

F.No. 21-9/2011-IA.III
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi - 110 003.

Dated: 9th November, 2011.

To
M/s Lavasa Corporation Limited,
Hincon House, 247 Park, LBS Marg,
Vikhroli (West), Mumbai - 400 083.

Subject- Environmental Clearance for the Development of Hill Station Township at Village Mulshi and Velhe Talukas, District Pune, Maharashtra by M/s. Lavasa Corporation Ltd. -regarding.

Sir,

This has reference to your application No: TPD/LCL/2011 dated 1st February 2011 and subsequent letters dated 07.02.2011, 21.05.2011, 11.06.2011, 08.07.2011, 12.07.2011, 27.07.2011, 27.09.2011 and 11.10.2011. submitted to the Ministry for seeking environmental clearance for the above project under the EIA Notification, 2006. This proposal has been appraised in light of final directions issued by the Ministry on 17th January, 2011 and the EIA Notification, 2006 and its subsequent amendments, as also on the basis of the mandatory documents enclosed with the application viz., the Form 1, Form 1A, Concept plan, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the Competent authority in its meetings held on 14th - 15th February 2011, 3rd - 4th March 2011, 5th - 6th April 2011, 11th - 12th May 2011 and 31st May 2011.

2. It is interalia noted that the project involves the development /construction of 1st phase of a hill station township on a plot area of 2,000 ha. It is proposed to develop residential area - 618.24 ha., commercial area - 33.74 ha., hotels area - 72.77 ha., institutional area - 207 ha., open space - 908 ha. and for other activities - 209 ha. The total built-up area proposed is 52,19,917 sq.m. Out of above 2,000 ha. Development/ Constructions have been carried out on approximately 681.27 ha. It is proposed to construct 3,068 buildings. The total water requirement will 12.256 MLD (fresh water requirement will 11.643 MLD). The total capacity of STP's proposed are 14.70 MLD. Treated waste water to be used for flushing of toilets 3.676 MLD, horticulture & cooling requirement 7.353 MLD. Total solid waste generation will be 70.03 MT/day. The power requirement will 240 MW. The total cost of the project proposed is Rs. 2,824 Crores.



3. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended in minutes of its meeting held on 31st May, 2011 for the grant of Environmental Clearance for the project mentioned above with certain conditions. The Ministry had accepted the recommendations of the Expert Appraisal Committee.

4. In light of the acceptance of the recommendations of the Expert Appraisal Committee, Ministry issued a letter to M/s Lavasa Corporation Ltd. to comply with the pre-conditions stipulated by the Ministry and also a letter to Government of Maharashtra to initiate credible action against the violation under the Environment (Protection) Act, 1986.

5. M/s Lavasa Corporation Ltd. submitted a letter dated 12th July, 2011, another letter on 27th July, 2011 and also submitted written undertakings during the hearing requested by it and provided on 5th August, 2011. The competent authority had accepted the report of the panel which concluded that these signify the willingness of M/s LCL to comply with stipulations. These documents are available on the website of the Ministry (www.envfor.nic.in).

6. Further the Expert Committee constituted by the competent authority under the chairmanship of Prof. K.T. Ravindran, has also examined the details of the project and visited the project area on 14th – 15th April, 2011 to assess the (i) Quantum of penalty and (ii) Creation of Environmental Restoration Fund for Lavasa City Project. The Ministry had accepted the recommendations of Prof. K.T. Ravindran Committee, a copy of the report of Prof. K.T. Ravindran committee is available on the website of the Ministry (www.envfor.nic.in).

7. The Ministry noted that there are various Writ Petitions and PIL in the Hon'ble High Court of Bombay at Mumbai regarding M/s LCL. On 20th October, 2011, Hon'ble High Court has directed the Ministry to pass final order on the application of M/s LCL for environmental clearance within three weeks.

8. Lastly, the Ministry has also noted the credible action taken by Govt. of Maharashtra namely that they filed a complaint in the Court of Chief Judicial Magistrate against the constructions/development carried out in Dasve sector (681.27 ha.) without obtaining prior Environmental Clearance under EIA Notification 1994 as amended in 2004 and also EIA Notification 2006 under Environment (Protection) act 1986, a copy of the application filed in the Court by Govt. of Maharashtra is also available on the website of the Ministry (www.envfor.nic.in).

