F. No. J-11011/343/2012-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Ali Garji,
New Delhi – 110003
E-mail: satish.garkoti@nic.in
Tel: 011: 24695316
Dated: 10th September, 2015

To

Shri Rakesh Bhargava (Jt. Vice President)
M/s Shree Cement Ltd.
Post Box No. 33, Bangur Nagar,
Andheri Deori, Beawar,
District-Ajmer
Rajasthan-305901

Email: bhargav@shreecementltd.com; Fax: 01462-228117/228119

Subject: Proposed expansion of integrated cement plant (Clinker from 10.4 MMTPA to 11.2 MMTPA) of M/s Shree Cement Ltd. at Dist. Pali, Rajasthan – Environmental Clearance regarding.

Sir,

This has reference to your letter dated 31.03.2014 and 02.08.2014 along with copies of EIA/EMP report seeking environment clearance under the provisions of the EIA Notification, 2006. The ToR was awarded by MoEF vide letter dated 23rd August, 2013 for preparation of EIA/EMP report.

2. The Ministry of Environment, Forest and Climate Change has examined the application for the project cited above. It is noted that M/s Shree Cement Ltd has proposed to expand their project by enhancing clinker production from 10.4 Million TPA to 11.2 Million TPA and WHERB plant capacity from 45 MW to 66 MW and limestone production from 17.2 Million TPA to 19.6 Million TPA by open cast mechanized method. To achieve the required clinker production of 11.2 MMTPA, Shree Cement Limited is planning to install an advance technology which will not only enhance the clinker production but will also increase the waste heat recovery capacity from 45 MW to 66 MW. Existing cement plant area is 187.56 hectare and proposed expansion project is coming up within the same existing land area. The lease area comprises of 741.0 ha Govt., waste land and 9.00 ha private agriculture land. The total estimated cost of proposed expansion project is Rs. 145 crores (capital cost of existing project is Rs 131.5 crores and that of expansion project is Rs 1447.3 crores). About Rs.15 crores are proposed for the capital cost of environment protection program and Rs. 0.2 crore as recurring cost. The expected life of the mine is 36 years. Project is interlinked to an Integrated Cement Plant of Shree Cement Limited near villages - Nimbeti and Ras, Tehsil - Jaitaran, District - Pali (Rajasthan). There are no National Parks/Wildlife Sanctuaries within 10km study area. There is one RF and 2 PPs existing within 50km study area at a distance of 4.25km, 8.9k, and 9.6km respectively.

3. Land use plan for the project is given below

[Signature]

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<table>
<thead>
<tr>
<th>S. No.</th>
<th>Item</th>
<th>Pre-operational (Ha.)</th>
<th>Operational (Ha.)</th>
<th>Post - Operational (Ha.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Area to be excavated</td>
<td>104.84</td>
<td>160</td>
<td>450 (260.0 ha. Backfilled and used for Agriculture purpose &amp; 190.0 ha. as a water reservoir).</td>
</tr>
<tr>
<td>2.</td>
<td>Storage for topsoil</td>
<td>0</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>3.</td>
<td>Overburden/clumps</td>
<td>16.30</td>
<td>78</td>
<td>135.0 plantation</td>
</tr>
<tr>
<td>4.</td>
<td>Mineral storage</td>
<td>3.10</td>
<td>3.1</td>
<td>nil</td>
</tr>
<tr>
<td>5.</td>
<td>Infrastructure (Workshop, Adm. Building)</td>
<td>2.3</td>
<td>2.3</td>
<td>4.0</td>
</tr>
<tr>
<td>6.</td>
<td>Roads</td>
<td>4.0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>Green belt (virgin land)</td>
<td>36.99</td>
<td>53.33</td>
<td>115.0</td>
</tr>
<tr>
<td>8.</td>
<td>Others (Undisturbed)</td>
<td>582.47</td>
<td>449.27</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>750</td>
<td>750</td>
<td>750</td>
</tr>
</tbody>
</table>

4. Following table shows the existing and the proposed expansion of the units:

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Unit/Facility</th>
<th>Existing</th>
<th>Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Clinker (MTPA)</td>
<td>10.4</td>
<td>11.2</td>
</tr>
<tr>
<td>2.</td>
<td>Cement (MTPA)</td>
<td>8.8</td>
<td>8.8</td>
</tr>
<tr>
<td>3.</td>
<td>WHR (MW)</td>
<td>45</td>
<td>66</td>
</tr>
<tr>
<td>4.</td>
<td>CPP (MW)</td>
<td>180</td>
<td>180</td>
</tr>
</tbody>
</table>

5. The raw material requirements for existing and expansion project are given below:

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Raw Material</th>
<th>Quantity (MTPA)</th>
<th>Source</th>
<th>Dist &amp; Mode of Transportaion</th>
<th>No. Of trips per day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Existing</td>
<td>Proposed</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Captive limestone mine</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Limestone</td>
<td>17.2</td>
<td>2.4</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Pet coke/coal</td>
<td>1.04</td>
<td>0.08</td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Laterite/Lead</td>
<td>0.468</td>
<td>0.036</td>
<td>0.504</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zinc</td>
<td></td>
<td></td>
<td>Captive limestone mine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Conveyer belt from mine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>adjoining the plant</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>800km By rail/road</td>
<td>107 + 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>190km</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27 + 3</td>
<td></td>
</tr>
<tr>
<td>Slag</td>
<td>Gypsum</td>
<td>Nil</td>
<td>Nil</td>
<td>Bhilwara, Lead, zinc slag from Chittorgarh</td>
<td>Chittorgarh - 250km By railroad</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>-----</td>
<td>-----</td>
<td>------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>4</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>Nagaur and synthetic gypsum (Raj.)</td>
<td>Nagaur - 200km Bikaner - 400km By rail/road</td>
</tr>
<tr>
<td>5</td>
<td>Flyash</td>
<td>3</td>
<td>Nil</td>
<td>STPS Suratgarh, KTPS, Kota, Chaibara and other Power Plants</td>
<td>Suratgarh - 400km Kota - 250km, Rail/road</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>260</td>
</tr>
</tbody>
</table>

6. The major air pollution control measures includes silo for clinker storage, flyash, cement wind breakage wall for storage of gypsum and laterite. Water sprinkling facility is provided at coal/pet coke storage area and at limestone crushing system. Bag filters shall be installed at material transfer points.

