



Validity expires on 31-09-2022

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

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

Sub:SEIAA- Environmental clearance for the development of campus of Indian Institute of Information Technology and Management in Survey Nos. 293 (293/1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21), 308 (p) (308/13, 14, 15), 309 (p) (5, 6, 7, 8, 10, 12, 13, 14, 15, 17, 18, 20, 21, 22, 23, 24, 25, 26, 31, 35, 36, 41), 210 (p) and 311(p) (311/1, 2,3,4,5,6,7,8,9, 9-1, 9-2, 10, 12, 13, 14, 15, 16) at Veiloor Village, Thiruvananthapuram Taluk, Thiruvananthapuram District, Kerala by M/s Indian Institute of Information Technology and Management-Kerala-Granted – orders issued.

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### **STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY**

**No. 459/SEIAA/KL/3181/2014**

***dated, Thiruvananthapuram 25-09-2015***

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- Ref: 1. Application dated 27-06-2014 from Dr. M.S. Rajasree, Director, Indian Institute of Information Technology, and Management, IIITM-K building, Technopark Campus, Thiruvananthapuram, 695581.
2. Minutes of the 33<sup>rd</sup> meeting of SEAC held on 02/03-09-2014.
3. Minutes of the 40<sup>th</sup> meeting of SEAC held on 29-05-2015.
4. Minutes of the 42<sup>nd</sup> meeting of SEAC held on 02-07-2015.
5. Minutes of the 40<sup>th</sup> meeting of SEIAA held on 03/04-08-2015.

### **ORDER No. 84/15.**

Dr. M.S. Rajasree, Director, M/s Indian Institute of Information Technology and Management-Kerala vide application received on 01.07.2014 and has sought environmental clearance under the EIA Notification, 2006 for the development of campus of Indian Institute of Information Technology and Management in Survey Nos. 293, 308 (p), 309 (p), 210 (p) and 311(p) at Veiloor Village, Thiruvananthapuram Taluk, Thiruvananthapuram District, Kerala.

2. Indian Institute of Information Technology and Management, Kerala, is an autonomous institution under Technopark authorities. The facilities proposed consist of academic buildings, hostels and residential buildings at Kurakkad in Veiloor village in 10.33 hectares acquired by the Govt. of Kerala in Manglapuram Panchyat. The campus is envisaged to accommodate about one thousand people who will work within the campus. The buildings of the campus is designed to be a model Green Building conforming with the GRIHA standards which would protect the terrain and

topography, conserve water and energy, recycle resources, and to utilize the maximum renewable energy resources. During the construction phase, no construction camp is proposed within the project site and labourers will be provided suitable accommodation facility in rented buildings or lodges outside. The noise level and atmospheric pollution are below the ranges set by CPCB.

3. Salient features of the project are as follows:

<i>Name of project</i>	Development of New Campus of Indian Institute of Information Technology and Management-Kerala (IIITM-K), Thiruvananthapuram
<i>Category/Subcategory &amp; Schedule</i>	Category 'B'; 8(a)
<i>Location Sy no/ district, Taluk/ village etc.</i>	Thiruvananthapuram; Thiruvananthapuram; Veiloor
<i>GPS co-ordinates</i>	N 08° 36' 55.82" E 76° 51' 09.18"
<i>No. of floors</i>	G+7
<i>Maximum height from ground level</i>	32.8 m
<i>Facilities proposed</i>	Administrative block, Auditorium, Academic and faculty block, Computer lab and library, Hostels, Residential complex, Director's residence
<i>Details of project cost</i>	Rupees 16,050 Lakhs
<i>Activity schedule of the project</i>	To be completed in 18 months
<i>CRZ recommendations</i>	Does not fall under CRZ
<i>Forest clearances</i>	Not a forest land
<i>Does it attract violation proceedings</i>	No
<i>Environment Management Plan/ Eco Restoration Plan (in brief)</i>	<p>The whole plan of environmental sustainability is the maintenance of low-lying areas and which would result in positive intervention for the augmentation of the Kurakkod thodu and development of water bodies and establishment of rain water harvesting tank in the south east corner of the campus.</p> <p>The proposed development site is a small depression in between two ridges, i.e. the south-west ridge starting from Karamood and ending at NH-47 and the north-east ridge starting from Thalaikonam and ending at NH-47. The depression is about 4-6 m. below the ridges. It is planned to maintain the topography without altering existing layout through developing waterscapes in the low lying area, augmenting and maintaining the existing aquifers through ground water recharging and by sustaining greeneries. The eastern front towards the stream (Kurakkad thodu) would be developed as a conservatory housing indigenous trees and bushes. The holistic ecological concept of sustainability is the main yardstick where least external interference is envisaged. It is planned that low lying areas in the southern end towards NH 66 would be developed as rainwater harvesting tank/pond near the wider section of the existing stream. Waterscapes with</p>

