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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/130/11/252
ENVIRONMENT CLEARANCE NO. DPCC/SEAC/130/SEIAA/4/2012

Dated: 13/8/12

To,

Hony Secretary,
Sir Ganga Ram Hospital, (Project Proponent)
Sir Ganga Ram Hospital Marg, Rajinder Nagar,
New Delhi – 110060

E-mail: gangaram@sgrh.com

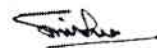
Telephone: 011-42251869

Fax No. - 011-25861002

Sub: Environmental Clearance for Expansion & Modernization of Sir Ganga Ram Hospital.

Sir,

1. This has reference to your application submitted on 08.11.2011 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 meetings of SEAC on dated 20.12.2011, 16.03.2012, 13.04.2012 and 15.06.2012. 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 15.06.2012, 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 & Modernization of Sir Ganga Ram Hospital (Phase-I) New Delhi. The total plot area is 48422.35 sq.mt. The existing built-up area is 58731.63 sq.mt. & proposed built-up area is 55486.50 sq.mt. The built-up area to be demolished is 6892.84 sq.mt. Total built-up area is 107325.297 sq.mt. The permissible Ground Coverage is 14526.705 sq.mt. The existing Ground Coverage is 12208.651 sq.mt. & proposed Ground Coverage is 1828.20 sq.mt. The Ground Coverage area to be demolished is 2098.78 sq.mt. Total Ground



Coverage is 11938.071sq.mt. The permissible FAR is 96844.7 sq.mt. The existing FAR is 48907.177 sq.mt. & proposed FAR is 17530.61 sq.mt. The FAR to be demolished is 4339.44 sq.mt. Total FAR is 62098.347 sq.mt. The existing Non-FAR area is 9824.46 sq.mt. The proposed Non-FAR area is 37955.89 sq.mt. The Non-FAR area (Basement area) to be demolished is 2553.40 sq.mt. Total Non-FAR area is 45226.95 sq.mt. The existing green area is 5825.06 sq.mt. & proposed green area is 9914.55 sq.mt. The total green area is 15739.61 sq.mt. The maximum height of building is 37 m. The blocks include Existing Main Hospital Building with B+G+1 floors, Existing working women hostel with G+3 floors, Existing Super Specialty Block with B+G+7 floors, Existing Out Patient Department with B+G+5 floors, Existing Causality Block & Blood Bank with B+G+6 floors, Ward Block (Special Ward) with G+4 floors existing & Service+2 floors proposed, Nursing Home with G+4 floors existing and 1 floor proposed, Proposed Block 1 (Hospital) with 2B+G+Service+8 floors, Proposed ESS Block with G+1 floors, Proposed Biomedical and Autoclave Room with Ground floor and Proposed Multilevel Parking Block with 3B+G+11 floors.

The total number of beds after proposed expansion is 932 (existing: 675 + proposed: 257). Total number of laboratories is 10 (existing: 6 + proposed: 4). The existing population is 5535 persons (No. of Beds: 675 persons + Working women & Nursing Hostel: 250 persons + No. of OPD patients: 1500 persons + No. of doctor staff: 610 persons + No. of supporting staff: 1500 persons + visitors: 1000 persons). The proposed population is 2057 persons (No. of Beds: 257 persons + No. of OPD patients: 500 persons + No. of doctor staff: 100 persons + No. of supporting staff: 800 persons + visitors: 400 persons). The total population after proposed expansion will be 7592 persons. The existing parking provision is 644 ECS (201 ECS in basement + 443 ECS in surface). The surface parking provision estimated to be reduced after development is 400 ECS. The total proposed parking is 1048 ECS (basement parking: 107 ECS + multilevel parking (G+11): 941 ECS). The total parking provision after proposed expansion is 1292 ECS (basement parking: 308 ECS + surface parking: 43 ECS + multilevel parking (G+11): 941 ECS). The total water requirement after proposed expansion will be 1000 KLD (existing: 710 KLD + proposed: 290 KLD), out of which fresh water requirement will be 465 KLD. The source of water supply will be DJB. An ETP of 10 KLD capacity is proposed for treatment of approx. 5 KLD of effluent generated from laboratories. The total wastewater generation will be 558 KLD (which include 5 KLD of treated effluent) and will be treated in already existing STP based on FAB technology of capacity 1000 KLD. The treated wastewater of 535 KLD will be used in flushing (256 KLD), HVAC (227 KLD), DG Cooling (22 KLD), Horticulture (30 KLD). The total municipal solid waste generation from hospital after proposed expansion will be 1214 kg (existing: 905 kg + proposed: 309 kg). The total bio-medical waste generation after proposed expansion will be 233 kg/day (existing: 169 kg/day + proposed: 64 kg/day). Total hazardous waste generation after