9. Therefore, the Ministry hereby accords Environmental Clearance for the above project as per the provisions of Environmental Impact Assessment



Notification - 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

PART A- SPECIFIC CONDITIONS

I. Construction Phase

- i) "Consent for Establishment" shall be obtained from Maharashtra State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- ii) Further development/constructions shall be undertaken after examining the environment issues e.g. Slope analysis, Soil investigation, physiography, geological, hydrological and geographical details and other vital parameters.
- iii) LCL shall submit its environment related policy/ plan of action to the Ministry within 3 months and shall abide with the written undertakings submitted to the Ministry on 27th July, 2011 and 5th August, 2011 as approved by Board of Directors.
- iv) The scale and intensity of development of the hill town shall be in accordance with the Hill Station Regulations of Maharashtra and shall be revised based on developable/ buildable area. A clear demarcation of "no development/ construction zone/ area" shall be identified comprising of (a) all water bodies (b) forest lands/forest like lands and (c) areas steeper than 1:3. The developable/buildable areas shall be verified through State Government/Director Town Planning and the calculation of FSI shall be made accordingly. No development shall be taken up in areas steeper than or equal to 1:3.
- v) The FSI calculation shall be worked out separately based on land uses and shall not be averaged for the calculation of FSI.
- vi) As far as possible, no hill cutting, digging, excavation, or any other activity involving generation of soil or its use or its transportation/ disposal shall be carried out.
- vii) The water conserved through bandharas shall be used for potable purposes only, putting lesser burden on the main Warasgoan reservoir. For all other secondary purposes, the treated waste water shall be used with dual plumbing system. Decentralised treatment (and reuse) of waste water shall be built into overall water/ waste water planning.
- viii) There shall be a provision for discharge of water from these bandharas as and when required by the Irrigation dept. other than natural over



flow in the monsoon season to meet the water requirement of down stream areas including Pune city.

- ix) Sediment and organic loading through runoff to the bandharas during monsoon shall be checked and computed more conservatively to assess the water quality.
- x) Continuous ecological monitoring of all the water bodies including bandharas within the project area shall be carried out and suitable mitigation measures shall be adopted. Appropriate measures shall be taken to restore the aquatic flora and fauna in the water bodies. Suitable fish species shall also be stocked based on the soil and water quality and in consultation with fisheries experts.
- xi) There shall be no discharge of any kind of effluents from any facilities, including the treated waste water, from the STP / ETP. The entire treated waste water from STP/ETP shall be recycled.
- xii) The surface water qualities shall be monitored at all the locations shown in the EIA Report, for pH, BOD, COD, Lead, Cadmium, Mercury, Chromium (VI), Arsenic, Nickel, Cobalt and Iron on six monthly basis and the reports shall be sent to MoEF and MPCB.
- xiii) Effluent Treatment Plant (ETP) shall be installed for treatment of the liquid effluents generated from the Hospital. All the other biomedical wastes generated from the hospital shall be sent, within 48 hours, to the Common Biomedical Waste Treatment Facility indicated by the MPCB in the authorization issued under the Biomedical Waste (Management and Handling) Rules, 1998.
- xiv) The cleaning of all the open/covered facilities, including pavements, walkways, etc. which are not connected to sewers, shall be restricted to only sweeping and there shall be no water washing of such facilities.
- xv) The sludge generated in S.T.P's shall be suitable managed. Suitable sanitation measures shall be adopted while pumping raw sewage.
- xvi) Construction spoils, including bituminous material and other hazardous materials, shall not be allowed to contaminate watercourses and the dump sites for such material shall be secured so that they shall not leach into the ground water.
- xvii) The Hazardous Wastes, namely used oil and electronic waste shall be stored in close containers under a covered shade/room and sold to the recyclers registered with the CPCB / SPCB as per the Hazardous Waste (Management and Handling) Rules, 2008 after taking



authorization required under these Rules from the Maharashtra Pollution Control Board (MPCB).

