control board.
	Also Stack emission should be monitored by setting up automatic stack monitoring unit.	Complied. All major stacks are provided with Opacity monitor & signal given in control room.
	Air quality and stack emissions should be monitored regularly.	Air quality and stack emissions are being monitored regularly and reports are being submitted to Karnataka State Pollution Control Board regularly.

	Fugitive emissions of particulate matters should be monitored regularly. The data collected should be statistically analyzed, interpreted and submitted to the State Pollution Control Board once in three months and this Ministry once in every six months.	Emission of particulate matters is monitored regularly and the data collected and submitted to the State Pollution Control Board and Ministry. Latest submitted vide our letter no. VC/WS/ENV/CKJ/27B/1614 dated: 07.11.11
viii	Noise levels in the working Environment should not exceed the limit of 85 dB(A) on 8 hourly exposure basis.	Complied. Noise levels at various working location is always below 85 dB(A).
ix.	A green belt of adequate width and density should be developed all around the plant on scientific basis using native plant species in consultation with the local DFO. About 1500-2000 plants per ha. Of land should be raised in the proposed green belt.	Complied. Total trees planted as on March' 2011 is 454038. Tree surviving is 259096. Survival rate is 54 %. Total trees planted from April 2011 to Sept 2011 is 12,984.
x.	Environmental lab should be established with adequate number and type of pollution monitoring (ambient and stack) and analysis equipment in consultation with the State Pollution Control Board.	Complied. The Laboratory is equipped with 3 nos. of Stack Monitoring kits, 6 No. of AAQ equipments, 3 Nos Personal sampler, Noise level meter, B.O.D incubator, DO meter, Spectrophotometer, Quintox gas Analyzer, Potable Flue gas analyzers and necessary chemicals and glass ware.
xi.	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided adequate training and information on necessary safety and healthy aspects.	1. Required PPE is provided to all workers. 2. Regular training is given.
xii.	Occupational health surveillance programme of the workers should be undertaken periodically to observe any contraction of respiratory diseases amongst the workers due to exposure to dust.	Complied. Regular periodical health checkup is being done for staff & workers and preventive action are taken.
xiii.	A separate environmental management cell with suitably qualified personnel to carryout various functions should be set up under the control of senior executive who will report directly to head of the organization.	Complied. Full fledged Environment cell is provided with well qualified personnel's to carryout various functions and reporting directly to Joint President (Engg & PP).
xiv.	The funds earmarked for environmental protection measures should not be diverted for other purposes and year-wise expenditure should be reported to this Ministry.	Complied.
xv.	The regional office of this Ministry located at Bangalore will monitor the implementation of the above conditions. Necessary facilities for undertaking for monitoring work may be provided to the staff of the Regional office.	Noted. VC will provide the facilities for monitoring to the authorities.
2	The Ministry or any other competent authority may stipulate any further condition(s) after reviewing the environmental monitoring reports etc.	Noted.

**PONITWISE COMPLIANCE REPORT TO EC FOR MINES MoEF, Delhi.**

**Ref no. J-11015/98/2004-IA. II (M) Dated 28<sup>th</sup> March 2005. Updated as on September'2011**

<b>A. Specific Conditions</b>	
(i)Topsoil should be stacked properly with proper slope at earmarked site(s) and should not be kept active and shall be used for reclamation and development of greenbelt and for bund construction.	Top soil is used for formation of Bund along the mining lease boundary for development of green belt. Top soil handled and used for bund formation during 2008-09 is 162589 m <sup>3</sup> & 2009-10 96025 m <sup>3</sup> & 2010-11 is 161820 m <sup>3</sup> & 2011-12(Up to Sept'2011) is 25990 m <sup>3</sup> .
(ii)Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil dump and from within lease area. The water so collected should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly.  Garland drains (size, gradient & length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mines site. Sump capacity should also provide adequate retention period to allow proper settling of silt material.	Garland drains are cut around the mine pit, whereby the rain water from the catchment area is channelized in to the mine pit. The catch drains also cut around the soil dump and the water is directed to mines pit which will act as settling pond apart from the water storage. Considering avg rain fall of 1025mm total capacity of sump required is around 14.18 Lake m <sup>3</sup> . We have already developed pit capacity of 34 Lakh m <sup>3</sup> . Keeping 50 % margin as advised. The stored water in the mine pit is utilized in the cement plant for process.
(iii)Crushers should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, haulage roads, transfer points, etc.	Complied
(iv)Drills should be wet operated or with dust extractors and operated only during daytime.	Drills are being wet operated to suppress the dust generation at source itself. As regards drill operation during daytime only, it should be reconsidered.
(v)Controlled blasting should be practiced with the use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.	Complied.  Blasting operations are carried out using the latest controlled blasting technique; NONEL. Blasting is carried out in day time only and will be avoided in windy periods.

<p>(vi) The total area that shall be brought under plantation at the end of mine life is 90 ha which includes areas under green belt, and reclaimed dumps by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2000 plants per ha.</p>	<p>Noted and will be complied. Plantation is done in ML area for gap filling purpose as mentioned below.</p> <table border="1" data-bbox="899 275 1539 594"> <thead> <tr> <th>Period</th> <th>Mines</th> <th>Colony</th> <th>Factory</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2009-10</td> <td>5500</td> <td>1000</td> <td>2500</td> <td>9000</td> </tr> <tr> <td>2010-11</td> <td>6865</td> <td>2500</td> <td>1490</td> <td>10855</td> </tr> <tr> <td>2011-12 Up to Sept'11</td> <td>4750</td> <td>5196</td> <td>3038</td> <td>12984</td> </tr> </tbody> </table>	Period	Mines	Colony	Factory	Total	2009-10	5500	1000	2500	9000	2010-11	6865	2500	1490	10855	2011-12 Up to Sept'11	4750	5196	3038	12984
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<p>(vii) Reclamation of quarried area (void) of 807.86 ha shall be developed as a water reservoir and used for recharge of ground water. The higher benches of the void shall be terraced and plantation done to stabilize the slopes. Peripheral fencing shall be done along the excavated area.</p>	<p>Noted and will be complied.</p> <p>As on 1<sup>st</sup> April' 2011 about 97.41 Ha areas is broken. Out of this, Limestone and Shale is fully removed from the area of 5.0 Ha. Approx and is developed as water reservoir.</p>																				
<p>(viii)</p>	<p>The point number (viii) is missing and we assume that it is a typographical error in numbering.</p>																				
<p>(ix) The company shall implement measures for rainwater harvesting and other measures for recharge of ground water for augmentation of ground water resource.</p>	<p>Compiled.</p> <p>Two pit of 34 Lakh m<sup>3</sup> water storage capacity is developed. The present water storage is 27 Lakh m<sup>3</sup> As on Sept'2011.</p>																				
<p>(x) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity should be done for a minimum four times a year in pre monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for ground water quality in May. Data thus collected should be submitted to the Ministry of Environment &amp; Forests and the Central Ground Water Board, Regional Office quarterly within one month of monitoring.</p>	<p>Noted and complied.</p> <p>The result of ground water level monitoring collected from CGWA Gulbarga (from Jan' 11 to Aug'2011) and ground water quality report for the month of July'2011 is submitted to Ministry vide our letter VC / WS / MINE / CKJ/ 66B / 2011 -12/ 1299. Dtd 14.09.2011.</p>																				
<p>(xi) Mining will not intersect ground water. Prior permission of the CGWA and MOEF shall be taken to mine below ground water.</p>	<p>Noted and will be complied.</p> <p>Authenticated certificate is given by GWSU , ZP , Gulabarga through Letter No SG/GWS/ZP/2005-06/840 Dtd30.01.2006.</p>																				

<p>(xii) Digital processing of the entire lease area using remote sensing techniques should be done regularly once in 3 years for monitoring land use pattern and report submitted to MOEF and its Regional Office at Bhopal.</p>	<p>Digital processing of the entire lease area by using remote sensing techniques has been done for monitoring land cover and land use pattern. Report of study is submitted to Ministry vide our letter no.VC/WS/MINE/CKJ/2010/B55A/392 dated: 11.10.2010.</p>
<p>(xiii) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment &amp; Forests 5 years in advance of final mine closure for approval.</p>	<p>Noted and will be complied.</p>
<p>(xiv) The Proponent shall earmark a separate fund of 1% of the total project cost subject to a minimum of Rs. 50,000/- for eco development measures including community welfare measures in the project area. The amount shall be deposited by the Company in a separate account within three months to be maintained by the Karnataka State Pollution Control Board. The action plan in this regard shall be submitted to the SPCB as well as to MOEF and its Regional office at Bangalore within three months of issue of this letter. After approval of the action plan by the SPCB, the amount deposited shall be released in two installments to the project authorities based on progress of implementation. The SPCB shall ensure that implementation of the action plan for eco development measures is completed within two years from date of its approval by SPCB. Further, the interest accrued during this period on the amount deposited by the proponent with the SPCB shall be ploughed back to the same eco-development fund.</p>	<p>M/s Vasavadatta Cement has deposited an amount of Rs 50000/- with the Karnataka State Pollution Control Board vide letter no. VC/WS/ENV/CKJ/B55/526DT dated 25.05.2005. The action plan in this regard is submitted to the KSPCB as well as to MOEF and its Regional office at Bangalore. Request for reimbursement for Eco-development fund is submitted vide our letter no. VC: WS: ENV: CKJ: F10 (ENV):554, dated 31.08.09.</p>
<p><b>B. General Conditions</b></p>	
<p>(i) No change in mining technology and scope of working should be made without prior approval of the Ministry Of Environment &amp; Forests.</p>	<p>Noted and will be complied</p>
<p>(ii) No change in the calendar plan including excavation, quantum of limestone, waste dumps should be made.</p>	<p>Noted and will be complied</p>
<p>(iii) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for monitoring RPM, SPM, NOX and SO2. Location of the ambient air quality station should be decided based on meteorological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.</p>	<p>Noted. VC is monitoring at 5 stations in core zone and 7 stations in buffer zone.</p>

