(IV) Proposed Terms of Reference for EIA studies.

It is proposed to increase the cement and clinker production capacity from 2.4 Million Tons Per Annum (MTPA) to 3.0 MTPA and 1.67 MTPA to 2.0 MTPA respectively by upgrading Kiln No.1 & Kiln No.2, optimization of existing cement mills and bottlenecks will be removed to reach maximum potential. The percentage increase in clinker production is estimated as 20% and in cement production , it is 25%.

No additional Land is required and no new processing unit shall be installed for proposed capacity expansion, only modification and modernization is proposed to achieve the enhancement in production, therefore we request honorable committee to *kindly consider our case in light of the amended notification dated 23.11.2016 of EIA notification 2006 (Caluse 7 of SO 3518-E), and kindly provided exemption from complete process of EIA notification 2006, if applicable.*

In case, EAC guides us for preparation of EIA and to follow procedure of EIA notification 2006, following shall be the terms of reference.

If Cement Plant complex is already in operation since long back. However increased production may result in adverse impacts on environment in the form of air pollution, water pollution, noise pollution, vibration, though it will not very much at significant extent.

The structure of the EIA report will be as outlined in the EIA notification of 14th September, 2006. There will be one dedicated chapter on risk assessment and disaster management planning. Post-project environmental monitoring program will also be detailed out in the EIA/EMP to ensure that the recommended mitigating measures are implemented and their effectiveness is monitored. The study will be confined to an area falling within 10 km around the project site.

1) Executive Summary
2) Introduction
3) Project Description
   - Cost of project and time of completion.
   - Products with capacities for the proposed project.
   - List of raw materials required and their source along with mode of transportation.
   - Other chemicals and materials required with quantities and storage capacities
   - Details of Emission, effluents, hazardous waste generation and their management.
   - Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
   - Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided
   - Hazard identification and details of proposed safety systems.
   - Expansion/modernization proposals:
4) Site Details

- Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- A toposheet of the study area in the radius of 10 Km. and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet respectively. (including all eco-sensitive areas and environmentally sensitive places)
- Co-ordinates (lat-long) of all four corners of the site.
- Google Earth map of the project site- downloaded from earth.google.com.
- Layout maps indicating proposed unit showing storage area, plant area, greenbelt area, utilities etc.
- Photographs of the proposed and existing (if applicable) plant site.
- Land use break-up of total land for the project (identified and acquired), government/ private including its category of usage, viz., agricultural, forest, wasteland, water bodies, settlements, etc.
- A list of major industries with name and type within the study area (around 10km radius) together with land use details within it.
- Geological features and Geo-hydrological status of the study area.
- Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years with details of Flood Level of the project site and maximum Flood Level of the river. (in case of mega green field projects)
- Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- R&R details in respect of land in line with state Government policy.

5) Environmental Status

- Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations- to be provided as an annexure to the EIA Report.
- Surface water quality of nearby surface water body (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF & CC guidelines.
- Ground water monitoring on at least eight locations, covering the study area.
- Noise levels monitoring at 8 locations within the study area.
- Soil Characteristic as per CPCB guidelines.
- Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area together with special reference to rare, endemic and endangered species. A Wildlife Conservation Plan if the study area inhabited by Schedule- I fauna.
- Socio-economic status of the study area.

6) Impact and Environment Management Plan

- Assessment of ground level concentration of pollutants from the stack emission based on site specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor cum-rail transport shall be examined.
- A note on treatment of wastewater from different plant operations, extent of recycling and reuse for different purposes shall be included together with Complete scheme of effluent treatment including characteristics of untreated and treated effluent to meet the prescribed standards of discharge under Environmental Protection Rules, 1986.
- Details of stack emission and action plan for control of emissions to meet standards.
- Measures for fugitive emission control
- Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- Action plan for the green belt development in 33 % area of the total area, with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for various activities in the project site to conserve fresh water and reduce the water requirement from other sources.
- Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- Action plan for post-project environmental monitoring shall be submitted.
- Onsite and Offsite Disaster (natural and Man-made) preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

7) Occupational health

- Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last

month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.

8) Corporate Environment Policy
   - A well laid down Environment Policy approved by its Board of Directors?
   - Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions
   - Hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
   - System of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be provided in detailed in the EIA report

9) Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
10) Enterprise Social Commitment (ESC)
    Allocation of adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan.
11) A tabular chart with index for point wise compliance of TOR, aforesaid.
12) Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines
13) Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
14) A 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius of the proposed site.
15) Present land use shall be prepared based on satellite imagery, using high-resolution satellite image data for the area falling in 10 Km radius of the proposed site and the same shall be used for land use/land-cover mapping of the area.
16) Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines is to be prepared.
17) Energy consumption per ton of clinker and cement grinding.

I hereby given undertaking that the data and information given in the application and enclosures are true to best of my knowledge and behalf and I am aware that if any part of data and information submitted is found to be false or misleading at any stage the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

Date **Signature of applicant with name & Full address**

Place :

(President & Unit Head)
(Project Proponent/ Authorized Signatory