- xviii) The soil quality shall be monitored at all playgrounds (Including those of schools, colleges, etc), gardens, parks and lawns and for Lead, Cadmium and Mercury on six monthly basis and the reports shall be sent to MoEF and MPCB.
- xix) A detailed management plan related to prevention of soil erosion and loss of road side plantation shall be delineated.
- xx) The ambient air quality shall be monitored at all the locations shown in the EIA Report for the relevant parameters on six monthly basis and the reports shall be sent to MoEF and MPCB.
- xxi) Regular air pollution monitoring shall be done around the hot mix plants/stone crushers to know their adverse impacts (if any) due to these activities. The locations shall be decided only after the consultation with the Maharashtra Pollution Control Board.
- xxii) The energy consumption shall aim to target minimum saving of at least 28-32% by adopting energy conservation methods including non-conventional energy. All the commercial buildings shall adhere to the mandatory ECBC code.
- xxiii) The intensity of educational/ health facilities shall be developed keeping in view the requirements of locals/ tourists and without much stress on environmental resources in the fragile ecosystem.
- xxiv) All the construction of roads and related infrastructure shall be carried out following the relevant IRC guidelines/protocols.
- xxv) Road Safety auditing of the various roads/road section shall be carried out. Further, based on the safety auditing report, various safety measures (improvement in the geometric design, display of sign Boards, speed limits etc.) shall be implemented. Further, contingency plans to deal with road traffic mishaps/accidents etc. shall also be clearly delineated with the budgetary allocation.
- xxvi) Use of the (appropriate) less polluting road construction techniques (e.g. Cold Mix technology for bituminous roads etc.) shall be used. Further, use of locally available road construction materials (including marginal materials) shall be used after detailed technical studies in consultation with local authorities.
- xxvii) A well worked out disaster management plan (fire, accidents, land slides, earthquakes etc.) for the entire township shall be prepared with



provision for emergency evacuation routes, space for assembly and other measures.

- xxviii) LCL shall submit within 3 months their policy towards Corporate Environment Responsibility (CER) as approved by Board of Directors which shall inter-alia address (i) Standard operating process/ procedure to bring into focus any infringement/ deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or administrative order of the Company to deal with environmental issues and ensuring compliance EC conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xxix) As part of CSR programme, LCL shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. LCL shall provide separate budget for community development activities and income generating programmes. This shall be in addition to vocational training for individuals imparted to take up self employment and jobs.
- xxx) At least 5% of the total cost of the project shall be earmarked towards the Corporate Social Responsibility (CSR) as approved by the Board of Directors and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxxi) A high level Verification and Monitoring Committee shall be constituted by Govt. of Maharashtra in consultation with MoEF. The Committee will comprise of eminent experts, representatives of MoEF, State Government, District Administration and other Stake holders etc. The Committee shall inter alia (i) examine, verify and monitor at various stages of planning, construction and operation etc.) of the project for compliance with the Conditions of the clearance. (ii) examine and verify the restoration work, (iii) undertake assessment of water balance in the reservoir, downstream requirements and the steps taken by M/s Lavasa for minimizing the use of fresh water, and (iv) ensure the compliance with the recommendations of the Prof. K.T.Ravindran Committee Report. The Committee shall

periodically submit reports to Government of Maharashtra and MoEF, GOI.

- xxxii) LCL shall submit an undertaking/commitment to:
- a) Restore the environment by specifically responding, but not limited to, the environmental damage caused to the Lavasa project and the related areas as a result of its activities, at its own cost;
 - b) An amount equal to 5% of the expenditure incurred as on the date, the L.C.L. activities ceased, may be kept with the Government of Maharashtra, which may be used in case the L.C.L. fails to carry out the necessary restoration works within a specific time frame,
 - c) The High Level Verification and Monitoring committee as indicated above at para (xxxi) shall ensure the follow up action on the recommendations of the Prof. K.T.Ravindran committee report.
 - d) L.C.L. shall prepare a time bound environmental restoration plan identifying the activities as indicated in the report of the Prof. K.T.Ravindran Committee and shall carry out the works under the supervision of the High Level Monitoring Committee.
- xxxiii) All required sanitary and hygienic measures shall be in place before starting construction activities and to be maintained throughout the construction phase.
- xxxiv) A First Aid Room shall be provided in the project both during construction and operation of the project.
- xxxv) Adequate drinking water and sanitary facilities shall be provided for construction workers at the site. The safe disposal of wastewater and solid wastes generated during the construction phase shall be ensured.
- xxxvi) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to E(P) Rules prescribed for air and noise emission standards.
- xxxvii) Vehicles hired for bringing construction material to the site shall be in good condition and shall conform to applicable air and noise emission standards and shall be operated only during non-peak hours.
- xxxviii) Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase.



