

**Proceedings of the State Environment Impact Assessment Authority  
Kerala**

*Present: Prof. (Dr.) K.P. Joy, Chairman, Dr. J. Subhashini, Member and Sri. P. Mara  
Pandiyar I.A.S., Member Secretary.*

Sub: SEIAA Kerala – Medical Trust Institute of Medical Sciences project in Sy. Nos. 188/2, 3, 5, 189/1, 2, 3, 4, 5, 6, 190/1, 2, 3, 198/4, 199/2, 3, 4, 5, 7, 200/5, 7, 12, 201/1, 2, 12, 202/24 at Thiruvankulam Village, Kanayannur Taluk, Ernakulam District, Kerala by M/s Pulikkal Medical Foundation – Environmental Clearance under EIA Notification 2006 accorded – Orders issued

**STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY**

**No. 143/SEIAA/KL/2744/2013**

**dated, Thiruvananthapuram 15-10-2015**

- Ref:
1. Application dated nil from Sri. P.V. Antony, Managing Director of M/s Pulikkal Medical Foundation, XXXV/2570, M.G. Road, Kochi, Kerala 682016.
  2. Minutes of the 21<sup>st</sup> meeting of SEAC held on 04-11-2013.
  3. Minutes of the 25<sup>th</sup> meeting of SEAC held on 14/15-02-2014.
  4. Minutes of the 27<sup>th</sup> meeting of SEIAA held on 11/03/2014.
  5. Minutes of the 30<sup>th</sup> meeting of SEAC held on 6/7-06-2014.
  6. Minutes of the 31<sup>st</sup> meeting of SEAC held on 26/06/2014.
  7. Minutes of the 33<sup>rd</sup> meeting of SEAC held on 24-09-2014.
  8. Minutes of the 40<sup>th</sup> meeting of SEAC held on 27/28-5-2015.
  9. Minutes of the 42<sup>nd</sup> meeting of SEAC held on 2-7-2015.
  10. Minutes of the 40<sup>th</sup> meeting of SEIAA held on 3/4-8-2015.

**ENVIRONMENTAL CLEARANCE NO. /2015**

Sri. P.V. Antony, Managing Director of M/s Pulikkal Medical Foundation, vide his application received on 07/10/2013 sought for environmental clearance under the EIA Notification, 2006 for the proposed Medical Trust Institute of Medical Sciences project in Sy. Nos. 188/2, 3, 5, 189/1, 2, 3, 4, 5, 6, 190/1, 2, 3, 198/4, 199/2, 3, 4, 5, 7, 200/5, 7, 12, 201/1, 2, 12, 202/24 at Thiruvankulam Village, Kanayannur Taluk, Ernakulam District. The land belongs to Pulikkal Medical Foundation. Part of the land for the proposed activity is "Purayidam" (0.4547 hectare) and part is quarry as 'reclaimed land' (7.5836 hectares). The branch of the thodu which is flowing within the site divides the property into different portions and appropriate culverting is required for connecting the parcels of land. It is

proposed to construct an elevated bridge / culvert for the connection of the two portions of the property. No forest land is involved in the present project. It is interalia, noted that the project comes under the Category B, 8 (a) of Schedule of EIA Notification 2006.

2. The proposed project involves the construction of Medical Trust Institute of Medical Science project in Sy. Nos. 188/2, 3, 5, 189/1, 2, 3, 4, 5, 6, 190/1, 2, 3, 198/4, 199/2, 3, 4, 5, 7, 200/5, 7, 12, 201/1, 2, 12, 202/24 at Thiruvankulam Village, Kanayannur Taluk, Ernakulam District, Kerala. It is proposed to construct 9 blocks within the site. The hospital building is with Lower Ground Floor + Upper Ground floor +6 floors. The proposed project involves Medical College Building block for 750 students, General ward block, Teaching and Corporate hospital blocks (1311 beds), hotel and accommodation block (140 persons for faculty/staff and 130 persons for attendants to patients), Service block, Workshop block, Power house building and convenience shops and storm water collection pond. The total plot area of the proposed project is 8.0383 ha (80,348.59 m<sup>2</sup>) and the total built-up area is of 1,28,769.85 m<sup>2</sup>. The maximum height of building is 30.4 m. The top soil will be kept at site for landscaping work. The excavated soil will be used for back filling purposes.

