F.No. 21-216/2014-IA.III
Government of India
Ministry of Environment, Forests & Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi - 110 003

Dated: 25th March, 2015

To
The Chief Medical Officer,
M/s Directorate of Health Services, Govt. of NCT of Delhi.
Swasthaya Sewa Nidashalaya Bhawan,
F-17, Karkardooma, Shahdara,
Delhi – 110032.

Subject: Proposed construction of 100 Bedded Hospital at KL-Block, Sarita Vihar, South East Delhi, Delhi by M/s Directorate of Health Services, Govt. of NCT of Delhi - Environmental Clearance - Reg.

Sir,

This has reference to your application No. F8/(A)/(5)/DHS/2008/H.Cell/64772 dated 05.12.2014 and subsequent letter dated 20.01.2015 seeking prior Environmental Clearance on the above-mentioned project.

2. The Ministry of Environment, Forests & Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance for **Proposed construction of 100 Bedded Hospital at KL-Block, Sarita Vihar, South East Delhi, Delhi by M/s Directorate of Health Services, Govt. of NCT of Delhi.** The proposal was considered by the EAC in its meetings held on 6th - 7th January, 2015 and reconsidered in 144th EAC meeting held on 28th - 30th January, 2015. The proponent has informed that:

i. The proposal involves construction of 100 Bedded Hospital at KL-Block, Sarita Vihar, South East Delhi, Delhi by M/s Directorate of Health Services, Govt. of NCT of Delhi. The project is located at 28°32.254'N Latitude and 77°17.869' E longitude.
ii. The total plot area is 6318.72 sqm. FSI area will be 12578.89 sqm and total construction area will be 22437.87 sqm. The project will comprise of Hospital Building. Flats shall not be developed as it is a hospital project but stay facility for emergency staff is provided at 3rd Floor of hospital building. Maximum height of the building will be 29.865 m.
iii. During construction phase, total water requirement is expected to be 25-30 KLD which will be met by tanker supply from Ohkla CSTP. Soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for construction labour.
iv. During operational phase, total water demand of the project is expected to be 218 KLD which will be met by the 118 KLD fresh water from Delhi Jal Board and 100 KLD from recycled water. Sewage generated (90 KLD) uses will be treated in house STP of total 110 KLD capacity. Lab effluent

of 12 KLD will be treated in ETP of 15 KLD. 88 KLD of treated sewage and 12 KLD of treated lab effluent will be recycled (34 KLD for flushing, 12 KLD for gardening and 54 KLD for HVAC cooling). ETP treated water will be used only for HVAC cooling. About 0 KLD will be disposed in to municipal drain.

v. About 0.52 TPD of municipal solid waste including domestic waste & landscape waste will be generated in the project. Recyclable waste will be segregated and will be sold to authorized vendor. STP sludge will be used as manure in landscape area. Rest municipal waste will be handed over to local authority for disposal.
vi. Apart from this Bio-medical waste will be generated as it is a hospital project. It is estimated 130 kg/day of bio-medical waste will be generated. Collection, management and disposal of waste will be in accordance with Bio-medical Waste (Management & Handling) Rules, 1998.
vii. The total power requirement is 2306.3 kVA which will be sourced by BSES. Three DG sets having capacity 3 x 1010 kVA will be used in case of power failure.
viii. The **total parking** facility proposed to be provided for 253 ECS.
ix. **Cost**: The total cost of the project is Rs. 77.89 crore.
x. **Wildlife issues:** There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 10 km buffer zone.
xi. **Forest land:** No forest land involved in the project.
xii. There is no **court cases/violation** pending with the project proponent.

3. The proposal was considered by EAC in its meeting held on 6th - 7th January, 2015 and sought additional information viz. Site suitability in view of the existence of Waste to Energy facility at about one km distance and its likely impact on the Hospital since there are complaints against the pollution problem of the unit. The wind rose for other seasons, major wind direction etc may be taken into consideration. Any other hazardous or pollution potential facility in the neighbours may also be considered. The proponent submitted information and informed that:

i. The Waste to Energy facility is at 2.4 km on NNW direction,
ii. The Okhla facility is at 1.6 km on western direction and NTPC Ash treatment plant is at 1.8 km on SE direction.
iii. According to the wind rose diagram, the predominant wind direction is NNW and the site is on downwind direction of the Waste to Energy facility.
iv. It is planned to make hospital air-tight by providing fixed glazing in the whole building keeping in view of the presence of above emission generating facilities in the vicinity.

4. The proposal was considered by the Expert Appraisal Committee (EAC) and recommended in its 144th EAC meeting held on 28th - 30th January, 2015 for granting Environmental Clearance. The Ministry of Environment, Forests & Climate Change hereby accords Environmental Clearance for the above-mentioned **Proposed construction of 100 Bedded Hospital at KL-Block, Sarita Vihar, South East Delhi, Delhi by M/s Directorate of Health Services, Govt. of NCT of Delhi** under the provisions of the Environment

Impact Assessment Notification, 2006 and amendments thereto and Circulars issued thereon and subject to the compliance of the following specific conditions, in addition to the general conditions mentioned below:

PART A – SPECIFIC CONDITIONS

I. Construction Phase

(i) The Project Proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work.

(ii) "Consent for Establishment" shall be obtained from State Pollution Control Board/Committee under Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 1974.

(iii) Authorization from Delhi Pollution Control Committee shall be obtained as applicable under Bio-Medical Waste (Management and Handling) Rules, 1998 as amended.

(iv) The project proponent shall comply with the conditions of NOC/Clearance obtained from Fire Department.

(v) All the construction shall be in accordance with the local building byelaws. The Project Proponent shall obtain all necessary clearances.

(vi) The total plot area is 6318.72 sqm. FSI area shall be 12578.89 sqm and total construction area shall be 22437.87 sqm. The project will comprise of Hospital Building. Flats shall not be developed as it is a hospital project. Maximum height of the building shall be 29.865 m.

(vii) During construction phase, total water requirement is 25-30 KLD which shall be met by tanker supply from Ohkla CSTP. Soak pits and septic tanks shall be provided for disposal of waste water. Temporary sanitary toilets shall be provided for construction labour.

(viii) During operational phase, total water demand of the project is 218 KLD which shall be met by the 118 KLD fresh water from Delhi Jal Board and 100 KLD from recycled water. Sewage generated (90 KLD) uses shall be treated in house STP of total 110 KLD capacity. Lab effluent of 12 KLD shall be treated in ETP of 15 KLD. About Zero KLD shall be disposed in to municipal drain.

(ix) About 0.52 TPD of municipal solid waste including domestic waste & landscape waste will be generated in the project. Recyclable waste shall be segregated and shall be sold to authorized vendor. STP sludge shall be used as manure in landscape area. Rest municipal waste shall be handed over to local authority for disposal.

(x) Apart from this, Bio-medical waste will be generated as it is a hospital project. 130 kg/day of bio-medical waste will be generated. Collection, management and disposal of waste shall be in accordance with Bio-medical Waste (Management & Handling) Rules, 1998.

(xi) The total power requirement is 2306.3 kVA which shall be sourced by BSES. Three DG sets having capacity 3 x 1010 kVA shall be used in case of power failure.

(xii) Suitable toilet fixtures for water conservation shall be provided.

(xiii) The rainwater harvesting plan should be incorporated by the CGWA.

(xiv) 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, mobile STP, 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.

(xv) A First Aid Room will be provided in the project both during construction and operation of the project.

(xvi) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.

(xvii) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xviii) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.

(xix) 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.

(xx) Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board/ Committee.

(xxi) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

(xxii) The diesel required for operating DG sets shall be stored in underground tanks and clearance from Chief Controller of Explosives shall be taken, as applicable.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

(xxiv) Ambient noise levels should conform to residential standards both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ DPCC.

(xxv) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003.

(xxvi) Ready mixed concrete must be used in building construction.

(xxvii) Storm water control and its re-use as per CGWB and BIS standards for various applications.

(xxviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xxix) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.

(xxx) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.

(xxxi) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.

(xxxii) Use of glass may be reduced by up-to 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.

(xxxiii) 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 the surroundings.

(xxxiv) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.

II. Operation Phase

(i) The bio-Medical wastes shall be managed in accordance with the Bio-Medical Waste (Management and Handling) Rules, 1998 as amended.

(ii) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(iii) The treated wastewater of 88 KLD and 12 KLD of treated lab effluent shall be recycled and reused for gardening (12 KLD), flushing (34 KLD), HVAC cooling (54 KLD) to reduce the demand of fresh water as committed. ETP treated water shall be used only for HVAC cooling.

(iv) Solid waste management shall be collected, treated disposed in accordance with the Municipal Solid Waste (Management & Handling) Rules, 2000. No municipal waste should be disposed off outside the premises.

(v) The Operation and Maintenance of STP shall be made in the MoU with STP supplier. Project Proponent shall ensure regular operation and maintenance of the STP.

(vi) Total parking facility shall be provided for 253 ECS. Parking facility for taxi and three wheelers shall be provided within the premises taking care for movement of patients and elderly. Parking facility with 6 m clear driveway shall be provided as committed.

(vii) The project proponent shall take measures to ensure 20% power/energy conservation in perpetuity with regular monitoring report to competent energy management authority.

(viii) The project proponent shall take all precaution to ensure that there is no adverse impact from the nearby Waste to Energy facility. Delhi Pollution Control Committee to monitor the same.

(ix) The Project Proponent shall explore the possibilities of reusing the treated wastewater from nearby projects.

(x) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled/ reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the State Pollution Control Board/ Committee. Necessary measures should be made to mitigate the odour problem from STP.

(xi) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/ inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.

(xii) Diesel power generating sets proposed as source of back-up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board/ Committee.

(xiii) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

(xiv) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.

(xv) Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.

(xvi) Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.

PART – B. GENERAL CONDITIONS

(i) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board/ Committee. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.

(ii) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.

5. Officials from the Regional Office of MoEF&CC, Lucknow who would be monitoring the implementation of environmental safeguards should 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&CC should be forwarded to the CCF, Regional office of MoEF&CC, Lucknow.

6. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

7. 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.

8. 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 respective competent authorities.

9. These stipulations would 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.

10. The project proponent should 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 State Pollution Control Board/Committee and may also be seen on the website of the Ministry of Environment, Forests & Climate Change at http://www.envfor.nic.in. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Lucknow.

11. This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation v/s. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

12. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

13. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/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 website of the company by the proponent.

14. The proponent shall upload the status of compliance of the stipulated EC 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 MoEF&CC, the respective Zonal Office of CPCB and the DPCC. The criteria pollutant levels namely; SPM, RSPM, SO_2, NOx (ambient levels as well

as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

15. 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/Committee 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 EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

Yours faithfully,

(Dr. R. Warrier)
Director

Copy to:

1) The Secretary, Department of Environment, Government of NCT of Delhi, Secretariat Building, I.P. Estate, New Delhi.
2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110 032.
3) Member Secretary, Delhi Pollution Control Committee, Department of Environment, Govt. of N.C.T. Delhi, 4th Floor, ISBT Building, Kashmere Gate, Delhi.
4) The CCF, Regional Office, Ministry of Environment & Forests , RO(CZ), Kendriya Bhawan, 5th Floor, Sector 'H', Aliganj, Lucknow – 226020.
5) IA – Division, Monitoring Cell, MoEF, New Delhi – 110003.
6) Guard file.

(Dr. R. Warrier)
Director