<p>(iv) Data on the environmental quality should be regularly submitted to the Ministry including its Regional Office at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months.</p>	<p>Complied.</p> <p>VC had submitted half yearly Environmental monitoring report from (April' 2011 to Sept'2011), vide our letter No.VC / WS / MINE / CKJ / 66 A/ 2011-12 /.757, Dated 13.10.2011.</p>
<p>(v) Adequate measures for control of fugitive emissions should be taken during drilling &amp; blasting operations, loading and transportation of mineral, etc. Fugitive dust emissions should be regularly monitored and data recorded properly. Water spraying arrangements on haul roads, loading and unloading points, and transportation of minerals, etc. should be provided and properly maintained.</p>	<p>Noted complied.</p>
<p>(vi) Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operations of HEMM, etc., should be provided with ear plugs/muffs.</p>	<p>Noted &amp; complied.</p>
<p>(vii) Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 May 1993 and 31<sup>st</sup> December 1993 or as amended from time to time. Oil and grease trap should be installed in the mine for treatment before discharge of effluents from the Workshop. Mine seepage water shall be tested and treated to conform to prescribed standards before discharge.</p>	<p>Noted &amp; complied.</p>
<p>(viii) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.</p> <p>Occupational health surveillance programme of the workers should be undertaken periodically and corrective measures taken, if required. Annual audiometric tests shall be done to employees in noise generating work zone and preventive measures implemented.</p>	<p>Complied.</p> <p>Protective respiratory devices are provided to Persons working in dusty areas and training &amp; information on safety and health aspects have been given.</p> <p>All the persons are periodically examined for medical covering general health check up, audiometry, spirometry, lung function test and X ray.</p>
<p>(ix) The data on environmental quality should be collected and analyzed either through an in-house environmental laboratory established with adequate number and type of pollution monitoring and analysis equipment or got analysed through an approved laboratory under the Environment (Protection) Rules,</p>	<p>Being complied regularly.</p> <p>Environmental monitoring and analysis is done by approved laboratory every quarterly and report is submitted regularly to Ministry.</p>

1986 in consultation with the State Pollution Control Board.	
(x) A separate environmental management cell with suitable qualified personnel should be set up under the control of a senior executive who will report directly to the head of the organization.	A separate cell with full fledged lab is working under the senior executive.
(xi) The funds earmarked for environmental protection measures should be kept in separate account and not diverted for any other purpose. Year-wise expenditure should be reported to the Ministry of Environment & Forests.	Complied. The funds earmarked for environmental protection is not diverted for any other purposes.
(xii) The project authorities should inform to the Regional office located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Complied. The date is informed vide letter no VC: WS: ENV: CKJ: B82A/2007/1562 dated. July 19, 2007 regarding financial closure.
(xiii) The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated environmental conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information /monitoring reports.	Noted.
(xiv) A copy of the clearance letter should be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.	Complied.
(xv) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the collector's /Tehsildar's Office for 30 days.	Not Applicable
(xvi) The project authorities should advertise at least in two local news papers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within 7 days of issuance of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at web site of the Ministry of Environment and forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .	Complied.
3. The Ministry or any other competent authority may stipulate any further additional condition for environmental protection.	Noted

4. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance.	Noted
5. The above conditions will be enforced, inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control) of Pollution Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted

**Point Wise Compliance Report to Ministry Of Environment and Forests**

**Ref: No. J-11011/22/2005-IAII Dtd. May 9, 2005**

<b>S.No</b>	<b>Condition</b>	<b>Compliance</b>
1	The Ministry of Environment and Forests has examined your application. It is noted that the proposal is for expansion of cement plant clinker production from 2.05 MTPA to 3.30 MTPA and cement from 2.45 MTPA to 4.10 MTPA by installation of unit –III and CPP from 25.2 MW to 47.2 MW by M/s Vasavadatta cement at village Sedam in district Gulbarga in Karnataka. The company is in possession of 559.97 acres of plant area. Expansion will be carried out with in the existing plant premises. No additional land is required. The limestone requirement will be met from the captive limestone mine. No forest land and displacement of people is involved. Water requirement of 2765 m <sup>3</sup> /d would be met from the River Kagina for which permission from the State Irrigation Department has been obtained on 23 <sup>rd</sup> January 2003. Public Hearing Panel has considered the project in the meeting held on 25.11.04. NOC / Consent to establish has been granted by the Karnataka Pollution Control Board on 29.01.2005. Total cost of the project is Rs.420 crores.	Noted
2	The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 27 <sup>th</sup> January 1994 as amended subsequently subject to strict compliance to the following specific and general conditions.	Noted
<b>A. Specific Conditions</b>		
i	The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the State Pollution Control Board. At no time the particulate emissions should exceed 50 mg/Nm <sup>3</sup> . Further, the Company may also take appropriate additional measures to improve the design and operating practices of the pollution control equipment Trappings in kiln ESP shall be minimized. Interlocking facility shall 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.	Complied. Pollution control equipments for Unit-III is designed for 50 mg/Nm <sup>3</sup> . Interlocking arrangement was incorporated in all the units. We have installed Bag house for Kiln to avoid emissions of ESP tripping.

ii	Ambient Air Quality including ambient noise levels must not exceed the standards stipulated under EPA/State authorities. Monitoring of ambient air quality and stack emissions shall be carried out regularly in consultation with SPCB and report submitted to the Board quarterly and to the Ministry (Regional Office at Bangalore) half yearly. Automatic stack monitoring system shall be installed in the major stacks of the plant.	Monitoring of AAQ and stack emissions is being carried out as per the SPCB guidelines & monthly reports are being submitted to SPCB, half yearly reports are being submitted to Regional Office of the ministry at Bangalore latest submitted vide our letter no. VC/WS/ENV/CKJ/27B/1614 dated: 07.11.11. In all major stacks installed opacity monitors and reading is displayed in control room.
iii	The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points. Company shall provide bag filter at all dry material conveyor and transfer points. The dust collected from the pollution control equipment shall be recycled back into the process. Storage of raw material shall be in closed roof sheds. Water sprinkling arrangement shall be made in the raw material stock yard and cement bag loading areas.	Dust collectors as required are installed to control fugitive dust emissions at various transfer points. The dust collected from PCE is recycled back into process at appropriate stages. For Unit-III Covered Sheds are provided for storage of raw material like coal, limestone, Gypsum, Bauxite & Laterite. Water sprinkling arrangement made at limestone dump hopper, limestone discharge at stacker.
iv	The coal storage area shall be covered and water spraying arrangements shall be made to control the fugitive dust emissions.	Coal is normally stored in closed shed. Water spray system is provided during unloading of coal. Latest two no's of M/s NIVIS, ITALY Dust Suppression System are procured. One is used at cement plant at unloading of raw materials like coal and Other one is latest truck mounted system which used at limestone mines. These equipments are based on Water Mist Technology used to control fugitive emission away from 25 to 50 meters during loading and unloading.
v	The company shall install bag filters to control the emissions from the coal grinding units. Further, emissions from the stack of CPP shall be controlled by installation of ESP. The outlet concentration of particulates shall not exceed 50 mg/Nm <sup>3</sup> .	Complied. In all coal grinding units bag filters are provided. Electrostatic Static Precipitators (ESP) are provided at all stacks of CPP. Outlet concentrations of particulates are below 50 mg/Nm <sup>3</sup> .
vi	The company shall use fly ash upto 35% from the proposed captive power plant for manufacturing of Portland pozzolana.	Complied. VC is utilizing 100% of ash generated at Captive Power Plant for manufacturing of PPC.
vii	No discharge of treated effluent shall be done outside the premises and all the treated effluent shall be utilized for green belt development and other plant related activities.	Complied. No treated effluent is discharged outside the plant premises; total treated water is used for gardening at colony and cement plant.
viii	As per charter on Corporate Responsibility for Environmental Protection in respect of cement industries, the company shall reduce CO <sub>2</sub> emission to 0.75 tonne/tonne of cement production. Action plan in this regard shall be submitted to the Ministry.	All efforts are made to reduce CO <sub>2</sub> emission to extent possible.
ix	The company shall develop green belt in an area of 5.25 ha in addition to 92.46 ha already brought under the green belt development. Central Pollution Control Board guidelines must be followed in planning and developing green belt and selection of species etc.	Noted and will be Complied.