- xxxix) Storm water control and its re-use as per CGWB and BIS standards for various applications shall be under taken.
- xl) Water demand during construction shall be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xli) Separation of grey and black water shall be done by the use of dual plumbing line for separation of grey and black water. Treatment of 100% grey water by decentralised treatment shall be done.
- xlii) Fixtures for showers, toilet flushing and drinking shall be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- xliii) Use of glass shall be reduced by upto 40% to reduce the electricity consumption and load on airconditioning. If necessary, use high quality double glass with special reflective coating in windows.
- xliv) Roofs of the buildings shall meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- xlv) Adequate measures shall be under taken to reduce air and noise pollution during construction phase keeping in mind CPCB norms on noise limits.
- xlvi) Opaque wall shall meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- xlvii) Other conditions as stipulated by MoEF/ other State agencies of State Government shall also be complied with

II. Operation Phase

- i) The installation of the 14.70 MLD Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Discharge of treated sewage shall conform to the norms & standards of the Maharashtra Pollution Control Board.
- ii) Rain water harvesting for roof run-off and surface run-off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.



- iii) The solid waste generated shall be properly collected & segregated before disposal. The In-vessel bio-conversion technique shall be used for composting the organic waste.
- iv) Any hazardous waste including biomedical waste shall be disposed of as per applicable Rules & norms with necessary approvals of the Maharashtra State Pollution Control Board.
- v) The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use. The open spaces inside the plot shall be suitably landscaped and covered with vegetation of indigenous variety.
- vi) Incremental pollution loads on the ambient air quality, noise and water quality shall be periodically monitored after commissioning of the project.
- vii) Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating. A hybrid system or fully solar system for a portion of the apartments shall be provided.
- viii) A Report on the energy conservation measures confirming to energy conservation norms finalize by Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.

PART - B. GENERAL CONDITIONS

- i) The environmental safeguards contained in the EIA Report shall be implemented in letter and spirit.
 - ii) Six monthly monitoring reports shall be submitted to the Ministry and it's Regional Office at Bhopal.
10. Officials from the Regional Office of MOEF, Bhopal who would be monitoring the implementation of environmental safeguards shall be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF shall be forwarded to the CCF, Regional office of MOEF, Bhopal.
11. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
12. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental



(Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

13. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the competent authorities.

14. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded environmental clearance and copies of clearance letters are available with the Maharashtra Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement shall be made within 7 days from the day of issue of the clearance letter and a copy of the same shall be forwarded to the Regional office of this Ministry at Bhopal.

15. These stipulations shall be enforced among others under the provisions of 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 and EIA Notification, 2006.

16. If in future, it is found that any condition is in violation of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent.



(E. Thirunavukkarasu)
Deputy Director (IA)

Copy to: -

- 1) The Secretary, Department of Environment, Government of Maharashtra, Mumbai.
- 2) The Member Secretary, Maharashtra State Pollution Control Board, Mumbai.
- 3) The CCF, Regional Office, Ministry of Environment & Forests, RO(WZ), E-5, Kendriya Paryavaran Bhawan, E-5, Area Colony, Link Road-3, Ravishankar Nagar, Bhopal - 462016.
- 4) IA - Division, Monitoring Cell, MOEF, New Delhi - 110003.
- 5) Guard file.
- 6) For Website.



(E. Thirunavukkarasu)
Deputy Director (IA)