7. The total water requirement for the proposed expansion project for plant, colony and mine will be 310 KLD. Thus, after expansion the water demand will be 4380 KLD. Additional 380 KLD will be sourced from the rain water collection in mines pit and earthen ponds developed in plant area. No wastewater will be discharged from the plant premises. The unit will operate on a zero-discharge basis. RO rejects will be used for flyash quenching and for synthetic gypsum plant, treated water from STP will be used for green belt and sludge used as manure in horticulture and used oil sold to CPCB authorised recyclers.

8. The proposed project activity is listed at S.No. 3(b) under Category ‘A’ of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

9. The proposal was considered in the 23rd EAC meeting held during 18th and 19th September 2014. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public Hearing conducted on 18.02.2013 was chaired by Addl. District Collector. Issues raised include pollution from clinker dust, provision of health care facilities, employment, were raised. An additional fund allocation of Rs 13.5 lakhs has been made over and above EMP costs and CSR costs. The proposed CSR Plan for life of the project will be for an estimated Rs 76.29 crores covering the sectors/areas of health and family welfare, education, women empowerment, social & cultural activities and community infrastructure development projects.

10. The Ministry of Environment, Forest and Climate Change (MoEFCC) on the basis of the aforesaid recommendations of the EAC (I), hereby decided to grant Environmental Clearance to the aforesaid project vide provisions of EIA Notification dated 14th September 2006, subject to strict compliance of the following Specific and General conditions:
A. SPECIFIC CONDITIONS:

i. The project proponent should install 24x7 air devices to monitor air emission, as provided by CPCB and submit report to Ministry and its Regional Office.

ii. The standards prescribed for Cement Plants vide the recent MOEF&CC Notification – CSR 612(E) dated 25.08.2014 shall be implemented.

iii. Project shall not start without EC for expansion of captive limestone mines.

iv. Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM shall be controlled within 50 mg/Nm³ by installing adequate air pollution control system. Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill. Low NOx burners shall be provided to control NOx emissions. Regular calibration of the instruments must be ensured.

v. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.

vi. Arsenic and Mercury shall be monitored in emissions, ambient air and water.

vii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.

viii. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and re-used in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and ‘zero’ discharge shall be adopted.

ix. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

x. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry’s Regional of MoEF, SPCB and CPCB.

xi. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / reproprocessors only.
xii. All the fly ash shall be utilized as per Fly ash Notification, 1999 subsequently amended in 2003 and 2008. Efforts shall be made to use fly ash maximum in making Pozzolona Portland Cement (PPC).

xiii. A detailed study on chemical composition of coal used particularly heavy metal and radio activity contents shall be carried out through a reputed institute and report shall be submitted to Regional Office of the Ministry. Only after ascertaining its radioactive level shall fly ash be supplied for utilization in cement manufacturing.

xiv. Efforts shall be made to use low-grade lime, more fly ash and solid waste in the cement manufacturing.

xv. Greenbelt of about 15-20 meter width shall be developed all along the periphery of the plant. Apart from that an area of 33% of total plantation area shall be provided for development the green belt. 3 layers of plantation shall be provided. Tree plantation shall more on the prevalent wind direction based upon the outcome of windrose at the site. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

xvi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) shall be implemented.

xvii. Third Part Monitoring of air pollution shall be furnished as part of compliance report.

xviii. All the commitments made to the public during the Public Hearing / Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry’s Regional Office.

xix. At least 5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs. The proponent shall prepare a detailed CSR Plan for every next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to Regional Office. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

xx. Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry’s Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
xxi. To educate the workers, all the work places where dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.

xxii. 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, 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.

B. GENERAL CONDITIONS:

i. The project authorities must strictly adhere to the stipulations made by the Rajasthan Pollution Control Board and the State Government.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

iii. Efforts should be made to achieve power consumption of 70 units/tonne for Portland Pozzolana Cement (PPC) and 95 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.

iv. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM$_{10}$, PM$_{2.5}$, SO$_2$ and NO$_x$ are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Lucknow and the SPCB/CPCB once in six months.

v. Industrial waste water 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 form time to time. The treated waste water shall be utilized for plantation purpose.

vi. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).

vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

viii. The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.

ix. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the
surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.

x. Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forests and Climate Change (MoEF&CC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Lucknow. The funds so provided shall not be diverted for any other purpose.

xi. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.

xii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF&CC at Lucknow. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

xiii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF&CC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Lucknow / CPCB / SPCB shall monitor the stipulated conditions.

xiv. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF&CC at Lucknow by e-mail.

xv. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Lucknow.
xvi. 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.

11. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

12. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.


(Dr. Satish C. Garkoti)
Scientist - 'F'

Copy to:

1. The Secretary, Department of Environment, Govt. of Rajasthan
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.
3. Rajasthan Pollution Control Board, 4, Jhalana Institutional Area, Jhalana Doongri, Jaipur (Rajasthan) - 302 004
4. Addl. Principal Chief Conservator of Forests (C), Kendriya Bhavan, 5th Floor, Sector-II, Aliganj, Lucknow-226024
5. Guard File / Record File/Monitoring file.

(Dr. Satish C. Garkoti)
Scientist - 'F'