x	The company must harvest the rainwater from the rooftops and storm water drains to recharge the ground water.	As this area is lime stone area there is no percolation of rain water, so the rain water collected from the roof top and surface runoff is diverted by drains to the rain water harvesting pit at power plant. At mines Sump developed in to Mine pit for storage of rain water for its further use during lean period. Garland drains are cut around the quarry channelizing the rainwater from the catchment area with capacity of 34 lakh cubic meter.
<b>B. General Conditions</b>		
i	The project authority must adhere to the stipulations made by Karnataka State Pollution Control Board and State Government.	Noted and will be Complied.
ii	No further expansion or modification the plant should be carried out without prior approval of this Ministry	Noted.
iii	At least four ambient air quality –monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO <sub>2</sub> , and NO <sub>x</sub> are anticipated in consultation with the Andhra Pradesh State Pollution Control Board. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months.	6 Nos. AAQ stations are installed in consultation with KSPCB. AAQ is being monitored regularly and data collected is being submitted to the State Pollution Control Board and Ministry. Latest submitted vide our letter no. VC/WS/ENV/CKJ/27B/1614 dated: 07.11.11
iv	Industrial waste water should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May 1993 and 31 <sup>st</sup> December 1993 or as amended from time to time. The treated wastewater should be utilized for plantation purpose.	Complied. Effluent water generated conforms to the limits prescribed under GSR -422 (E). And treated waste water is used for gardening at colony and cement plant.
v	The overall noise levels in and around the plant area should 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 Environmental (Protection) Act, 1986 Rules, 1989 viz.75 dBA (day time) and 70 dBA (night time).	Complied. Noise generating sources like Blowers and Compressors have been segregated and housed in secluded buildings. We have selected screw compressors with acoustic enclosure. In CPP all turbines are provided with Acoustic enclosures. Reduced noise level of Motors by changing Air cooling fans. Shell cooling fan aluminum blades replaced by FRP blades. Ambient noise levels are well within the prescribed standards under EPA.
vi	Proper housekeeping and adequate occupational health programmes must be taken up. Occupational Health Surveillance programme should be done on a regular basis and records maintained. The programme must include lung function and sputum analysis tests once in six months.	Two TPS 3D machines & Four truck mounted system are operated for road sweeping in plant and colony. Apart from this manually operated floor sweeping machines are in operation for good house keeping. VC is certified for IS 18001. The Occupational Health Centre is equipped with clinical laboratory, ECG, X-ray, spirometer, audiometer, ultrasound scanning, eye testing equipment, pulse oximeter and nebulizer. Following health checkups are being carried out at our OHC centre for permanent employees- preplacement examination at the time of joining, periodic medical examination, lung

		function test, audiometry, eye test. Once in a six months lung function test & sputum analysis is being done and all records are maintained. other activities like providing best health facility to our employee & their dependants, Free distribution of medicine, Maintenance of the health data of employees, Pre-placement examination of the employee before joining our organization, Periodical medical examination, Conducting health education, Health surveillance of the surrounding villages, We invite specialists weekly/monthly from Gulbarga such as Orthopedician, ENT Surgeon, Ophthalmologist, Gynecologist, Gen.Physician & Pediatrician.
vii	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the Environmental Impact Assessment/ Environmental Management Plan.	Complied.
viii	A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring functions should be set up under the control of Senior Executive	Complied. The Laboratory is equipped with 3 nos. of Stack Monitoring kits, 6 No. of AAQ equipments, 2 Nos Personal sampler, 2 no. of Noise level meters, B.O.D incubator, DO meter, Quintox gas Analyzer, Potable Flue gas analyzers and necessary chemicals and glass ware. Full fledged Environment cell is provided with well qualified personnel's to carryout various functions and reporting directly to Joint President (Engg & PP).
ix	The project authorities will provide separate funds both recurring and non recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Complied.
x	The Regional Office of this Ministry at Bangalore / Central Pollution Control Board/ State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along the statistical interpretation should be submitted to them regularly.	Data monitored for Stacks/AAQ/Fly ash utilization on monthly basis and regularly submitted to MoEF every six months. Vide our letter no VC/WS/ENV/CKJ/27B/1614 dated: 07.11.11.
xi	The Project Authorities should 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.	Complied.

xii	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . This should 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.	Complied.
3	The Ministry or any competent authority may stipulate any further condition(s) on receiving reports from the project authorities. The above conditions will be monitored by the Regional Office of this Ministry located at Bangalore.	Will be complied.
4	The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.	Noted.
5	Any other conditions or alteration in the above conditions will have to be implemented by the project authorities in a time bound manner.	Will be complied.
6	The above conditions will be enforced, inter alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted.

**Point Wise Compliance Report to Environmental Clearance to Plant accorded by Ministry Of Environment and Forests,  
New Delhi**

**Ref: No. J-11011/383/2006-IA-II(I)(T) Dtd. 16 May,2007**

<u>S. No</u>	<u>Condition</u>	<u>Compliance</u>
	Environmental Clearance to Expansion Project for Clinker production from 3.30 MMTPA to 6.0 MMTPA and Cement production from 4.1 MMTPA to 9.0 MMTPA along with Expansion of Captive Power Plant from 43.2 MW to 73.2 MW at Sedam, Gulbarga, Karnataka by M/s Vasavadatta Cement .	Noted.
	This is with reference to your communication no. VC:WS:E&I:ENV:CKJ:06:009A 2853 dated 9th October 2006 seeking environmental clearance for the above mentioned project.	
2	The Ministry of Environment and Forests has examined the proposal and additional information submitted by you vide your letter no VC: WS: JPEPP: ENV: CKJ: 07:001 dated 2nd March 2007. It is noted that the company intends to augment Clinker production capacity from 3.30 MMTPA to 6.0 MMTPA and of Cement from 4.1 MMTPA to 9.0 MMTPA accompanied by expansion of the coal based Captive Thermal Power Plant of 43.2 MW to 73.2 MW at Sedam , Gulbarga in Karnataka State. The cost of the project is 575.00 Crores out of which Rs.28.00 Crores is for environment protection, of which about Rs. 04.20 Crores will be recur annually. Capacity of the existing units will be optimized and a new unit as Unit IV of 1.75 MMTPA capacity will be added along with addition of 100 TPH slag grinding unit. Additional residential accommodation of 25 houses will be complete the project. Existing plant area is 227 ha land, of which 160.2 ha is for cement plant and 66.3 ha for colony. 94.69 ha has already been covered as green belt and another 5.25 ha is proposed for the same. No additional land is needed for the expansion.	Noted. Power plant capacity revised from 30 MW to 18 MW. Total 73.2 MW to 61.2 MW. Information on above for the same was sent to MoEF & KSPCB. We have received letter No. J-11011/383/2006-IA-II(I)(T) dated 15th October 2007 from MoEF, New Delhi and also received the corrigendum No. CFE-CELL/VC/EIA-621/2007-2008/3689 dated 30 JAN 2008 from KSPCB, Bangalore for change in capacity of captive power plant from 30MW to 18 MW.
	No forest, agriculture land, eco sensitive zones or R & R is involved in the project site.	Noted.
	No endangered species of plants and animals in the area reportedly exist. Kamalavati Nala abuts the plant boundary and river Kagina is 9 Km away. Requirement of limestone will increase from 4.5 MMTPA TO 9 MMTPA on commissioning Unit-IV and it will be sourced from Injepalli captive Mines located 3 km away. Environment clearance for the same has been obtained. 0.2580 MMTPA of Laterite, 2.080 MMTPA of Fly ash, 0.42 MMTPA of Gypsum, 0.5 MMTPA of Shale, 0.0855 MMTPA of Bauxite and 0.260MMTPA of Slag will be required finally. Total coal demand is 1.550 MMTPA and will be met by	

	<p>Singareni. CPP will consume 1414 TPD. Coal will have 25-40% of ash and 0.5% of Sulphur and will be transported by rail. The plant will be based on "Dry Process and Precalculator Technology." The boiler for CPP will be Atmospheric Fluidized Bed Combustion (AFBC). Possibility of air cooled condensers for cooling towers will be explored. Power will be catered to by the CPP, KPTCL meeting the shortfall. Three standby D.G.Sets of 4 MW capacity will be as standby. Water required for all the units is 12,095 m<sup>3</sup>/d, diminishing to 10,869 m<sup>3</sup>/d after recycling and will be sourced from Kagina River, Kamalavati Barrage and water harvesting at the mine pit. Permission for additional water of 2825 m<sup>3</sup>/d from River Kagina has been applied for. Approval for withdrawal of 4903 m<sup>3</sup>/d from Kagina River and 3182 m<sup>3</sup>/d from Kamalavati Barrage exists. The overall water generation from the project after the expansion will be about 1,726 m<sup>3</sup>/d, of which 590 m<sup>3</sup> will be recycled and 1105 m<sup>3</sup> utilized. No waste water will be discharged from the plant. Total Ash generation from all the Units will be 0.226 Mill MT/Y and will be used in cement production which will use 2.08 MMTPA of fly ash. Extra fly ash shall be procured from RTPS. Spent oil and automobile batteries will be sold of to authorize recyclers. Public Hearing was conducted on 12.12.2006 and 17.12.2006. The Commitment to fulfill the vouches during the Public Hearing has been submitted to the Ministry. It has been confirmed that no wild life Sanctuary exists in 10 km area of the site.</p>	
3	<p>The project falls in 3 (b) "A" Category in the Schedule of EIA Notification 2006 however was considered as per the EIA Notification 1994 in the light of Para 2.2.1 (i) (a) of the Interim Operational Guidelines of 13th October, 2006 issued by the Ministry under Para 12 of the EIA Notification 2006.</p>	Noted.
4	<p>Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification, 2006 subject to the compliance of the following Specific and General conditions:</p>	Noted.
<b>A. Specific Conditions</b>		
i	<p>The gaseous emissions from various units shall conform to the standards prescribed by the concerned State Pollution Control Board (SPCB) or by the Ministry, whichever is stringent. Bag filter system shall be provided for flue gas instead of conditioning towers.SPM emission from all the stacks, including CPP will be &lt;50 mg/m<sup>3</sup>. The CPP will be based on AFBC technology and will preferably have Air Cooled Condenser System for cooling of water for CPP.</p>	<p>Complied. All the pollution control equipments are designed for particulate emission standards of 50 mg/Nm<sup>3</sup>. We have selected Bag House for kiln/raw mill. Air cooling system for CPP installed in addition to water cooled condenser as advised by MoEF.</p>
ii	<p>The unit shall use the high calorific hazardous waste in their kiln. The relevant designed factors shall be incorporated at the inception stage itself.</p>	<p>Design incorporated. Burner pipe is capable of handling alternative fuels.</p>