3. The water consumption during construction phase is for meeting the domestic requirement of the construction labourers and for construction purposes. The domestic water requirement is expected to be 35 KL per day and for construction purposes would be about 40 KL per day. The source of water for construction purpose is from treated water from STP and stored rain water. The total daily domestic water consumption for the proposed project would be 849.59 KL/day. The sources of water during operation phase for the proposed project are Rain Water (on rainy days for non-flushing requirement), well water (on non-rainy days for non-flushing requirement) and treated waste water from STP (for flushing requirement for entire year). The project has made provision for rain water storage tanks of total 2500 KL (500 KL + 1500 KL + 500 KL) which will be used as a concurrent source of water during rainy days. Also, two large ponds of capacity 2,440 KL + 3560 KL (total 6000 KL) is also proposed. The source of water for this pond is rain water.

4. The Proposed project has provision of STP to treat sewage during construction phase and two numbers of STP of capacity of about 816 KL/day (20% extra capacity) and ETP of capacity of about 50 KL within the project premises to treat the sewage during operation phase. The domestic sewage of about 679.672 KL/day generated will be treated through proposed STP to be installed within project premises. The treated water will be fully recycled for meeting the flushing, horticulture, and boiler and to partially meet the cooling water requirement. The sludge from STP will be partially recycled for enhancing biological

treatment and the excess sludge will be sent to the biogas generation facility and the biogas produced will be used within the premises and the manure produced will be used in green area during operation phase. Solid waste generation from the project during construction phase will be about 140 kg/day and domestic sewage will be about 28 KL/day.

5. The non-biodegradable waste and other packaging material will be sold to the vendors. The biodegradable solid waste will be disposed in a bio-bin system for microbial composting and a STP for the treatment of domestic sewage from the labour colony. Solid waste of about 1,923 kg/day generated from the project will be collected separately as biodegradable and non-biodegradable waste as per the MSW Rules, 2000. The non-biodegradable and recyclable waste would be sold to the vendors. The biodegradable waste along with sludge from STP would be sent to the biogas generation plant (with capacity of about 1000 kg/day) to be developed within the premises. The biogas generated (expected to be about 40 kg/day) would be consumed in the canteen/kitchen area within the site and the manure produced will be used for green area development within the premises. It is also proposed to construct ETP for the treatment of laundry waste including laboratory waste water. The spent oil from the D.G. sets will be sold to C.P.C.B. approved recyclers.

6. As per Hazardous Waste (Management and Handling Rules), 2003, the hazardous waste i.e., the used oil from the D.G. sets, discarded oil filters and discarded batteries will be stored separately and will be outsourced to C.P.C.B./ S.P.C.B. authorized vendors only. The e-waste generated will be stored in an earmarked area and will be disposed as per E waste (Management and Handling) Rules, 2012. The biomedical waste generated of about 917.70 Kg/day would be segregated at source by providing appropriate colour coded bins/containers as per the colour coding provided in the Biomedical waste (Management and Handling) Rules. The biomedical waste from the proposed hospital cum medical college would be outsourced through a Kerala State Pollution Control Board authorized agency (M/s Indian Medical Association Goes Eco Friendly, IMAGE). Radioactive waste containers shall be stored as close to the work area as feasible to minimize the possibility of spillage during the transfer of waste to the container.

7. The total power requirement is 6500 KVA which will be sourced through Kerala State Electricity Board. Parking facilities is proposed for 1113 cars, 1065 two wheelers and 5 ambulances. Total project cost is Rs. 678 Crores. Konathu *puzha* is adjacent to the project site and in the building design the HFL of the water body is taken into account. A village pond is abutting the site. Chithrapuzha river is within 2 km and Mangalavanam Bird Sanctuary is

within 10 km of the project site. Southern Naval Command is within 10 km of the project site.

8. The SEIAA considered the proposal in its 27<sup>th</sup> meeting held on 11<sup>th</sup> March 2014 and 31<sup>st</sup> meeting held on 26<sup>th</sup> June 2014, and 33<sup>rd</sup> meeting held on 24/09/2014. The Authority specially considered the fact that *part of the land for the proposed activity is purayidam (0.4547 ha.) and part of it is reclaimed land (7.5836 ha.).* Subsequently SEAC in its 35<sup>th</sup> meeting held on 17/18-10-2014 identified it as 'Nilam Nikathu Purayidam' (as reported by Addl. Tahsildar, Kanayannur) and recommended for issuance of EC. The statement, that 'part is reclaimed land' necessitated further clarification that the provisions of the Kerala Conservation of Paddy Land and Wetland Act, 2008 are not violated. 40<sup>th</sup> SEAC held on 27-28<sup>th</sup> May 2015 considered the case as item no 40.03 and the Committee examined the records based on the minutes of the Sub-committee, Form I, Form IA, Conceptual plan and details submitted and decided to recommend to SEIAA to close further action in this matter as the proposal falls under category 8(a) as per OM of MoEF dated 22-12-2014 and to inform the proponent, accordingly. However as a response to the queries raised by SEIAA, it was also decided to inform that as per the letter No. H3-13188/2013 dated 19.9.2013 of the Additional Tahasildar, Kanayannur, furnished along with the original application, the land in question is already a filled up land on the date of commencement of Kerala Conservation of Paddy Land and Wetland Act, 2008. Hence it does not come under the purview of the above said act.

9. The Proposal was appraised by the State Level Expert Appraisal Committee (SEAC) as per the prescribed procedure in the light of provisions under the EIA Notification 2006 and subsequent amendments, in its 21<sup>st</sup> meeting held on 4<sup>th</sup> November 2013, 25<sup>th</sup> meeting held on 14<sup>th</sup> and 15<sup>th</sup> February 2014 and 30<sup>th</sup> meeting held on 6<sup>th</sup> and 7<sup>th</sup> June 2014 and on the basis of the supporting documents enclosed with the application viz., the Form – 1 & 1A, Conceptual Plan and the additional clarifications furnished in response to the observations, the Committee recommended environmental clearance to the project. 42<sup>nd</sup> SEAC held on 2<sup>nd</sup> July 2015 reappraised the case on the basis of the notification No. S.O.3252 (E) dated 22.12.2014 and decided to recommend to close further action since EC is not required for educational institution as per above said OM. The 39<sup>th</sup> meeting of SEIAA examined the above recommendations of SEAC and held as under:

*"If a Health Care Institute, which comes under 'red category' industry, is having plinth area of 20,000 m<sup>2</sup> or over, E.C is necessary. This has been clarified by MoEF in O.M No. 19-2/2013-1A-14 dated 09-06-2015. It is clarified that the Notification No. S.O. 3252 (E) dated 22-12-2014 provides exemption to buildings of educational institutions including*



*Universities from obtaining prior E.C under the provision of EIA Notification 2006 subject to suitable environmental management. In the case of Medical Universities/ Institutions the component of hospitals will continue to require prior E.C."*

10. In view of the OM F No. 19-2/2013-IA III dated 9-06-2015 the Committee reviewed the decision taken, in its 40<sup>th</sup> meeting. The total built up area of the hospital building is 8621.32m<sup>2</sup> (MC block 1) + 18860.08 m<sup>2</sup> (MC block 2). Therefore the Committee decided to endorse the decision taken in its 30<sup>th</sup> meeting for issuance of EC stipulating the above specific conditions in addition to the general conditions for non-mining projects. The Committee also intimated SEIAA that as per the letter No. H3-13188/2013 dated 19.9.2013 of the Additional Tahasildar, Kanayannur, furnished along with the original application, the land in question is already a filled up land as on the date of commencement of *Kerala Conservation of Paddy Land and Wetland Act, 2008*. Hence it does not come under the purview of the above said Act. Moreover, if necessary, it is the responsibility of the Local Body to obtain the prior clearance under the above Act before according the building permit.

11. Now that the status of the land is also got clarified by revenue authorities and SEAC, the Authority decided to accept the recommendations of SEAC in the 30<sup>th</sup> and 39<sup>th</sup> meetings and to issue the E.C, also subject to strict adherence to the rules on disposal of Biomedical Wastes and fulfillment of all other statutory obligations for construction at the site and the conditions in the inspection report.

12. The SEIAA, after due consideration of the relevant documents and clarifications submitted by the project proponent, and in view of the recommendations of SEAC, approved for issuance of Environmental Clearance for the project in the 40<sup>th</sup> meeting held on 03-04/08/2015. Accordingly, the State Environment Impact Assessment Authority (SEIAA) Kerala hereby accord Environmental Clearance for the Medical Trust Institute of Medical Science project in Sy. Nos. 188/2, 3, 5, 189/1, 2, 3, 4, 5, 6, 190/1, 2, 3, 198/4, 199/2, 3, 4, 5, 7, 200/5, 7, 12, 201/1, 2, 12, 202/24 at Thiruvankulam Village, Kanayannur Taluk, Ernakulam District, Kerala by M/s Pulikkal Medical Foundation subject to strict compliance of the undertakings on Environmental irrigation as in the form I and Form IA, corporate social responsibility initiatives proposed and the Environmental Management Plan, which will be deemed to be a part of this proceedings as if incorporated herein, following specific conditions, and the general conditions contained in the Annexure, which shall also form a part of this document.

1. A buffer distance of at least 10 m to be kept as 'No Development Zone' on the side of the *thodu*.

2. No part of the streams in the site should be reclaimed.
3. The hierarchy of width of internal roads must be maintained.