	water lilies, lotus and aquatic plants would be developed as a part of conservation and beautification. There would not be any dumping of soil from outside and ecological integrity would be maintained with reeds and beautiful yellow bamboo clumps. No earthwork or concrete boundaries which would destroy the ecology, is planned. Ultimately as a part of aesthetic beautification, Japanese type of gardens with short bamboo clumps and natural rocks and small bamboo bridges would be designed.
<b>ABOUT THE PROJECT</b>	
<b>Environmental parameters considered</b>	<b>Description</b>
<b>WATER</b>	
Water requirement & sources	The Water requirement is 415 KLD which would be sourced mainly from the ground water, recycling and rain water harvesting. The whole plan of environmental sustainability is the maintenance of sloping terrain which would result in positive intervention for the augmentation of the Kurakkod thodu and development of water bodies and establishment of rain water harvesting tank in the south east corner of the campus. The entire quantity of fresh water needs in the operational phase of the project can be met by the shallow phreatic aquifers in the project area.
RWH units proposed	The IIITMK will have a roof top area of 8215 M2, on completion. The runoff coefficient of the roof top will be 100% and the annual roof top run off of 15610 m3 will be received by the project area as roof top run off in an year.
Facilities for liquid waste treatment	The system of treatment proposed for the sewage from various project components is anaerobic cum extended aeration. In order to accelerate the decomposition of organic materials and to reduce the space for the Sewage Treatment Plant (STP)/Moving Bed Bioreactor (MBBR) will also be added. Capacity of STP proposed for = 200 KLD
Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	The total water consumption projected is 415m3/day out of which 135m3/day will be available through recycling in the proposed STP's which will be used for irrigation only. The balance water requirement is 280 m3/day.
Water quality meeting requirements	Water quality requirement will be satisfied by the analysis of water
Does it have provisions for use of recycled water	Yes, 135m3/day
<b>LAND</b>	
Proximity to forest lands	No forest land nearby
Access road to the site –Width & Condition	NH-66 is passing adjacent to our project site
Facility for solid waste management	Segregation of solid waste at the site. The solid wastes generated during construction shall be segregated in to recyclable/reusable materials and the ones needing safe disposal.

Topographic features/ slope	The proposed premises which is a depression or a small valley of two ridges. South west ridge starts from Karamood and extends towards NH-66. The North-east ridge starts from Thalaikonam and ends in NH-66. The ridges are about 6-10 meters high on an average. The lay of the land is regular and linear which is a depression and its lower by 5-6 m from adjacent NH-66. The elevation deference of areas within the site is 3 m.
Proneness of the area for landslides	Nil, there is no steep slope in the area for any landslide
Likely emissions affecting environment	Nil
<b>ENERGY</b>	
Energy requirement	3000 KVA
Energy sources	KSEB (Kerala State Electricity Board)
Extent of usage of alternative energy resources	Two nos. 2300 KVA, (refer equipment sizing calculation) 11 kV, 50 Hz silent type DG sets with radiator suitable for outdoor installation will be installed in MRSS to provide 100% DG backup. Both the DG Sets will run in synchronization through PLC.
<b>BIODIVERSITY</b>	
Presence of any endangered species or red listed category	Nil. The project will not pose any significant threat to the biodiversity of the region. There are no threatened species or uncommon endemic species in the project site. No displacement of fauna or loss of native species and genetic diversity. Maintenance of the surface flow of Kurakkad thodu is important in minimizing the impacts on terrestrial and aquatic flora & fauna. The Environment Management Plan as proposed will be implemented with budget layout for contractors and of IIITM (Kerala).
<b>SOCIAL ASPECTS</b>	
Proximity to nearest habitation	There are households on the western side and adjacent to the NH-66.
CSR related to the project/ allocation/ time frame (details mandatory)	The Director, Indian Institute of Information Technology and Management – Kerala has undertaken to shoulder the Social Responsibilities like providing periodic health check-ups, blood donation camps, etc. at their own expenses and sufficient funds will be earmarked in our budget. The Director through the Manager (Finance and Administration) cum Secretary is responsible for the implementation of the same.
<b>GENERAL</b>	
Does it propose environment management plan	Yes, Actionable Management Plan is proposed with budget layout for Contractors and Management Authorities of TTTM (Kerala).
E-waste management	Collection once in three months. Handover to authorized e-waste collection agents.
Sufficiency of parking spaces/ traffic management	The project is quite generous in providing car parking space and about 5700 sq. m area is earmarked for car parking areas

	which would accommodate 346 cars. The present project is a new venture and the area is being planned for road connectivity by Technopark authorities. The entry and exit points are planned comprehensively to avoid bottle necks and smooth flow of traffic. As far as possible use of personal cars will be restricted. It is advisable to use pollution free electric cars.
Litigation/ court cases, if any, against the project (Provide details)	Nil as declared by proponent
Details of Authorised Signatory	Dr. Rajasree M. S. Director Indian Institute of Information Technology and Management- Kerala IIITM-K Bldg., Technopark Campus Thiruvananthapuram – 695 581, Kerala Tel: 91-471-2527567, 2700777, Fax: 2527568 Email: rajasree.ms@iiitmk.ac.in
Details of NABET approved EIA consultant organisation	M/s Consulting Engineering Services India Pvt. Ltd., Gurgaon (JACOBS) Water & Environment Department, 2nd Floor, Platinum Tower, 184, Udyog Vihar – Phase 1, Gurgaon 122016

4. The 33<sup>rd</sup> meeting of SEAC held on 2<sup>nd</sup> and 3<sup>rd</sup> September, 2014 found that, the entrance is from the proposed road within the Technocity must be provided. The case was deferred for field visit for ascertain ground reality and for seeking additional details. Field visit to the proposed building project site was carried out on 18.09.2014 by a sub-committee of SEAC. The representatives of the proponent were present at the site and the Inspection report was as follows:

*“The project is proposed by the side of NH 66 at Kurakkad in Veiloor village, Thiruvananthapuram Taluk. The site is located as a linear plot confined to the low lying area on the northern side of National Highway. The area is almost level with a very gentle slope to the south. Natural drainage lines are seen on either side of the plot but the one on the east appears to be prominent and is provided with a culvert when crossing the Highway. The soil is on the surface is mostly sandy clay loam. The water table is near the surface. The land is currently fallow but with coconut trees. KWA has a source well within the area with a reported yield of 0.7 MLD. The approach road to the site is yet to be provided”.*

*Following points may be additionally considered:-*

- 1. The level of approach road and other internal roads with reference to the level of National highway must be provided. The hierarchy of roads must be maintained.*
- 2. Width of main road within the campus must be increased to a minimum of 7m.*
- 3. A clear distance of at least 3 m must be provided between the drive way and proposed building.*
- 4. Parking facility to be increased (cars and buses) taking into consideration the residential nature of the proposed project.*

5. *The status of existing stream must be maintained with the natural vegetation on either bank. A buffer distance equivalent to the width of stream must be left as it is.*
6. *Land filling must be minimised. Foundation and other structural elements of the main building must be planned keeping in view of future expansions vertically.*
7. *In order to ensure the sustained yield of existing KWA well, a safe distance must be left as a no development zone. In addition a sub-surface dyke with an over flow into the stream can be provided on the downstream side of the KWA intake well to arrest the seepage into the project land and to maintain yield of the well.*
8. *Other general conditions to be followed.*

5. The proposal was then considered in the 40<sup>th</sup> meeting of SEAC held on 27<sup>th</sup> to 28<sup>th</sup> May 2015 and decided to direct the proponent to submit approved building plan incorporating the above findings as f specific conditions in addition to the general conditions stipulated for building projects. In view of the amendment to Para (3) of Appendix V of EIA notification 2006 issued vide SO 3067 dtd 1.12.2009 of the Ministry of Environment & Forest the Committee reviewed its decision taken in its 40<sup>th</sup> meeting and hence the proposal was again considered in the 42<sup>nd</sup> meeting of SEAC held on 2<sup>nd</sup> July 2015.

6. On Verification of the concerned maps, the Committee found that the proposed area doesn't fall under CRZ. In this particular case, the Committee observed that the CRZ status will not have any bearing on the appraisal. The Committee recommend for issuance of EC to the project subject to general conditions in addition to following specific conditions.

1. The level of approach road and other internal roads with reference to the level of National Highway must be provided. The hierarchy of roads must be maintained.
2. The access, parking facility, and setbacks shall be in accordance with the National Building Code.
3. The status of existing stream must be maintained with the natural vegetation on either bank. A buffer distance equivalent to the width of stream must be left as it is.
4. Land filling must be minimised.
5. In order to ensure the sustained yield of existing KWA well, a safe distance must be left as a no development zone. In addition a sub-surface dyke with an over flow into the stream can be provided on the downstream side of the KWA intake well to arrest the seepage into the project land and to maintain yield of the well.
6. Adequate precautions for disaster management should be inbuilt in the plan.
7. Carbon foot print of the project should be reduced to the maximum extent possible.

7.8. The Authority in its 40<sup>th</sup> meeting held on 3/4-8-2015 resolved to approve the application for the issuance of E.C as per the recommendations of SEAC incorporating the Environment Management Plan, and mitigation measures as undertaken in the EMP and pre- feasibility report and the green building conditions as under:



- There shall be RWH facility with adequate capacity.
- Technology and capacity of the STP to be indicated with discharge point (if any) of the treated effluent.
- Effluent water not conforming to specifications shall not be let out to water bodies
- Maximum reuse of grey water for toilet flushing and gardening and construction work shall be ensured.
- Dual plumbing for flushing shall be done
- Provisions for disposal of e-wastes, solid wastes, non-biodegradables and separate parking facility for the buildings shall be provided.
- Generation of solar energy to be mandatory for own use and/or to be provided to the grid.
- There shall not be any compromise on the safety conditions and facilities to be provided by the project proponent, which shall be ensured for occupation, regularisation or consent to operate.

8. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed development of the campus of Indian Institute of Information Technology and Management project in Survey Nos. 293 (293/1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21), 308 (p) (308/13, 14, 15), 309 (p) (5, 6, 7, 8, 10, 12, 13, 14, 15, 17, 18, 20, 21, 22, 23, 24, 25, 26, 31, 35, 36, 41), 210 (p) and 311(p) (311/1, 2,3,4,5,6,7,8,9, 9-1, 9-2, 10, 12, 13, 14, 15, 16) at Veiloor Village, Thiruvananthapuram Taluk, Thiruvananthapuram District, subject to the specific conditions in para 6 above, green conditions in para 7 above and all the environmental impact mitigation and management measures undertaken by the project proponent in the Form 1, 1A ,and other documents submitted to SEIAA, the mitigation measures proposed in the table in para 3 above and specifically the undertakings in the Environment Management Plan (pages 116 to 160 of the conceptual plan) . Those assurances and clarifications given by the proponent will be deemed to be a part of these proceedings as if incorporated herein. Also the general conditions for projects other than mining appended hereto will be applicable and have to be strictly adhered to.

9. Validity of this environmental clearance will be seven years from 1-10-2015, subject to earlier review in the event of non- compliance or violation of any of the conditions stipulated herein.

10. (i) Compliance of the conditions herein will be monitored by the Directorate of Environment & Climate Change or its agencies and also by the regional office of the Ministry of Environment& Forests Government of India, at Bangalore.

(ii) Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring.

(iii) Instances of violation if any shall be reported to the District Collector, Thiruvananthapuram to take legal action under the Environment (Protection) Act 1986.

- There shall be RWH facility with adequate capacity.
- Technology and capacity of the STP to be indicated with discharge point (if any) of the treated effluent.
- Effluent water not conforming to specifications shall not be let out to water bodies
- Maximum reuse of grey water for toilet flushing and gardening and construction work shall be ensured.
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- There shall not be any compromise on the safety conditions and facilities to be provided by the project proponent, which shall be ensured for occupation, regularisation or consent to operate.

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(iii) Instances of violation if any shall be reported to the District Collector, Thiruvananthapuram to take legal action under the Environment (Protection) Act 1986.

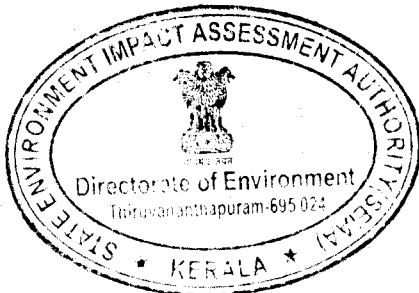


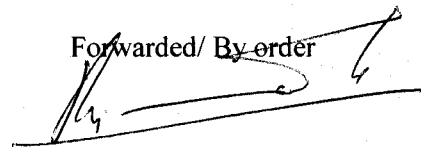
11. The given address for correspondence with the authorised signatory of the project is Dr. M.S. Rajasree, Director, Indian Institute of Information Technology and Management, IIITM-K Building, Technopark Campus, Kariavattom P.O, Thiruvananthapuram, 695581.

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

To,

1. Dr. M.S. Rajasree,  
Director,  
Indian Institute of Information Technology and Management,  
IIITM -K Building, Technopark Campus,  
Karyavattom P.O, Thiruvananthapuram, 695581.
2. The District Collector, Thiruvananthapuram,
3. Tahsildar, Thiruvananthapuram.
4. Secretary,  
Mangalapuram Grama Panchayat,  
Mangalapuram,  
Thiruvananthapuram-695581.
5. The District Town Planner, Thiruvananthapuram.
6. Principal Secretary, Environment Department,  
Government of Kerala.
7. Principal Secretary, Local Self Government Department,  
Government of Kerala.
8. Principal Secretary, Information Technology Department.
9. Chief Executive Techno Park (Kerala) Karyavattom P.O, Thiruvananthapuram.
10. O/C
- ✓ 11. S/F



Forwarded/ By order  
  
Administrator  
SEIAA

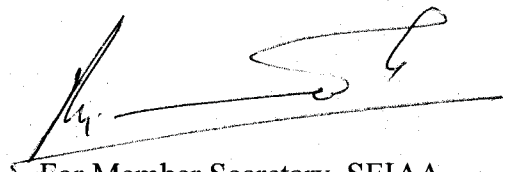
**GENERAL CONDITIONS** *(for projects other than mining)*

- (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

**G. RAJEEV**  
Administrator  
State Environment Impact Assessment Authority  
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Thiruvananthapuram-695024  
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