iii	The predicted values for SO <sub>2</sub> seems low and will further decrease if the actual sulphur content of 0.4 to 0.5 % is considered. These may be rechecked and submitted to the Ministry with in fifteen days of issue of this letter.	Complied.
iv	The height of stack with Unit-IV AFBC will be 88 m, of raw mill, 90 m, of coal mill 100 m, while other stacks will be 30-40 m and CPP, it will be 110 m. Bag house will be installed at all other emission points except the cooler exhaust. Bag filters will be provided at all material handling and transfer locations. Low NO <sub>x</sub> burners shall be installed to control NO <sub>x</sub> emissions and lime injection shall be carried out to reduce SO <sub>2</sub> emissions if required.	We have received corrigendum no. J-11011/383/2006-IA.II (I) (T) dated 15th October 2007 from MoEF New Delhi. The stack heights corrected as per our request letter except coal mill. The stack height for coal mill should have been 50 mtr instead of 100 mtr as requested vide our letter no. VC: WS: ENV: CKJ: B27/3548 dated: 21.01.2009 for issue of corrigendum/corrections. Low NO <sub>x</sub> burner is installed to control NO <sub>x</sub> emissions and lime injection will be carried out to reduce SO <sub>2</sub> emissions if required.
v	Continuous on-line monitors for particulate emissions, SO <sub>2</sub> and NO <sub>x</sub> in Raw Mill / Kiln, clinker cooler, coal mill, cement mill etc. shall be provided and shall make necessary arrangements for submission of on-line real time emission data to CPCB website. Interlocking facility shall be provided between pollution control equipment and the process operation so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.	Online equipments for Particulate emissions is installed in all major stacks, and one online equipment is put up at one of the major stack for SO <sub>2</sub> and NO <sub>x</sub> measurement on trail basis, on successful completion we will place order for all the major stacks. And also we would also like to inform that SO <sub>2</sub> & NO <sub>x</sub> is not present in cooler & Cement mill gases.
vi	Regular Ambient Air Quality Monitoring shall be carried out. The location of the monitoring stations will be reviewed in consultation with the State Pollution Control Board and additional stations will be installed, if required. It will be ensured that at least one monitoring station is set up in up-wind & in down-wind direction along with those in other directions. On-line data for air emissions shall be transferred to the CPCB and APPCB regularly. The instruments used for ambient air quality monitoring shall be calibrated regularly.	VC has installed 6 Nos. AAQ stations in consultation with KSPCB and is being monitored and data collected is being submitted monthly to the board. We request exemption from the clause of online data transfer as this is not practicable in the absence of reliable technology. We have received material for 2 No. of CAAQ which will be installed one in upwind and one in down wind direction within short period 2-3months in consultation with KSPCB.
vii	Fugitive emission shall be < 500 mg/m <sup>3</sup> . Bag filters shall be provided for all stacks except CPP Boiler and Cooler where ESP shall be provided. The regular monitoring of fugitive emission shall be carried out by the unit as per the CPCB guidelines.	Complied.
viii	Raw material will be stored in covered yards and clinker in Silos / covered tanks to control fugitive emissions. Fugitive emissions from cement mill, packing area and coal yard also be controlled.	We have provided covered sheds for limestone, Coal, Laterite / Bauxite for Unit-IV. To control fugitive emissions at various places bag filter are provided
ix	Vacuum dust cleaning system will be provided to evacuate dust on floors. All roads will be swept with sweeping machines. Material will be transported in tippers, covered trucks, covered containers, covered rail wagons etc. Dust collectors and extraction system (suction apparatus) shall be installed to control fugitive dust emissions at coal and limestone unloading points, at all the transfer points, stockpiles to arrest free release of dust.	Complied. Two TPS 3D machines & Four truck mounted system are operated for road sweeping in plant and colony. Apart from this manually operated floor sweeping machines are in operation for good house keeping. Dust collectors are installed at various places like transfer points, stockpiles to control the fugitive emissions

x	Windbreakers will be installed to restrict fugitive dust.	Noted and will be Complied.
xi	Water sprinkling arrangement should be made in the raw material stock yard and suction system for cement bag loading areas. Regular water sprinkling shall be carried out at all areas where fugitive dust can be generated.	Latest two no's of M/s NIVIS, ITALY Dust Suppression System are procured. One is used at cement plant at unloading of raw materials like coal and Other one is latest truck mounted system which used at limestone mines. These equipments are based on Water Mist Technology used to control fugitive emission away from 25 to 50 meters during loading and unloading. And water sprinkling system is provided to suppress the dust emissions at required areas.
xii	The proposed cooling system for CPP may be decided and submitted along with a detailed water balance resubmitted.	Air cooling system for CPP is working, in addition to water cooled condenser. Now CPP can run on any one system.
xiii	Acoustic enclosures will be provided at all high noise equipment and place to limit the noise levels below 85 dBA.	Complied. To control high noise levels acoustic enclosure are provided at various locations.
xiv	Copy of water withdrawal permission from the authority shall be submitted before starting the project.	Complied. Submitted vide letter no.VC: WS: ENV: CKJ: B82A/2007/685 dated May 26, 2007.
xv	Note on source wise water withdrawal and status of permissions on this account is needed.	Complied. Submitted vide letter no.VC:WS:ENV:CKJ:B82A/2007/685 dated May 26, 2007.
xvi	Water requirement will not exceed from 10,869 m <sup>3</sup> /d. No wastewater will be generated in cement manufacture. The wastewater from CPP and domestic activities shall be treated in Effluent Treatment Plant (ETP) and Sewage Water Reclamation Plant (SWRP) respectively and recycled/reused in cement plant for make-up, in CPP for cooling, dust suppression, other plant related activities and green belt development. No waste water will be released outside the premises. "Zero" discharge shall be strictly adopted. During monsoon, the waste water will be stored in the mine pit. Separate storm water drains will be provided and storm water from CPP area will be stored in a settling tank before discharging into the nala.	Complied. 1. "Zero discharge" is strictly adopted. No discharge of treated effluent outside the plant premises and all the treated effluent is used in other plant related activities and treated waste water is utilized for gardening in plant and colony. 2. Drains are already provided and storm water from CPP area is collected at Rain water harvesting pit at CPP.
Xvii	Solid waste generated shall be 100 % recycled and reutilized in the process and no solid waste shall be disposed off outside the plant premises. The solid waste will be dumped in the low lying areas and the area thus filled up /reclaimed shall be used for tree plantation.	Complied. 100 % Solid waste (Fly ash) generated is utilized in cement plant for production of PPC
Xviii	Vermi Composting shall be adopted for disposing off bio-degradable waste from the domestic sources.	Noted and will be complied.
xix.	0.226 MMTPA of fly ash generated from CPP will be transported pneumatically to the cement plant fly ash silos and	Complied. 1. Fly ash generated from CPP is transported

	shall be 100% utilized in Portland Pozzolana Cement production. Bottom ash shall also be used in cement plant or used for land filling. Treated STP sludge shall be used as manure for green belt development. Waste oil sludge shall be reused in the plant and finally burnt in the kiln or sold to authorized recyclers / re-processors.	pneumatically to cement plant fly ash silo and it is 100 % utilized in PPC production. Bottom ash is also used in cement plant. Treated STP sludge is used as manure for green belt development. 2. Waste oil sludge is burnt in Kiln-I / as sold to authorized recyclers / re-processors for which VC had permission.
xx	The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP)	Being complied.
xxi	An additional area of 5.25 ha shall be developed as green belt.	Noted.
xxii	The company must harvest surface as well as rainwater from the rooftops of the buildings proposed in the expansion project and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	VC, as part of rainwater harvesting is collecting the storm water for storage in the mine pits for use during lean season and also pits are being developed near TPP to harvest rain water from colony & plant surface runoff.
xxiii	Studies on noise dosimetry and audiometry to assess the noise induced hearing loss in case of exposed employees will be carried out and appropriate ameliorative measures will be taken, wherever necessary.	Yes. Noise monitoring is done regularly. Ear plugs are provided to employees exposed to noise areas and Half yearly audiometry test is done and conservative measures for better improvement is also taken.
	<b>B. General Conditions</b>	
i	The project authorities must strictly adhere to the stipulations made by State Pollution Control Board (SPCB) and the State Government.	VC will adhere to the stipulations made by KSPCB & state government.
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	No further expansion or modification of the plant will be carried out without prior approval of the ministry.
iii	Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the SPCB. Regular monitoring shall be carried out for relevant parameters.	Complied.
iv	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report.	Complied.
v	Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Complied. The waste water is being properly collected & treated to the GSR 422 (E) standards. Presently, the waste water from power plant is utilized for plantation & cement process.