13. Construction shall be complying with the following Green conditions also;

1. Adequate rain water harvesting facilities shall be arranged for.
2. Technology and capacity of STP to be indicated with discharge point (if any) of the treated effluent.
3. Effluent water not conforming to specifications shall not be let out to water bodies.
4. Maximum reuse of grey water for toilet flushing and gardening and construction work shall be ensured.
5. Dual plumbing for flushing shall be done.
6. Provisions for disposal of e-wastes.
7. Solid wastes, non- biodegradables and separate parking facilities for the building shall be provided.
8. Generation of solar energy to be mandatory for own use and /or to be provided to the grid.
9. There shall be no compromise on safety conditions and facilities to be provided by the project proponent, which shall be ensured for occupation, regularisation or consent to operate.

14. Compliance of the above conditions will be monitored by the Directorate of Environment and Climate Change, Government of Kerala or its agencies and also by the Regional Office of the Ministry of Environment and Forests, Government of India, Bangalore.

(i) Necessary support for entry and inspection should be provided by the project proponent to the staff of the Directorate and Ministry for monitoring purposes. The violation of any condition or undertaking shall be reported to the District Collector, Ernakulam to take legal action under the Environment (Protection Act) 1986.

15. (i) The given address of correspondence of the Authorized Signatory of the project is:- Sri. P.V. Antony, Managing Director, M/s Pulikkal Medical Foundation, XXXV/2570, M.G. Road, Kochi, Kerala – 682016; Tel. No. 0484-2358001; Fax No. 0484-2358031; Email: antonypulikkal@gmail.com; info@medicaltrushospital.org

(ii) Agency with NABET accreditation for EIA :- M/s Environmental Engineers & Consultants Pvt. Ltd., A1- 198, Janak Puri, NewDelhi – 110058; Tel. No. 011-25507190; Telefax No. 011-25622604; Email: eecnewdelhi@yahoo.in ; eecnewdelhi@gmail.com

16. The validity of EC is for a period of seven years, from 15/10/2015, subject to earlier review in the event of non-compliance or violation of any of the condition stipulated herein.

Sd/-

P. MARA PANDIYAN, I.A.S.  
Member Secretary (SEIAA)  
&  
Principal Secretary  
Environment & Forests Department,  
Government of Kerala.

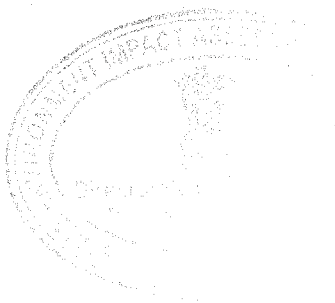
To,

1. The District Collector, Ernakulam
2. Tahsildar, Kanayannur Taluk, Ernakulam.
3. Village Officer, Maradu Village, Ernakulam
4. Secretary, Maradu Municipality.  
Ernakulam Dist.
5. Sri. P.V. Antony  
Managing Director,  
M/s Pulikkal Medical Foundation,  
XXXV/2570, M.G. Road, Kochi, Kerala – 682016.
6. Principal Secretary, Environment Department,  
Government of Kerala.
7. Principal Secretary, Local Self Government Department,  
Government of Kerala.
8. Member Secretary Kerala Coastal Zone Management Authority,  
Sasthra Bhavan, Pattom, Thiruvananthapuram -695004.

O/C, S/F

Forwarded/ By order

G. Rajeev  
Administrator  
(SEIAA)



**GENERAL CONDITIONS** *(for projects other than mining)*

- (i) Rain Water Harvesting capacity should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified elsewhere.
- (ii) Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
- (iii) Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, inclusive of approach road and internal roads.
- (iv) The project shall incorporate devices for solar energy generation and utilization to the maximum possible extent with the possibility of contributing the same to the national grid in future.
- (v) Safety measures should be implemented as per the Fire and Safety Regulations.
- (vi) STP should be installed and made functional as per KSPCB guidelines including that for solid waste management.
- (vii) The conditions specified in the Companies Act, 2013 should be observed for Corporate Social Responsibility.
- (viii) The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
- (ix) Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating activity.
- (x) All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.
- (xi) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.
- (xii) The Authority 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 Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- (xiii) The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including 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.

- (xiv) The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at [www.seiaakerala.org](http://www.seiaakerala.org). The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
- (xv) A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.
- (xvi) The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data **(both in hard copies as well as by e-mail)** and 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 respective Regional Office of MoEF, Govt. of India and also to the Directorate of Environment and Climate Change, Govt. of Kerala.
- (xvii) The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40.
- (xviii) The proponent should provide notarized affidavit (*indicating the number and date of Environmental Clearance proceedings*) that all the conditions stipulated in the EC shall be scrupulously followed.

  
For Member Secretary, SEIAA