proposed expansion is 7 kg/day (existing: 3 kg/day + proposed: 4 kg/day). The total sanctioned power demand for proposed expansion is 7.67 MVA (existing: 5.5 MVA + proposed: 2.17 MVA). The total essential and non-essential load will be 3540 KW (essential load: 2661 KW + non-Essential load: 879 KW). The power supply is met from BSES. The existing DG sets provided for power backup are 2 x 1875 KVA, 2 x 2000 KVA, and 3 x 625 KVA. DG sets of 3 x 750 KVA are proposed for power backup. The total number of Rain Water Harvesting Pits is 11 (existing: 3 + proposed: 8). The total estimated cost of the project is Rs. 300 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 17th meeting held on 20.07.2012 hereby accords the Prior Environmental Clearance for a 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) An Environment Management Cell should be created to manage the environment in the campus.
- (iii) NOC of the land owning agency i.e. L & DO, Ministry of Urban Development, Govt. of India should be obtained before starting the construction
- (iv) 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.
- (v) Health and safety norms of CPWD should be followed during construction.
- (vi) Top soil excavated during construction activities should be stored within the site for use in horticulture/landscape development.
- (vii) 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.
- (viii) Proper measures should be adopted to control dust emissions during construction phase by providing adequate numbers of water sprinklers.
 - (ix) 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.
 - (x) 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.
 - (xi) Bio-medical waste shall be disposed of as per the Bio-medical Waste (Management & Handling) Rules, 1998 and authorization shall be obtained from DPCC as per applicability.
 - (xii) 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.
 - (xiii) 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.
 - (xiv) 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.
 - (xv) Vehicles hired for bringing construction material to the site should be in good condition, have pollution check certificate, conform to applicable air and 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.
 - (xvi) Ambient noise levels should conform to prescribed sensitive 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 every six month.
 - (xvii) 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.
 - (xviii) Natural drainage should be preserved as far as possible.

- (xix) 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.
- (xx) 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.
- (xxi) 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.
- (xxii) Ready Mix Concrete must be used in building construction to minimize the use of water and by use of pre-mixed concrete, curing agents and other best practices preferred.
- (xxiii) 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.
- (xxiv) 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.
- (xxv) 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.
- (xxvi) Approval of competent authority shall be obtained for structural safety of the building due to earthquake. Adequacy be ensured for firefighting equipments etc as per National Building Code including protection measures from lightening etc.
- (xxvii) 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. Necessary measures should be made to mitigate the odour problem from STP/ETP.

- (iii) The treated water from ETP and STP should not be mixed and all treated waste water should be reused.
- (iv) 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.
- (v) 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.
- (vi) Number of D.G. Sets for power backup should be kept minimum taking into account less than 50 % of the total load as essential load
- (vii) 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.
- (viii) All the DG sets should be subjected to periodic noise and stack monitoring in consultation with DPCC.
- (ix) Waste/used diesel should be stored and managed as per the Hazardous Waste (Management and Handling) Rules, 1989 as amended to date and be disposed of to CPCB approved recyclers. Clearance from AAI should be obtained for stack height of D.G Set.
- (x) 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.
- (xi) Energy Conservation measures such as solar lighting for common areas, solar water heating system, LED lights; solar inverters etc should be adopted.
- (xii) 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

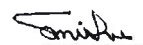
technology, R & U factors etc and submit a copy to Ministry of Environment & Forests, Regional Office, Chandigarh and DPCC in three months time with intimation to SEIAA.

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.
- (ii) Corporate Social Responsibility should be carried out as per action plan submitted with the condition that at least 0.4% of the project cost should be budgeted for one time expenditure and at least 0.08% as recurring.
- (iii) 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 & DPCC.
- (iv) 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.
- (v) In compliance to the Hon'ble High Court's Order dated 7th August, 2008, use, sale and storage of all kinds of plastic bags shall be forbidden.
- (vi) 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.
- (vii) 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.
- (viii) 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.
- (ix) 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.

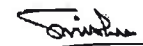
- (x) The Project Proponent should prominently advertise in at least two local Newspapers widely circulated in the region indicating that the project has been accorded Environmental Clearance and copy of clearance is available with the DPCC and may also be seen on the website of DPCC at <http://www.dpcc.delhigovt.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter.
- (xi) 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.
- (xii) Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the Project Proponent on its website.
- (xiii) Tall trees with closed canopy such as jammun should be planted and more trees should be planted within the campus.
- (xiv) Rainwater harvesting should not be recharged to the ground water but should be stored in underground water tanks for reuse.



(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)