vi	The overall noise levels in and around the plant area shall be limited within the prescribed standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.	Complied. Noise generating sources like Blowers and Compressors have been segregated and housed in secluded buildings. We have selected screw compressors with acoustic enclosure and fans with silencers for Unit-3&4 plants. In CPP all turbines are provided with Acoustic enclosures. Reduced the noise level of Motors by replacing aluminium blades with FRP blades. Ambient noise levels are well within the prescribed standards under EPA Act/Rules.
vii	Proper House keeping and adequate occupational health programs shall be taken up. Regular Occupational Health Surveillance Programme shall be carried and records shall be maintained properly for at least 30-40 years. The programme shall include lung function and sputum tests once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.	Complied. 1. Two TPS 3D machines & Four truck mounted system are operated for road sweeping in plant and colony. Apart from this manually operated floor sweeping machines are in operation for good house keeping. 2. VC certified for IS 18001. The OHC centre is equipped clinical laboratory, ECG, X-ray, spirometer, audiometer, ultrasound scanning, eye testing equipment and nebulizer. Once in a six months lung function test & sputum analysis is being done and all records are maintained. 3. Records of the employee and specific test records are kept till his retirement from the service and after retirement 15 years records will be kept in our occupational health centre.
viii	A separate environment management cell with full fledge laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a Senior Executive.	Complied. The Laboratory is equipped with 3 nos. of Stack Monitoring kits, 6 No. of AAQ equipments, 2 Nos Personal sampler, 2 No. Noise level meter, B.O.D incubator, DO meter, spectrophotometer, Quintox gas Analyser, Potable Flue gas analysers and necessary chemicals and glass ware. Full fledged Environment cell is provided with well qualified personnel's to carryout various functions and reporting directly to Joint President (Engg & PP).
ix	As proposed in the EIA/EMP, Rs 28.00 Crores and Rs. 04.20 Crores/annum earmarked to meet the capital and recurring cost/annum respectively for the environmental protection measures shall be used judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.	Complied.

x	The concerned Regional Office of this Ministry/ State Pollution Control Board / Central Pollution Control Board shall monitor the implementation of the stipulated conditions. Six monthly compliance status report and monitoring data along with statistical interpretation shall be submitted to them regularly.	Complied. Data are sent regularly. Last six months report sent on dated 07.11.2011, vide letter no.VC: WS: ENV: CKJ: 27B/1614 and also all EC compliance half yearly submitted vide our letter no. VC/WS/ENV/CKJ/2010/B87/297 Dt.16.05.2011 (October-10 to March-11)
xi	The Project Proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Ministry's Regional Office at Bangalore.	Complied.
xii	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 start of land development work.	Complied
5	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
6	The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.	Noted
7	The above conditions will be enforced, inter alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, Hazardous Waste (Management & Handling) Rules, 1989 and Manufacture, Storage, and Import of Hazardous Chemicals Rules, 1989 along with their amendments and rules.	Noted.

**POINTWISE COMPLIANCE REPORT TO ENVIRONMENTAL CLEARANCE FOR MINES (Accorded by MoEF, New Delhi.)  
updated as on September 2011.**

Ref: No. J-11015/328/2006-IA.II(M) Dtd. April 4, 2007 & corrigendum No. J-11015/328/2006-IA. II(M) dated September 17, 2007.

Condition	Compliance Status
<p>The undersigned is directed to refer to your letter no. VC:WS:E&amp;I:CKJ:06:009/2854 dated 9.10.2006 and subsequent communication dated 16.1.2007 and 15.2.2007 on the above mentioned subject. The Ministry of Enviroment and Forests has examined the application.</p>	<p>Noted.</p>
<p>2. It has been noted that proposal is for expansion of captive limestone mine for production of limestone from 4.5 to 9.0 million TPA and shale production of 0.50 million TPA to meet the requirement of cement plant. The company proposes to increase the clinker capacity of the cement plant from 3.3 MTPA TO <b>6.0 MTPA</b>. Distance of cement plant is 0.5 km from the limestone mine. River Kagina flows at a distance of 4.4 km from the mine lease boundary. Kamalavathi nalla passes adjacent to the western boundary of the mining lease. Topography of the area is gently undulating. Elevation above mean sea level is 420 m above MSL. Total mine lease area of the mine is 897.86 ha of which 889.16 ha is agriculture land and 8.7 ha is government land. Out of 889.16 ha agriculture land, 792.86 ha is active mine lease area, 15.0 ha is for infrastructure and roads and 90.0 ha will be under safety zone with bund provided with green belt. Life of the mine is 67 years.</p>	<p>Noted.</p>
<p>3. No ecologically sensitive area such as National park/wildlife sanctuary/biosphere reserve is located within 10 km distance of the core zone of mining lease area. Injepalli village is situated in 3 acres of land adjacent to the mine lease having 108 families. Company will acquire 6 acres of land to rehabilitate the existing villagers taking into consideration all the required infrastructure facilities like school, community hall etc. Method of mining is opencast and mechanized involving drilling and blasting. Present working depth is <b>45 m (bgl) &amp; maximum working depth will be 60 mt below ground level</b>. Working depth is 45 m below ground level. Working will not intersect ground water table.</p>	<p>Noted.</p>

<p>Void of 60m depth will be created. Mined out pit will be created into artificial lake. Pit will be fenced as safety measure. Water requirement of 500 m<sup>3</sup>/d initially will be met from the mine pit (494 m<sup>3</sup>/d) and from the Kagina river for domestic consumption (6.0 m<sup>3</sup>/d). About 7.25 million m<sup>3</sup> of OB waste will be generated, of which 1.25 million m<sup>3</sup>/will be used for afforestation in and around the colony plant, road etc. 6.0 million m<sup>3</sup> of OB waste will be utilized to form bund of 50 m width, all along the lease boundary. It is noted that public hearing of the project was held on 12.12.2006. IBM has approved the mining scheme (including mine closure plan) on 11.08.2006. Cost of the project is Rs. 31.07 crores.</p>	
<p>4. The project has been considered in accordance with the para 2.2 {2.2.1(i) (a)} of Interim operational guidelines of the Ministry issued on 13th October 2006 by the Ministry of Environment and Forests under para 12 of the EIA Notification 2006.</p>	Noted.
<p>5. Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006 subject to the compliance of the following Specific and General conditions:</p>	Noted.
<p><b>A. Specific conditions</b></p>	
<p>(i) The mining operation shall not intersect the ground water table. Prior approval of the Ministry of Environment and Forests and Central Ground Water Authority shall be obtained for mining below water table.</p>	<p>Will be Complied. Mining depth will be 60 meter (bgl). Depth of ground water table in the area is 90-95 meters (bgl) during pre-monsoon and 80- 85 meters (bgl) in post monsoon. Hence the mining operations will not intersect ground water table. However, prior approval of the Ministry of Environment &amp; Forests and Central Ground Water Authority will be obtained for mining below water table. Authenticated certificate is given by GWSU , ZP , Gulbarga through Letter No.SG/GWS/ZP/2005-06/840 Dtd.30.01.06.</p>
<p>(ii) Top soil shall be stacked properly with proper slope with adequate safeguards and shall be backfilled for reclamation and rehabilitation of mined out area.</p>	<p>Noted. Top soil will be utilized for formation of bund along mining lease boundary and green belt development outside the mining lease area. Reclamation and rehabilitation of mined out area shall be carried out in accordance with mining plan / scheme approved by the Indian Bureau of Mines i.e Hydroreclamation of mine pit. Request to issue</p>

	<p>corrigendum. We have requested for corrections vide letter no.VC:WS:ENV:CKJ:B83/2007 dated July 28, 2007. During 2008-09, about 260142 tonnes, 2009-10 about 153640 tonnes, 2010-11 161820 m<sup>3</sup> &amp; 2011-12 Upto Sept'2011 is 25990 m<sup>3</sup>.of soil removed and used for bund formation.</p>
<p>(iii) Over burden shall be stacked at earmarked dump site (s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 30 m, each stage shall preferably be of 10 m and over all slope of the dump shall not exceed 28°. The mine pit area shall be reclaimed by back filling the OB in a phased manner. The OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment &amp; Forests on six monthly basis.</p>	<p>Noted.The slope of soil bund will be maintained within 37 1/2 ° and overall slope will be maintained as 28°. Rehabilitation of mined out area shall be carried out in accordance with mining plan / scheme approved by Indian Bureau of Mines i.e Hydroreclamation (Creating artificial lake). Request to issue corrigendum. We have requested for corrections vide letter no.VC:WS:ENV:CKJ:B83/2007 dated July 28, 2007.</p>
<p>(iv)Garland drains/trench around the mine shall be constructed to arrest flow of <b>limestone</b>, silt and sediment flows from soil, and mineral dumps into the agricultural field. The water so collected shall be utilized for watering the mine area, roads; green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. Garland drain (size, gradient and length) shall be constructed for both mine pit and for waste dump and sump capacity shall be designed keeping 50 % safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.</p>	<p>Garland drains are cut around the mine pit, whereby the rain water from the catchment area is channelized in to the mine pit. To arrest soil erosion the toe bunds will be formed along the periphery of soil bund bottom. The catch drains will also be cut around the soil dump and the water will be directed to mines pit which will act as settling pond apart from the water storage. The stored water in the mine pit is utilized in the cement plant for process and dust suppression on haul roads, balsted heaps before commencement of loading etc. No water is pumped and discharged out of the mine. The mine sump is designed for the capacity of 34 lakh m<sup>3</sup> .</p>
<p>(v) The project proponent shall prepare a rehabilitation action plan to rehabilitate the villagers for implementation in consultation with the State Government and the affected persons.</p>	<p>This is not Applicable for present project.</p>
<p>(vi) Drilling and blasting shall be by using dust extractors/wet drilling.</p>	<p>Complied.</p>

