

F.No.21-12/2018-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 24th May, 2018

To,

Shri Johnson
M/s Rajagiri Healthcare and Education Trust,
Rajagiri Healthcare & Education Trust, Chunangamvely, Aluva,
Ernakulam - 683112 (Kerala)
E Mail: meddir@rajagirihospital.com

Subject: Expansion of existing Hospital cum Residential Project at Sy. Nos. 2140/73, 936/1/46, 939/1/45 (New Re-survey No. 134) of Edathala Village, Aluva Taluk, Ernakulam District, Kerala by M/s Rajagiri Healthcare and Education Trust - Terms of Reference - reg.

Sir,

This has reference to your proposal No. IA/KL/NCP/72004/2018 dated 2nd January, 2018, submitting the above proposal to this Ministry for seeking Terms of Reference (ToR) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for grant of Terms of Reference (ToR) to the project 'Expansion of existing Hospital cum Residential Project at Sy. Nos. 2140/73, 936/1/46, 939/1/45 (New Re-survey No. 134) of Edathala Village, Aluva Taluk, Ernakulam District, Kerala promoted by M/s Rajagiri Healthcare and Education Trust was considered by the Expert Appraisal Committee (Infra-2) in its meeting held on 18-20 April, 2018.

3. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above said meeting, are under:-

- (i) The project is located at 10°5'21.22"N to 10°5'9.84"N (Latitude) and 76°23'32.09"E to 76°23'9.31"E (Longitude).
- (ii) The project is Expansion of Existing hospital complex project. The existing hospital project has accorded with Environmental Clearance vide Order No. 21-5/2011-IA.III dated 14.06.2011 from MoEF for built-up area of 61,025.46 sqm. & plot area of 9.238 ha. The construction work was started for the expansion area only after obtaining the Environmental Clearance from MoEF&CC.
- (iii) The total plot area is 12.2069 ha, FSI area is 2,98,667.44 sqm and total construction area of 4,20,309.25 sqm. The project will comprise of 1,560 bedded Hospital, Medical college, Teaching hospital, Nurses quarters, Hostel, accommodation facility for patient relative, parking block, services block, Nursing college, Dental College & Commercial building & supporting infrastructure facilities shall be developed. Maximum height of the building is 61.50 m.



- (iv) During construction phase, total water requirement is expected to be 81 KLD which will be met by stored rain water in pond / tank water for construction and / Ground water for meeting the domestic water requirement. During the construction phase, mobile STP will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
- (v) During operational phase, total water demand of the project is expected to be 975 KLD (which includes fresh water requirement of 830 KLD) and the same will be met by the 702 KLD Recycled Water. Wastewater generated (780 KLD) uses will be treated in STP of total 936 KLD capacity. 702 KLD of treated wastewater will be recycled (245 KLD for flushing, 50 KLD for gardening & 150 KLD for boiler req. and excess for makeup water req. for cooling towers attached with HVAC system. About no treated / untreated water will be disposed in to municipal drain.
- (vi) About 3.231 TPD solid wastes will be generated in the project. The biodegradable waste (2.423 TPD) will be processed in bio-gas generation unit / bio bin system and the non-biodegradable waste generated (0.808 TPD) will be handed over to authorized local vendor.
- (vii) The total power requirement during operation phase is 10 MVA and will be met from Kerala State Electricity Board & DG Sets (standby) and total power requirement during construction phase is 0.5 MVA and will be met from Kerala State Electricity Board & DG Sets (standby).
- (viii) Rooftop rainwater of buildings will be collected in RWH tanks and pond with appropriate capacity for harvesting after filtration.
- (ix) Parking facility for 3,828 Cars + 4,126 Two wheelers is proposed to be provided against the requirement of 3,579 Cars + 3,808 two wheelers respectively (according to local norms).
- (x) Proposed energy saving measures would save about 22.5% of power.
- (xi) No Eco Sensitive area is located within 10 km radius.
- (xii) There is no court case pending against the project.
- (xiii) Investment / Cost of the project is Rs. 1,500 Crores.
- (xiv) Employment potential: about 5,382 jobs.
- (xv) Benefits of the project: Direct and indirect employment opportunities.

4. The project/activity is covered under item 8(b) 'Township and Area Development Projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Kerala, the proposal is appraised at Central Level.

5. The EAC, in its 30th meeting held on 18-20 April, 2018, after detailed deliberations, recommended the project for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report. As per the recommendation of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords ToR to the project 'Expansion and Modification Project 'Expansion of existing Hospital cum Residential Project at Sy. Nos. 2140/73, 936/1/46, 939/1/45 (New Re-survey No. 134) of Edathala Village, Aluva Taluk, Ernakulam District, Kerala promoted by M/s Rajagiri Healthcare and Education Trust

for preparation of the Environment Impact Assessment (EIA) Report and Environment Management Plan (EMP) with the following specific and general conditions in addition to Standard ToR provided at **Annexure -1**:-

- (i) The EIA would study the impact of dewatering and draw up an action plan for disposal of the excess water.
- (ii) The EIA would study the impact of Demolition and conformance to the Construction and Demolition Rules under the E.P. Act, 1986.
- (iii) Certified Compliance Report issued by the MoEF&CC, Regional Office or concerned Regional Office of Central Pollution Control Board or the Member Secretary of the respective State Pollution Control Board for the conditions stipulated in the earlier environmental clearance issued for the project along with an action taken report on issues which have been stated to be partially complied or non/not complied.
- (iv) The Air Quality Index shall be calculated for base level air quality.
- (v) A detailed report on compliance to ECBC-2017 norms.
- (vi) A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- (vii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- (viii) The permission of the CGWA for abstraction of ground water and for basement/excavation dewatering.
- (ix) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (x) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point.
- (xi) A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (xii) Proposals to ensure that Indoor Air Quality is maintained as per prescribed standards.
- (xiii) The Air Quality Index shall be calculated for base level air quality.



- (xiv) Proposals to ensure that the parking areas are secure and do not permit entry of vehicles within the Hospital campus. Only ambulances and emergency vehicles shall be provided access into the hospital through dedicated emergency and exit gates. Battery operated vehicles shall be provided for internal movement of patients and attendants.
- (xv) A management plan for handling and disposal of biomedical wastes to the satisfaction of the State Pollution Control Board shall be drawn up in conformance to the Biomedical Waste Management Rules, 2016.
- (xvi) Silence zones under the Noise Rules shall be demarcated and maintained in consultation with the District Administration. Proposals should be submitted in this regards.
- (xvii) Laboratory wastes shall be managed in accordance to the BMW Rules, 2016 and the atomic Energy Commission regulations as applicable. Proposals may be submitted in this regards.
- (xviii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 shall be prepared and submitted along with EIA Report.

General Guidelines

- (i) The EIA document shall be printed on both sides, as for as possible.
- (ii) All documents should be properly indexed, page numbered.
- (iii) Period/date of data collection should be clearly indicated.
- (iv) Authenticated English translation of all material provided in Regional languages.
- (v) The letter/application for EC should quote the MoEF&CC File No. and also attach a copy of the letter prescribing the ToR.
- (vi) The copy of the letter received from the Ministry on the ToR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.
- (vii) The final EIA-EMP report submitted to the Ministry must incorporate the issues in ToR. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP Report where the specific ToR prescribed by Ministry. Questionnaire related to the project (posted on MoEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.
- (viii) Grant of ToR does not mean grant of EC.
- (ix) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.
- (x) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed ToRs (ToR proposed by the project proponent and additional ToR given by the MoEF&CC) have been

complied with and the data submitted is factually correct (Refer MoEF&CC Office memorandum dated 4th August, 2009).

- (xi) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF&CC Office Memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.
- (xii) All the ToR points as presented before the Expert Appraisal Committee (EAC) shall be covered.

6. The above ToR should be considered for the project 'Expansion of existing Hospital cum Residential Project at Sy. Nos. 2140/73, 936/1/46, 939/1/45 (New Re-survey No. 134) of Edathala Village, Aluva Taluk, Ernakulam District, Kerala promoted by M/s Rajagiri Healthcare and Education Trust, in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

7. The project/activity is covered under item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Kerala, the proposal is appraised at Central Level.

8. The project proponent shall submit the detailed final EIA/EMP prepared as per ToR to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF&CC O.M. No.J-11013/41/2006-IA-II(I) (P) dated 08.10.2014.

9. The consultants involved in preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/ Laboratories including their status of approvals etc. vide Notification of the MoEF&CC dated 19.07.2013.

10. The prescribed ToR would be valid for a period of three years for submission of the EIA/EMP Reports.


(Kushal Vashist)
Director

Copy to:

The Member Secretary, Kerala State Pollution Control Board, Pattom P.O., Thiruvananthapuram - 695 004, Kerala.

Annexure - I

8(b): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR TOWNSHIP/ AREA DEVELOPMENT PROJECTS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

- (i) Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.
- (ii) Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- (iii) Examine baseline environmental quality along with projected incremental load due to the project.
- (iv) Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
- (v) Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project
- (vi) Submit the details of the trees to be felled for the project.
- (vii) Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- (viii) Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
- (ix) Ground water classification as per the Central Ground Water Authority.
- (x) Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
- (xi) Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.
- (xii) Examine soil characteristics and depth of ground water table for rainwater harvesting.
- (xiii) Examine details of solid waste generation treatment and its disposal.



- (xiv) Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.
- (xv) DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
- (xvi) Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
- (xvii) A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- (xviii) Examine the details of transport of materials for construction which should include source and availability.
- (xix) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- (xx) Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- (xxi) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- (xxii) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- (xxiii) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Townships>".

A handwritten signature in black ink, appearing to be 'J. S. Rao', located in the bottom right corner of the page.