

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY – DELHI
OFFICE OF DELHI POLLUTION CONTROL COMMITTEE
4TH FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-110006
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F.No. DPCC/SEIAA-SEAC/ 164/13/1022-1026

Dated: 02.05.2013

ENVIRONMENT CLEARANCE NO. DPCC/SEAC/164/SEIAA/26/2013

To,

The Principal,
Shivaji College (University of Delhi),
Raja Garden, New Delhi- 110027.

E-mail : shivajicollege.ac@gmail.com
Telephone : 9818312789
Fax No. : Nil

Sub: Environmental Clearance for “Expansion of Shivaji College Campus” (University of Delhi), Raja Garden, New Delhi- reg.

Sir,

1. This has reference to your application submitted on 03.01.2013 to the State Level Expert Appraisal Committee (SEAC), Delhi, constituted vide GOI Notification No. S.O. 1888(E) dated 30.07.2008 and re-constituted vide GOI notification no. 1845(E) dated 08.08.2011, for seeking Environmental Clearance under the Environmental Impact Assessment Notification, 2006 amended as on date. The matter was discussed in the meeting of SEAC on dated 22.02.2013 subsequently; letters for submission of the desired information / documents were issued to you the Project Proponent. On receipt of your responses to the said SEAC, Delhi, the proposal has been appraised on 22.02.2013 as per prescribed procedure in the light of provisions under EIA Notification, 2006 as amended to date on the basis of mandatory documents enclosed with the application along with the additional clarifications furnished in response to the observations of State Level Expert Appraisal Committee.
2. It is inter-alia noted that the proposal is for grant of Environmental Clearance for “Expansion of Shivaji College Campus” (University of Delhi), Raja Garden, New Delhi. The total plot area is 20235 sq.mt. The existing built-up area is 11322.47 sq.mt. The proposed built- up area is 13923.84 sq.mt. The total built-up area is 25246.31 sq.mt. The permissible Ground Coverage area is 7082.2 sq.mt. The existing Ground Coverage area is 3250.12 sq.mt (residential block: 451.51 sq.mt. + college block: 2798.61 sq.mt) and the proposed Ground Coverage area is 2022.15 sq.mt (residential block: 573.20 sq.mt. + college block: 1448.95 sq.mt.). The total Ground Coverage area is 5272.27 sq.mt. The permissible FAR area is 30352.28 sq.mt. The existing FAR area is 11216.92 sq.mt (residential block: 1214.06 sq.mt. + college block: 10002.86 sq.mt.), and the proposed FAR area is 13350.64 sq.mt (residential block: 2292.80 sq.mt. +

- (xvi) Natural drainage should be preserved as far as possible.
- (xvii) Rain water harvesting, as per plan submitted, for roof top run-off and surface run-off should be implemented. Before recharging the surface run-off, pre-treatment must be done to remove suspended matter, oil and grease. The depth of the bore for rainwater recharging should be kept in consultation with DJB. No wastewater (such as sewage, trade effluent, backwash of treatment unit, floor washing wastewater etc) should be discharged into the rainwater harvesting structure in order to avoid groundwater contamination. The collected rainwater, if any, should be properly treated before use.
- (xviii) The ground water drawl during construction and operation phases should be done only with the prior permission of DJB. Until then, no ground water shall be used in construction activities. The ground water level and its quality should also be monitored regularly in consultation with DJB.
- (xix) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification dated September 14th, 1999 and amended as on August 27th, 2003.
- (xx) Ready Mix Concrete must be used in building construction to minimize the use of water and also by use of pre-mixed concrete, curing agents and other best practices preferred.
- (xxi) Fixtures for toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control mechanism.
- (xxii) Energy Conservation Building Code to be strictly adopted in all aspects of building design and construction. Requirements of GRIHA rating, if proposed, should be followed.
- (xxiii) Approval of Chief Fire Officer and Delhi Urban Arts Commission for Building Plans, approval of Airport Authority of India for Building Height and approval of other authorities viz Land Owning Agency, DJB, MCD, NDMC, DISCOM, etc should be obtained.
- (xxiv) NOC for cutting of trees, if any, should be obtained from Department of Forests & Wildlife.
- (xxv) Approval of competent authority shall be obtained for structural safety of the building due to earthquake. Adequacy should be ensured for firefighting equipments etc as per National Building Code including protection measures from lightening.
- (xxvi) Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to neighbours.

II. Operation Phase

- (i) Consent to Operate under Air and Water Acts shall be obtained from DPCC before operation, failing which the Environmental Clearance herein shall be deemed to be withdrawn.
- (ii) The Zero wastewater discharge condition shall be achieved with installation of a well designed on-site Sewage Treatment Plant (STP) for the generation of sewage and Effluent Treatment Plant (ETP) for any type of effluent and the treated waste water shall be reused in HVAC cooling, flushing through dual plumbing and in Horticulture. The STP/ETP should be certified by an

independent expert and adequacy report in this regard should be submitted to Delhi Pollution Control Committee before the project is commissioned for operation. Water meters at all appropriate places shall be installed to know the quantum of water used, wastewater treated, treated water recycled/reused in HVAC, flushing and horticulture/ gardening. Necessary measures should be made to mitigate the odour problem from STP/ETP.

- (iii) The solid waste (dry as well as wet garbage) generated should be properly collected and segregated. Biodegradable garbage generated should be converted to compost or biogas by suitable technology. Non-Biodegradable waste should be outsourced properly after recovery of recyclable material. Paper recycling unit should be installed for recycle and reuse of waste paper. Adequate measures should be taken to prevent odour problem.
- (iv) Bio-medical waste, if generated any, shall be disposed of as per the Bio-medical Waste (Management & Handling) Rules, 1998 and authorization shall be obtained from DPCC as per applicability.
- (v) Utilization of Diesel power generating sets is subject to power failure condition only. The DG sets proposed as a source of power back up during operation phase should be of enclosed acoustically treated type, low sulphur diesel run and conform to rules made under the Environment (Protection) Act, 1986. The DG sets of capacity more than 1000 KVA should be provided the stipulated stack height of 30 meter from ground. If not possible due to any reason, permission from MOEF must be obtained specifically for stack height of such DG sets. All the DG sets should be subjected to periodic noise and stack monitoring in consultation with DPCC. Waste/used diesel should be stored and managed as per the Hazardous Waste (Management and Handling) Rules, 1989 as amended to date and be sold to CPCB approved recyclers. Clearance from AAI should be obtained for stack height of D.G Set.
- (vi) Traffic congestion near the entry and exit points from the roads adjoining the project site must be avoided. Parking should be fully internalized and no public space should be utilized. Separate Parking provision should be provided for handicapped persons.
- (vii) Energy Conservation measures such as solar lighting for common areas, solar water heating system, LED lights; solar inverters etc should be adopted.
- (viii) A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit a copy to Ministry of Environment & Forests, Regional Office, Chandigarh and DPCC in three months time with intimation to SEIAA.

PART B- GENERAL CONDITIONS

- (i) The environmental safeguards and monitoring schedule as contained in the EMP should be implemented in letter and spirit & there will be no departure from the final project proposal.

college block: 11057.84sq.mt.). The total FAR area is 24567.56 sq.mt. The maximum number of floors will be B+G+7. The number of basement is one, and the total basement area is 105.55 sq.mt. The total number of blocks is 2 (existing: 1 + proposed: 1). The existing height of building is 17 m and the maximum height of proposed building is 35 m. The total population, after proposed expansion, will be 5285 persons (Students: 4500 persons + Residential student: 150 persons + Residential staff: 60 persons + Teaching Staff: 225 persons + Non-teaching Staff: 200 persons + Maintenance Staff: 50 persons + Visitors: 100 persons). The total parking provision is for 291 ECS (existing: 113 ECS + surface parking: 178 ECS). The existing green area is 6498.57 sq.mt, and the proposed green area is 898.89 sq.mt. The total green area is 7397.46 sq.mt. The total water requirement after proposed expansion will be 140 KLD, out of which fresh water requirement will be 82 KLD. The source of water supply will be Delhi Jal Board. The total wastewater generation will be 107 KLD, which will be treated in STP with capacity of 130 KLD based on MMR technology. The treated wastewater of 58 KLD will be used in Flushing (48 KLD), Gardening (8 KLD), Miscellaneous purposes (2 KLD) and remaining 44 KLD will be used for road side plantation. The total municipal solid waste generation will be approx. 664 kg/day (existing: 394 kg/day + proposed: 270 kg/day). The existing power requirement is 99 KW and the proposed power requirement is 374 KW. The total power requirement is 473 KW. The power supply is met from BSES Rajdhani Power Limited. DG sets of 2 x 110 KVA are proposed for power backup. The number of Rain Water Harvesting Pit is 1. The total estimated cost of the Project is Rs. 26 Crores. SEIAA has not examined their requirements as the same has been taken into account by SEAC during the appraisal of project.

3. The State Level Environment Impact Assessment Authority, (SEIAA) in its 19th meeting held on 25.03.2013 hereby accords the Environmental Clearance for the period of 5 years from the date of issuance of this letter to the above said project as per provisions of Environment Impact Assessment Notification, 2006 and its subsequent amendments, subject to the compliance of the terms and conditions as follows:

PART A- SPECIFIC CONDITIONS

I. Construction Phase

- (i) Construction should be started after obtaining prior Consent to Establish from Delhi Pollution Control Committee (DPCC) under Air and Water Acts and a copy shall be submitted to the SEAC-Delhi, failing which project shall be discontinued.
- (ii) Provision shall be made for the housing of labours within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care along with first aid room, crèche etc. The housing may be in the form of temporary structures to be removed after completion of the project.
- (iii) Health and safety norms of CPWD should be followed during construction.

- (ii) Smoke generated due to vehicle movement in parking area should be exhausted and provision for fresh air infusion should be provided as per CPCB norms.
- (iii) The project proponent shall follow the revised Guidelines/Criteria for Evaluation of Proposals/Request for Ground water abstraction issued by Central Ground Water Authority (CGWA) vide letter no.21-4/Guidelines/CGWA/2012-4793 dated: 30.10.2012 which are in effect from 15.11.2012.
- (iv) Traffic congestion near the entry and exit of the College Complex should be avoided.
- (v) STP should be relocated at appropriate site, preferably near residential complex.
- (vi) Solar street lighting should be installed.
- (vii) A Paper Recycling Unit should be established.
- (viii) Organic Waste Converter should be installed to compost bio-degradable waste.
- (ix) DG sets capacity should cover only 30% of the total load.
- (x) Officials from Ministry of Environment & Forests, Regional Office, Chandigarh and Delhi Pollution Control Committee, who would be monitoring the implementation of environmental safeguards, should be given full co-operation to inspect the facilities and documents/data on site by the project proponents during their site inspection. A complete set of all the documents submitted to SEAC should be forwarded to Ministry of Environment & Forests, Regional Office, Chandigarh & DPCC. Six monthly monitoring reports should be submitted to Ministry of Environment & Forests, Regional Office Chandigarh & also to DPCC.
- (xi) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEAC and the Consent to Establish/Operate from DPCC as well.
- (xii) In compliance to Hon'ble High Court's Order dated 7th August, 2008, use, sale and storage of all kinds of plastic bags shall be forbidden.
- (xiii) E-waste generated in the complex should be managed as per E-waste (Management and Handling) Rules, 2011 and disposed through approved e-waste recyclers.
- (xiv) State Environmental Impact Assessment Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including the revoking of the Environmental 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.
- (xv) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department etc shall be obtained from the respective competent authorities.
- (xvi) These stipulations would be enforced among others under the provisions of Water (Prevention and Control) Pollution Act, 1974, the Air (Prevention and Control) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006, as amended to date.

- (xvii) The Project Proponent should prominently advertise in at least two local Newspapers widely circulated in the region indicating that the project has been accorded Environmental Clearance and copy of clearance is available with the DPCC and may also be seen on the website of DPCC at <http://www.dpcc.delhigovt.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter.
- (xviii) The Project Proponent should submit copy of Environmental Clearance to the Heads of Local bodies, Panchayats and Municipal bodies in addition to relevant offices of Government who in turn has to display the same for 30 days from the date of receipt.
- (xix) Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the Project Proponent on its website.

(Sandeep Mishra)
Member Secretary (SEIAA)

Copy to:

1. **The Secretary(Environment) cum Chairman (DPCC)**, Department of Environment, Government of NCT Delhi, Secretariat Building, 6th Level, C-Wing, I.P.Estate, New Delhi.
2. **Sh. Kaushal Kumar Mathur, Chairman, State Level Environment Impact Assessment Authority**, 4, Defence Enclave, Vikas Marg, Delhi - 110092.
3. **The Director, Impact Assessment III- Division, Ministry of Environment & Forests**, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi-110003.
4. **The Additional Director/Conservator of Forests, Ministry of Environment & Forests**, Regional Office (NZ), Bays No.24-25, Sector 31 A, Dakshin Marg, Chandigarh - 160030.

(Sandeep Mishra)
Member Secretary (SEIAA)

- (iv) Top soil excavated during construction activities should be stored within the site for use in horticulture/landscape development.
- (v) Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed of only in approved sites with the approval of competent authority taking the necessary precautions for general safety and health aspects of people.
- (vi) Proper measures should be adopted to control dust emissions during construction phase by providing adequate numbers of water sprinklers.
- (vii) Soil and water samples of the site should be tested by the Project Proponent from any laboratory recognized by MOEF/DPCC to ascertain that there is no threat to ground water quality by leaching of contaminants, on quarterly basis for inclusion in the six monthly reports.
- (viii) Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water. Bulk of the demolition waste should be recycled and minimum possible demolition waste should be dumped at designated dumping site.
- (ix) Bio-medical waste, if any, shall be disposed of as per the Bio-medical Waste (Management & Handling) Rules, 1998 and authorization shall be obtained from DPCC as per applicability.
- (x) Any hazardous waste generated during construction and operation phase should be disposed of as per applicable rules and norms with necessary authorization from Delhi Pollution Control Committee.
- (xi) The diesel generator sets to be used during construction phase should be acoustically treated and operated on low sulphur diesel and should conform to the Environment Protection Rules prescribed for air and noise emission standards.
- (xii) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- (xiii) Vehicles hired for bringing construction material to the site should be in good condition, have pollution check certificate, and conform to applicable air & noise emission standards. These vehicles should be operated only during non-peak hours. The material loaded or unloaded should be covered (especially sand, excavated soil, etc.) before transportation to avoid fugitive emissions etc.
- (xiv) Ambient noise levels should conform to prescribed residential standards both during day and night hours. Adequate measures should be made to reduce ambient air and noise level during construction and operation phase, so as to conform to the norms stipulated by CPCB/DPCC. Ambient air and noise monitoring should be done by an accredited lab and data should be submitted along with compliance report in every six month.
- (xv) Thick green belt of the adequate width and density, along with adequate tree plantation to create a buffer zone as per plan submitted, shall be raised along the periphery of the plot so as to provide protection against particulates and noise.