<p>(vii) Plantation shall be raised in an area of <b>63.8 ha</b> including a green belt of adequate width by planting the native species around the ML area, roads, OB dump sites etc. in consultation with the local DFO / Agriculture Department. The density of the trees shall be around 2500 plants per ha.</p>	<p>Noted. Plantation carried out for different years is as follows. In 2009-10 in mining lease area 5500 nos of saplings. &amp; outside mine lease area 3500 nos of saplings . During 2010-11, 6865 in mining lease nos of saplings &amp; outside mine lease 3990 nos of saplings. During 2011-12 (upto Sept'2011 is 4750 in mining lease &amp; 8234 nos of saplings</p>
<p>(viii) The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.</p>	<p>Noted and will be complied. We have written a letter to The Regional Director, CGWB, Bangalore vide our letter no. VC:WS:MINES:CKJ:66:2009/10:849. Dated November 06, 2009.</p>
<p>(ix) Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year - pre-monsoon (April - May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to MoEF, Central Ground Water Authority and Regional Director Central Ground Water Board.</p>	<p>The results of ground water level monitoring collected from CGWA Gulbarga (from Jan' 11 to Aug'2011) and ground water quality report for the month of July'2011 is submitted to Ministry vide our letter VC / WS / MINE / CKJ/ 66B / 2011 - 12/ 1299. Dtd 14.09.2011.</p>
<p>(x) The project proponent shall convert the mined out area into pisciculture and as a source of drinking water and recreational activities and form a cooperative society of local people to undertake pisciculture.</p>	<p>Noted and will be complied as per the approved mine closure plan.</p>
<p>(xi) Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.</p>	<p>Noted. Regular monitoring of vehicular emission is done once in every six months as required under Rules 231(B)(8) KMV Rules 1989 from authorized agencies. Also the Limestone fragmentation is maintained at average level with no fines generation. The material is drenched with water regularly before loading the material in dumpers for onward transportation from mines face to crusher installed in the mines pit. The crushed Limestone is transported from Mines Pit to crusher by 1.4 Km long belt conveyor covered with hoods.</p>
<p>(xii) A Final Mine Closure Plan along with details of Corpus Fund, shall be submitted to the Ministry of Environment &amp; Forests 5 years in advance of final mine closure for approval.</p>	<p>The progressive mine closure plan pertaining to Injepalli Limestone Mine is prepared and got approved from the Indian Bureau of mines Bangalore. We have submitted the bank Guarantee for Rs 3797575/- towards financial assurance of Progressive Mine Closure Plan in the name of Regional Controller Indian bureau of Mines Bangalore.</p>

(xiii) The project proponent shall engage a doctor who is trained in occupational health.	Complied. Doctor is appointed with qualification of MBBS & AFIH.
<b>B. General Conditions</b>	
(i) No change in mining technology and scope of working shall be made without prior approval of the Ministry Of Environment & Forests.	Noted and will be complied.
(ii) No change in the calendar plan including excavation, quantum of mineral, limestone and waste shall be made.	Noted and will be complied.
(iii) Conservation measures for protection of flora and fauna in the core & buffer zone shall be drawn up in consultation with the local forest and wildlife department.	Noted and will be complied.
(iv) Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO <sub>2</sub> and NO <sub>x</sub> monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	We are already doing such monitoring in 5 stations in core zone and 7 stations in buffer zone by an outside agency quarterly.
(v) Data on ambient air quality (RPM, SPM, SO <sub>2</sub> , NO <sub>x</sub> ) 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.	Complied. The AAQ monitoring is done regularly for all the seasons except Monsoon. VC had submitted half yearly Environmental monitoring report from (April' 2011 to Sept'2011), vide our letter No.VC / WS / MINE / CKJ / 66 A/ 2011-12 /757 Dated 13.10.2011.
(vi) Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.	Complied. Drills are wet operated. Water is sprayed regularly on Haul roads and blasted Limestone before commencement of Loading Operations. Water sprinklers are installed at the crusher hopper and operated continuously during crusher operation.
(vii) 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.	Machineries are maintained in good condition by following scheduled and preventive maintenance. Tightening of fasteners is done regularly. Persons engaged in blasting, drilling & HEMM operations are provided with ear plugs / muffs.
(viii) Industrial waste water (workshop and waste water	Noted and being complied. Oil & Grease separation tank is

from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 May,1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	constructed & maintained to separate the oil & grease content from the water used for HEMM washing. Water conforms to the standard prescribed under GSR422(E) General Standards for discharge of effluents inland surface water.
(ix) 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.	Complied. Personal Protective equipments are issued to the personnel working in dusty areas. Regular health education, training and information is given to workers on safety & Health aspects..
(x) Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Noted and being complied. This is done by periodic medical examination & monitoring.
(xi) A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the Organization.	A separate cell with full fledged lab is working under the senior executive.
(xii) The project authorities shall inform to the Regional Office located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Date submitted vide our letter nos.VC:WS:ENV:CKJ:B82A/2007/1562 dtd. July 19, 2007 regarding date of financial closure.
(xiii) The funds earmarked for environmental protection measures shall be kept in separate account and should not be diverted for other purpose. Year-wise expenditure shall be reported to the Ministry and its Regional Office located at Bangalore.	Noted, The funds earmarked for environmental protection is not diverted for any other purposes.
(xiv) The project authorities shall inform to the Regional Office located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Noted. Date submitted vide our letter nos.VC:WS:ENV:CKJ:B82A/2007/1562 dtd. July 19, 2007 regarding date of financial closure.
(xv) The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information /monitoring reports.	Noted and will be complied.
(xvi) A copy of the clearance letter will be marked to concerned Panchayat/local NGO, if any, from whom any	Complied.

suggestion/representation has been received while processing the proposal.	
(xvii) State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office / Tehsildar's Office for 30 days.	Not Applicable.
xviii) The project authorities should advertise at least in two local news papers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also at web site of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same shall be forwarded to the Regional Office of this Ministry located Bangalore.	Complied.
6.The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Noted
7. 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.	Noted
8. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted

**VASAVADATTA CEMENT, SEDAM**

**Point Wise Compliance Report to Ministry Of Environment and Forests**

**Ref: No. J-11011/1044/2007-IA-II (I) Dated: 20<sup>th</sup> Jan, 2010**

S.No	Condition	Compliance status																														
1	Kindly refer your letter no. VC/WS/ENV/CKJ/B90 dated 2 <sup>nd</sup> May, 2009 along with final EIA/EMP report and Questionnaire for seeking environmental clearance under the EIA Notification, 2006 for the above mentioned project and subsequent information submitted vide communications dated 8 <sup>th</sup> July, 2009, 2 <sup>nd</sup> May, 2009, 8 <sup>th</sup> July, 2009 and 15 <sup>th</sup> October, 2009.																															
2	<p>The Ministry of Environment and Forests has examined the application. It is noted that proposal is for the expansion of Cement Plant [Clinker (6 MTPA to 7.75 MTPA), Cement, (9 MTPA to 11.7 MTPA)] Captive Limestone Mine. (Limestone 9.0 MTPA to 11.3 MTPA and Shale 0.5 MTPA to 0.66 MTPA) and Captive Power Plant (61.2 MW to –84.2 MW) at Village Sedam, District Gulbarga, Karnataka by M/s Vasavadatta Cement. Environment clearance for the existing cement plant is accorded vide Ministry’s letter no. J-11011/383/2006-IA-II(I) dated 15<sup>th</sup> October, 2007 The expansion will involve installation of new clinkerisation unit (Unit V) within the existing premises. The new unit, power plant, and the expansion of limestone production will be the part of the expansion. 18 MW power plant will be coal based thermal power plant which will be installed adjacent to unit IV power plant and 5 MW waste heat recovery power plant will be installed near unit I and unit II Cement plant. The plant and colony area is 227 ha and mining lease area is 897.86 ha. Mining lease is approved by the Govt. of Karnataka vide letter dated 9<sup>th</sup> September, 2003. No increase in mining lease area is proposed. Total cost of the project is Rs. 800 Crores. Following are the details of the products and production capacity of the plant:</p> <table border="1"> <thead> <tr> <th>S. N.</th> <th>Products</th> <th>Existing</th> <th>After expansion</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Clinker</td> <td>6.0 MTPA</td> <td>7.75 MTPA</td> <td>New line Unit-V</td> </tr> <tr> <td>2</td> <td>Cement</td> <td>9.0 MTPA</td> <td>11.70 MTPA</td> <td>New line Unit-V</td> </tr> <tr> <td>3</td> <td>Lime Stone</td> <td>9.0 MTPA</td> <td>11.3 MTPA</td> <td>Increase in production without increase in mining lease area (897.86 ha).</td> </tr> <tr> <td>4</td> <td>Shale</td> <td>0.50 MTPA</td> <td>0.66 MTPA</td> <td>Increase in production without increase in lease area (897.86 ha).</td> </tr> <tr> <td>5</td> <td>Power</td> <td>61.2 MW</td> <td>84.2 MW</td> <td>New CPP (18 MW) &amp; WHRB (5 MW)</td> </tr> </tbody> </table>	S. N.	Products	Existing	After expansion	Remarks	1	Clinker	6.0 MTPA	7.75 MTPA	New line Unit-V	2	Cement	9.0 MTPA	11.70 MTPA	New line Unit-V	3	Lime Stone	9.0 MTPA	11.3 MTPA	Increase in production without increase in mining lease area (897.86 ha).	4	Shale	0.50 MTPA	0.66 MTPA	Increase in production without increase in lease area (897.86 ha).	5	Power	61.2 MW	84.2 MW	New CPP (18 MW) & WHRB (5 MW)	<p>Unit-V Power plant (CPP 18 MW) project civil work started same was intimated to Ministry, SPCB and its regional offices vide our letter no. VC/WS/ENV/CKJ/2010/B87/3518, dated: 24.02.11.</p> <p>Unit-V Power plant (CPP 18 MW) work progress details as enclosed as Annexure-1</p> <p>Work on cement plant not yet started we will inform as and when civil work starts.</p>
S. N.	Products	Existing	After expansion	Remarks																												
1	Clinker	6.0 MTPA	7.75 MTPA	New line Unit-V																												
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3	<p>Electrostatic precipitator, bag house, bag filters and stacks of suitable height will be installed to control emissions within 50 mg/Nm<sup>3</sup>. Water spraying will be done to control fugitive dust within the premises and mining area. The total water requirement for the proposed plant will be 13,983 KLD from Kagina River, Kamalavati barrage and mine pit. No process waste water will be generated and all the wastewater from the power plant will be recycled. Domestic sewage will be treated in sewage treatment plant and used for green belt development. All the dust collected in air pollution control equipments in the cement plant will be recycled /reused in the process. Wet drilling, water sprinkling on haul roads and maintenance of the vehicles will be done to control dust pollution in the mining area. Grading of haul roads and service roads will be done. No overburden will be produced from the mine area as the lime stone are out cropped and no dumping/stacking of OB/waste will be required. The benches will be 10 m high, 15 m wide (7 m wide at finishing stage) with bench slope of 80% will be opencast mechanized with shovel, dumper combination. Controlled blasting, safe charge per delay to control ground vibrations and use of cap sensitive explosives will be practiced. Mine working will not intersect the ground water table.</p>	Noted and will be complied
4	Public hearing is exempted as per para 7(ii) of the EIA Notification, 2006.	Noted
5	The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14 <sup>th</sup> September, 2006 subject to strict compliance to the following specific and general conditions:	Noted
	<b>A. Specific Conditions</b>	
I	The Company shall comply with all the stipulations mentioned in the environmental clearance letter accorded by the Ministry vide letter no J-11011/383/2006-IA-II (I) dated 16 <sup>th</sup> May, 2007.	Noted
ii	The Company shall comply with the conditions stipulated in the mining plan approval letter no. issued by the Indian Bureau of Mines and mining lease accorded by the State Government.	Noted
iii	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) shall not exceed 50 mg/Nm <sup>3</sup> . Continuous on-line monitors for particulate emissions shall be installed. Interlocking facility shall 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.	All the pollution control equipments will meet the particulate emission standards of 50 mg/Nm <sup>3</sup> . We will install Bag House for kiln/raw mill. On line opacity monitor will be installed. Interlocking as desired will be provided.

iv	The proponent shall upload the status of compliance of the stipulated EC conditions, including monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant namely; SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at the convenient location near the main gate of the Company in the public domain.	Noted and will be complied
v	The Company shall install low NO <sub>x</sub> burner with Kiln/calciner for control of NO <sub>x</sub> emissions below 400 mg/Nm <sup>3</sup> .	Noted. We will install low NO <sub>x</sub> burner, however NO <sub>x</sub> level of less than 400 mg/Nm <sup>3</sup> is not possible to maintain with available coal, request to ensure the same.
vi	Secondary fugitive emissions shall be controlled within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.	Noted.
vii	Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the State authorities.	Noted.
viii	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 shall be followed.	Noted and will be Complied.
ix	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land.	Noted.
x	Fly ash shall be utilized as per the provisions of Fly Ash Notification, 1999, subsequently amended in 2003. Fly ash shall be stored in ash silo and 100% used in the cement manufacturing.	Noted and will be complied.
xi	The company shall carry out the trace metal like mercury, chromium, lead, arsenic, uranium etc analysis in the all the raw materials like lime stone, gypsum, fly ash, slag coal etc. and the analysis reports shall be submitted Ministry's Regional Office at Bangalore, CPCB and SPCB.	Noted and will be complied.
xii	The company shall make the efforts to utilize the high calorific hazardous waste in the cement kiln and necessary provisions shall be made accordingly. The company shall keep the record of the waste utilized and shall submit the details to ministry's Regional Office at Bangalore, CPCB and SPCB.	Noted and will be complied.
xiii	Total water requirement shall not exceed 13983 m <sup>3</sup> /day from Kagina River, Kamalavati barrage and Mines pit and the conditions stipulated in the permission letter obtained from the Central Ground Water Authority/State Ground Water Board complied with and shall be submitted to Ministry's Regional Office at Bangalore. The treated wastewater from STP and utilities shall be reutilized for green belt development and other plant related activities i.e. cooling and dust suppression in raw material	Noted and will be complied. The treated waster water from STP is utilized for gardening at cement plant and colony. 'Zero' discharge of effluent to outside the premises.

	handling area etc. after necessary treatment. 'Zero' discharge shall be strictly adopted and no effluent from the process shall be discharged outside the premises.																					
xiv	Rainwater harvesting measures shall be adopted for the augmentation of ground water at cement plant, colony and mine site. Besides, company must also harvest the rainwater from the rooftops and storm water drains to recharge the ground water. 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 pressure from the river. The Company shall construct the rain water harvesting and groundwater recharge structures outside the plant premises also in consultation with local Gram Panchayat and Village Heads to augment the ground water level. An action plan shall be submitted to Ministry's Regional Office at Bangalore within 3 months from date of issue of this letter.	<p>VC as part of rainwater harvesting garland drains are cut around the mine pit, whereby the rain water from the catchment area is channelized in to the mine pit. The stored water is utilized in the cement plant during lean season.</p> <p>Entire rain water of area under control is directed to rainwater harvesting pit. Mine Two pit of 34 lakhs m<sup>3</sup> water capacity is developed. Present water stored is 27 lakhs m<sup>3</sup>. Other pit at CPP of capacity 3 lakhs m<sup>3</sup>.</p> <p>An action plan for construction of RWH pits and ground water recharge structures outside the plant premises is submitted to Ministry's Regional Office at Bangalore vides our letter no.-VC/WS/ENV/CKJ/10/B90/121, dated 16.04.2010.</p> <p>Two Gram Panchayaths came forward and shown interest to construct rain water harvesting &amp; ground water recharge structures for coming rainy season.</p>																				
xv	The project proponent shall modify the mine plan of the project at the time of seeking approval for the next mining scheme from the Indian Bureau of Mines so as to reduce the area for external over burden dump by suitably increasing the height of the dumps with proper terracing. It shall be ensured that the overall slope of the dump does not exceed 28°.	There is no generation of over burden																				
xvi	Top soil, if any, shall be stacked with proper slope at earmarked site(s) only with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.	<p>Top soil is used for formation of Bund along the mining lease boundary for development of green belt. Top soil handled and used for bund formation during 2008-09 is 162589 M<sup>3</sup> &amp; 2009-10 is 96025 M<sup>3</sup>. 2010-11 161820 m<sup>3</sup> &amp; 2011-12(Up to Sept'2011) is 25990 m<sup>3</sup>.</p> <table border="1"> <thead> <tr> <th>Period</th> <th>Mines</th> <th>Colony</th> <th>Factory</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2009-10</td> <td>5500</td> <td>1000</td> <td>2500</td> <td>9000</td> </tr> <tr> <td>2010-11</td> <td>6865</td> <td>2500</td> <td>1490</td> <td>10855</td> </tr> <tr> <td>2011-12 Up to Sept'11</td> <td>4750</td> <td>5196</td> <td>3038</td> <td>12984</td> </tr> </tbody> </table>	Period	Mines	Colony	Factory	Total	2009-10	5500	1000	2500	9000	2010-11	6865	2500	1490	10855	2011-12 Up to Sept'11	4750	5196	3038	12984
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		Reclamation and rehabilitation of mined out area shall be carried out in accordance with mining plan / scheme approved by the Indian Bureau of Mines i.e. Hydro reclamation of mine pit. Request to issue corrigendum. We have requested for corrections vide letter no.VC: WS: ENV: CKJ: B83/2007 dated July 28, 2007.
xvii	The project proponent shall ensure that no natural water course shall be obstructed due to any mining and plant operations. The company shall make the plan for protection of the natural water course passing through the plant and mine area premises and submit to the ministry's Regional Office at Bangalore.	There is no perennial nallas are located within the mines area. River Kagina which is the only major river is located 4.4 km from the mine boundary. Hence the impact of mining activity to that for distance of 4.4 km is not envisaged.
xviii	The inter burden and other waste generated shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The total height of the dumps shall not exceed 30 m in three terraces of 10 m each and the over all slope of the dump shall be maintained to 28 <sup>0</sup> . The inter burden dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office, Bangalore on six monthly bases.	There is no generation of waste and inter burden.
xix	The void left unfilled shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation to be done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.	Noted and will be complied
xx	Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, inter burden and mineral dumps to arrest flow of silt and sediment. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after monsoon, and maintained properly.	VC has provided a drain driven in the lease hold connecting the sloping area to arrest soil erosion and check dam was constructed across to prevent carrying of silt and clay particles along with which will be accumulated in check dam and will be desilted after monsoon.
xxi	Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter burden dumps and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.	Garland drains are cut around the mine pit, whereby the rain water from the catchment area is channelized in to the mine pit. The catch drains will also be cut around the soil dump and the water will be directed to mines pit which will act as settling pond apart from the water storage. Considering as rainfall of 1025mm total capacity of sump required is around 14.18 Lakh M <sup>3</sup> . We have already developed pit capacity of 34 Lakh M <sup>3</sup> capacity keeping 50% margin as advised. The stored water in the mine pit is utilized in the cement plant for process, watering in mine road and for gardening at mines.

xxii	Dimension of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run-off and siltation shall be based on the rain fall data.	There is no dump of over burden. Top soil removed being used for formation of Bund along the mining lease boundary for development of green belt.
xxiii	Regular monitoring of ground water level and quality shall 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 shall be four times a year- pre-monsoon (April / May), monsoon (August), post-monsoon (November), and winter (January). Data thus collected shall be sent at regular intervals to Ministry of Environment and Forests and its Regional Office at Bangalore, Central Ground Water Authority and Central Ground Water Board.	Noted and will be complied. The result of ground water level monitoring collected from CGWA Gulbarga (from Jan' 11 to Aug'2011) and ground water quality report for the month of July'2011 is submitted to Ministry vide our letter VC / WS / MINE / CKJ/ 66B / 2011 -12/ 1299. Dtd 14.09.2011.
xxiv	Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented.	Noted and will be complied. Blasting operations are carried out using the latest controlled blasting technique NONEL. Blasting is carried out during day time only. And will be avoid during high windy periods.
xxv	The project proponent shall adopt wet drilling.	Drills are being wet operated.
xxvi	As proposed, green belt shall be developed in 76.34 ha in plant & colony and around the plant as per the CPCB guidelines. The mining area except water body shall be developed as green belt.	Noted and will be complied. Presently total trees planted as on March' 2011 is 454038. Tree surviving is 259096. Survival rate is 54 %. Total trees planted from April 2011 to Sept 2011 is 12,984.
xxvii	All the recommendations of the Corporate Responsibility or Environmental Protection (CREP) for the cement plants shall be strictly followed.	Being complied.
xxvii i	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.	Vehicular emission is regularly monitored once in every 6 month as prescribed under Rules 231(B) (8) Karnataka Motor vehicle Rules – 1989.  The limestone fragmentation is maintained at average level with no fines generation. The material is drenched with water regularly before loading in dumpers for onward transportation from mines face to crusher installed in the mines pit. The crushed limestone is transported from mines crusher to plant by 1.4Km long conveyor covered with hood.  'The vehicle shall be covered with a tarpaulin' need to be deleted as it is applicable for the transportation of minerals consisting of fines by public roads over a long distance such as iron ores. <b>Requested to issue corrigendum.</b>

xxix	Digital processing of the entire lease area using remote sensing technique shall be done regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bangalore.	Digital processing of the entire lease area by using remote sensing techniques has been done for monitoring land cover and land use pattern. Report of study is submitted to Ministry vide our letter no.VC/WS/MINE/CKJ/2010/B55A/392 dated: 11.10.2010.
xxx	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure, for approval.	The progressive mines closure plan pertaining to Injepalli Limestone Mine is prepared and got approval from the Indian Bureau of Mines, Bangalore. We have submitted the bank Guarantee for Rs 37, 97,575/- towards financial assurance of Progressive Mines Closer Plan in the name of Regional Controller Indian Bureau of Mines, Bangalore.
xxxi	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Noted and will be complied
	B. General Conditions	
i	The project authority shall adhere to the stipulations made by Karnataka State Pollution Control Board (KSPCB) and State Government.	Noted and will be complied
ii	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	Noted
iii	At least four ambient air quality monitoring stations shall be established in the down wind direction as well as where maximum ground level concentration of SPM, SO <sub>2</sub> and NO <sub>x</sub> 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 / CPCB once in six months.	Data on ambient air quality and stack emissions monitored and regularly submitted to this Ministry including its Regional Office and SPCB / CPCB once in six months. Last submitted vide our letter no. VC/WS/ENV/CKJ/27B/1614 dated: 07.11.11.
iv	Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Noted and will be complied
v	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 shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Noted and will be complied

vi	<p>Proper housekeeping and adequate occupational health programmes shall be taken up. Occupational Health Surveillance programme shall be done on a regular basis and records maintained properly for at least 30-40 years. The programme shall include lung function and sputum analysis tests once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.</p>	<p>Two TPS 3D machines &amp; Four truck mounted system are operated for road sweeping in plant and colony. Apart from this manually operated floor sweeping machines are in operation for good house keeping.</p> <p>VC is certified for IS 18001. The Occupational Health Centre is equipped with clinical laboratory, ECG, X-ray, spirometer, audiometer, ultrasound scanning, eye testing equipment, pulse oximeter and nebulizer. Following health checkups are being carried out at our OHC centre for permanent employees- replacement examination at the time of joining, periodic medical examination, lung function test, audiometry, eye test. Once in a six months lung function test &amp; sputum analysis is being done and all records are maintained. other activities like providing best health facility to our employee &amp; their dependants, Free distribution of medicine, Maintenance of the health data of employees, Pre-placement examination of the employee before joining our organization, Periodical medical examination, Conducting health education, Health surveillance of the surrounding villages, We invite specialists weekly/ monthly from Gulbarga such as Orthopedician, ENT Surgeon, Ophthalmologist, Gynecologist, Gen.Physician &amp; Pediatrician.</p>
vii	<p>The company shall undertake eco-development measures including community welfare measures in the project area.</p>	<p>Noted and will be complied</p>
viii	<p>The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP.</p>	<p>Noted and will be Complied</p>
ix	<p>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 Senior Executive.</p>	<p>Complied.</p> <p>The Laboratory is equipped with 3 nos. of Stack Monitoring kits, 6 No. of AAQ equipments, 2 No's Personal samplers, 2 No. Noise level meter, B.O.D incubator, DO meter, spectrophotometer, Quintox gas Analyzer, Potable Flue gas analyzers and necessary chemicals and glass ware. Full fledged Environment cell is provided with well qualified personnel's to carryout various functions and reporting directly to Joint President (Engg &amp; PP) and President.</p>

x	Adequate fund shall be allocated to implement the conditions stipulated by the Ministry of Environment and Forests 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.	Complied. The funds earmarked for environmental protection is not diverted for any other purposes.
xi	The Regional Office of this Ministry / CPCB / KSPCB 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 data along with statistical interpretation shall be submitted to them regularly.	Noted and will be complied.
xii	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both on hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the KSPCB.	Noted and will be complied.
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.	Complied. Commencing the land development work (only power plant) informed vide our letter no. VC/WS/ENV/CKJ/2010/B87/3519, dated: 24.02.2011.
xiv	No change in 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.	Noted and will be complied.
xv	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.	Machines are maintained in good condition by following scheduled and preventive maintenance. Tightening of fasteners is done regularly. Persons engaged in blasting drilling & HEMM operations are provided with ear Plugs / muffs.
xvi	Industrial waste water (workshop and waste water from the mine) shall be properly collected, 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. Oil and grease trap shall be installed before discharge of workshop effluents.	Noted and being complied. Oil and Grease separation tank is constructed & maintained to separate the oil & grease content from the water used for HEMM washing. Water confirms to the standards prescribed under GSR 422(E)
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 to dust and take corrective measures, if needed.	Complied. Protective respiratory devices are provided to Persons working in dusty areas and training & information on safety and health aspects have been given. All the persons are periodically examined for medical covering general health check up, audiometry, spirometry, lung function test and X ray.

xviii	The project authorities shall inform to the Regional Office located regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Complied. Commencing the land development work (only power plant) informed vide our letter no. VC/WS/ENV/CKJ/2010/B87/3519, dated: 24.02.2011.
xix	A copy of clearance letter shall be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation, if any, was received while processing the proposal.	complied
xx	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zilla 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.	Complied
xxi	The project authorities shall advertise at least 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 the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the Karnataka State Pollution Control Board and also at web site of the Ministry of Environment and Forests at " <a href="http://envfor.nic.in">http://envfor.nic.in</a> " and a copy of the same shall be forwarded to the Regional Office of this Ministry.	Complied
xxii	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the Company along with the status of compliance of EC conditions and shall also be sent to the respective regional Office of the MoEF by e-mail.	Noted and will be complied
6	The Ministry or any other competent authority may stipulate any further condition(s) on receiving reports from the project authorities. The above conditions shall be monitored by the Regional Office of this Ministry.	Noted
7	The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.	Noted
8	Any other conditions or alteration in the above conditions shall have to be implemented by the project authorities in a time bound manner.	Noted
9	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, Second Floor, Trikot-I, Bhikaji Cama Place, New Delhi-110066, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.	Noted
10	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted

