



**PROCEEDINGS OF THE ADMINISTRATOR, STATE
ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,
THIRUVANANTHAPURAM**

(Present. SHAHER BANU)

Sub: SEIAA - Environmental Clearance for proposed expansion of M/s Adlux Medicity & Convention Centre Pvt. Ltd in Re- Survey No.35/2 at Karukutty village, Aluva Taluk, Ernakulam District, Kerala by Dr. Sujith Sudheesan, Director, M/s Adlux Medicity & Convention Centre Pvt. Ltd – Granted - Orders issued

State Environment Impact Assessment Authority, Kerala

No. 1186/A/2018/SEIAA

dated, Thiruvananthapuram 27.02.2020

- 16.1
1. Application for ToR, received on 15.10.2018 from Dr.Sujith Sudheesan, Director, Adlux Medicity & Convention Centre Pvt. Ltd, Adlux Junction, Karakutty P.O, Angamaly, Ernakulam- 683576
 2. Minutes of the 88th meeting of SEAC held on 30th October 2018
 3. Minutes of the 93rd meeting of SEAC held on 21st February 2019
 4. Minutes of the 94th meeting of SEAC held on 12th & 13th March 2019
 5. Application for EC received on 01.02.2019 from Dr.Sujith Sudheesan, Director, Adlux Medicity & Convention Centre Pvt. Ltd, Adlux Junction, Karakutty P.O, Angamaly, Ernakulam- 683576
 6. Minutes of the 96th meeting of SEAC held on 26th & 27th April 2019
 7. Minutes of the 97th meeting of SEAC held on 21st & 22nd May 2019
 8. Minutes of the 99th meeting of SEAC held on 27th & 28th June 2019.
 9. Minutes of the 100th meeting of SEAC held on 11th & 12th July 2019
 10. Minutes of the 101th meeting of SEAC held on 1st & 2nd August 2019
 11. Minutes of the 97th meeting of SEIAA held on 24th September 2019
 12. Minutes of the 104th meeting of SEAC held on 10th & 11th October 2019
 13. Minutes of the 106th meeting of SEAC held on 28th, 29th & 30th November 2019
 14. Minutes of the 107th SEAC meeting held on 24th December 2019
 15. Minutes of the 108th SEAC meeting of SEAC held on 13th & 14th January 2020
 16. Minutes of the 102nd meeting of SEIAA held on 10th & 11th February 2020.

17. Affidavit dt.11.02.2020 submitted by Dr.Sujith Sudheesan, Director, Adlux Medicity & Convention Centre Pvt. Ltd
18. Deed of Bank Guarantee submitted by the Proponent dated.26.02.2020
19. G.O(Rt.) No.29/2019/Env dt.12.04.2019.

ENVIRONMENTAL CLEARANCE NO.28/2020

Dr. Sujith Sudheesan, Director, Adlux Medicity & Convention Centre Pvt. Ltd, Adlux Junction, Karakutty P.O, Angamaly, Ernakulam- 683576, vide his application received online and hard copy received on 15.10.2018 has sought Environmental Clearance under EIA Notification, 2006, for the proposed project in Re- Survey No.35/2 at Karukutty village, Aluva Taluk, Ernakulam District, Kerala. The project comes under the Category B of Schedule 8 (a) of Environment Impact Assessment Notification 2006.

2) The proposed project site falls within Latitude 10°14'5.89"N , Longitude 76°22'20.37" E. Total built up area after proposed expansion is 73379.68 m² and the No. of Floors is B+G+9. The height of the building is 47 m above GL. Total water requirement in operation phase (Non-monsoon season) is 1063 KLD and for 960 KLD for Monsoon season. Rainwater harvesting system will be constructed for the project. The total power requirement is 2500 kW. Total expected Project cost is 110 Crores.

3) The proposal was placed in the 88th meeting of SEAC held on 30th October, 2018 and deferred it for the want of the following details:

1. Tertiary treatment of waste water to be adopted
2. Water harvesting to be augmented
3. Plan on conservation and use of energy to be produced

4) The proponent has submitted the above details along with the EIA Report. The proposal was placed in the 93rd SEAC Meeting held on 21st February, 2019. The Committee deferred the item for next meeting. The proposal was again placed in the 94th SEAC Meeting

held on 12th & 13th March, 2019. The Committee after detailed deliberation decided to approve the standard ToR subject to general conditions. As per the 94th SEAC Meeting, ToR has been issued vide letter No.1186/A2/2018/ SEIAA dated 20.03.2019.

- 5) Dr. Sujith Sudheesan, Director, M/s Adlux Medicity & Convention Centre Pvt. Ltd, vide letter dated 19.03.2019 stated that they had already submitted the EIA report as per the standard ToR and requested to consider the application for EC. They have not submitted the public hearing report. The proposal was placed in the 96th SEAC meeting held on 26th & 27th April 2019. The Committee noticed that the ToR was issued on 20.03.2019 and the proponent submitted the EIA Report on 19.03.2019. Hence, the Committee decided to call for explanation from the proponent in this regard. The proponent submitted explanation on 15.05.2019.
- 6) The proposal then placed in the 97th SEAC Meeting held on 21st & 22nd of May 2019. The Committee directed the proponent to present the EIA Report as per the TOR issued on 20-3-2019. The proponent submitted the EIA report based on the ToR approved on 20.03.2019.
- 7) The proposal was considered in the 99th SEAC meeting held on 27th & 28th June, 2019. The Committee decided to invite the proponent for presentation and the proponent intimated accordingly.
- 8) The proposal was placed in the 100th SEAC meeting held on 11th & 12th July 2019. The proponent was present and the consultant made a presentation. The Committee entrusted Dr.A.V.Raghu & Shri.K.Krishna Paniker for field inspection. Also, the proponent was directed to produce the documents regarding collecting and disposal of solid wastes. The field inspection was carried out on 22nd July 2019 and the report was submitted.
- 9) The proposal was placed in the 101th SEAC meeting held on 1st & 2nd August 2019. The Committee decided to recommend for EC subject to the following specific conditions
- 1) Storm water should not be directly fed to RWH pond.
 - 2) Roads surrounding hospital buildings should have sufficient width for free fire engine movements.
 - 3) For every tree removed 3 plants are to be planted.
 - 4) Proper dust control measures are to be taken during construction phase.

10) After the SEAC meeting the proponent submitted following Details/ documents :-

- 1.Details/ documents regarding collection and disposal of solid wastes
2. Terms and conditions of M/S Adlux Medicity and convention Centre Pvt.Ltd
3. Revised site plan with width of all internal roads are equal to or more than 6m

11) The proposal was placed in the 97th SEIAA meeting held on 24th September 2019. Authority decided to seek clarifications from SEAC on violation of EIA Notification 2006 in the light of latest OM dated 09th September 2019 of MoEF & CC & estimation of area under different components for which EC is required.

12) The proposal was placed in the 104th SEAC meeting held on 10th & 11th October, 2019. The Committee stated that EC recommended earlier stands and also entrusted Shri.K. Krishna Panicker and Dr.A.V.Raghu to peruse the files and report for initiating the violation proceedings. The proponent submitted request letter on 11.11.2019 for personal hearing in the next SEAC meeting.

13) The proposal was considered in the 106th SEAC meeting held on 28th, 29th & 30th November 2019. The proponent requested for personal hearing regarding details of remediation plan. The Committee decided to call the proponent for personal hearing on 30th November 2019. The Committee heard the proponent and the consultant on 30th November 2019 and directed to submit a suitable damage assessment and remediation plan for the violation of EIA Notification 2006 as per guidelines and Court orders on the subject. The proponent submitted the remediation plan on 23.12.2019.

14) The proposal was considered in the 107th SEAC meeting held on 24th December 2019. The proponent has agreed to spend 5% of the project cost for implementing the remediation plan. But the present remediation plan is for 2.57% of the project cost. So the Committee decided to direct the proponent to submit the revised remediation plan. The proponent submitted revised remediation plan on 09.01.2020.

15) The proposal along with remediation plan placed in the 108th SEAC meeting held on 13th & 14th January 2020. The remediation plan is as follows;

I. Damage Assessment

Attribute	Cost of the Damage Assessed (in Rs Lakhs)
Land Environment	42.6
Air Environment	20.0
Noise	4.32
Water Environment	16.0
Loss of vegetation	23.0
Total	105.92

II. Remediation & Community and Natural Resources Augmentation Plan

Project Cost: INR 110 Crores

Budgetary provisions for remediation and community and natural resources augmentation

S No	Environment	Activity	Cost in Rs Lakhs
1.	Water environment	Restoration of abandoned wells in the Karukutty, Koratty and Parakkadav Panchayats equipped with rain water recharge <ul style="list-style-type: none"> o 60 wells o Rs 15,000 per well 	9.0
		Restoration and maintenance of public ponds in Karukutty, Koratty and Parakkadav Panchayats with facilities for ground water recharge <ul style="list-style-type: none"> o 12 ponds o Rs 5,00,000 avg per pond 	60.0
		Free water testing for 15 major potable water sources in Karukutty, Koratty and Parakkadav Panchayats Cost for collection and testing per sample : Rs 3000 <ul style="list-style-type: none"> o Water testing to be done every 	16.1

S No	Environment	Activity	Cost in Rs Lakhs
		month for 3 years	
		Provision of rainwater harvesting tanks to educational institutions and public places in Karukutty, Koratty and Parakkadav Panchayats <ul style="list-style-type: none"> Rs 1,00,000 per institution 10 institutions from each Panchayat each year 	30.0
		Restoration and maintenance of Manjalithodu for 6 km stretch from Madurapuram bridge (at Athani-Mekkad-Elavoor road) up to Kothakulangara bridge (connecting to NH544), including clearing up the garbage and silt to ensure free flow and beautification with suitable native species (species to be selected based on report by KFRI).	80.0
2.	Ecological environment and Noise control	Avenue plantation for NH (3 km stretch in front of the project site. Project report by KFRI)	25.0
		Setting up and maintenance of oxygen park with high oxygen releasing species, at the barren lands in Karukutty Koratty and Parakkadav Panchayats (Project report by KFRI) Cost per oxygen park = Rs 4 Lakhs No. of oxygen parks = 16.0	64.0
		Setting up and maintenance of bio parks in nearest schools and public places (Project report by KFRI) Cost per bio park = Rs 3.5 Lakhs No. of bio parks = 12.0	42.0
3.	Air Environment	Ambient air quality monitoring in sensitive areas such as the ten schools each and ten Anganwadis each in Karukutty, Koratty and Parakkadav Panchayats <ul style="list-style-type: none"> Monitoring monthly Per sample monitoring cost Rs 5000/- Total cost = 12 x 60 x 5000 	36.0
4.	Land Environment	Printing & distributing leaflets on proper segregation (degradable and non-biodegradable at source itself) <ul style="list-style-type: none"> Printing & distribution of leaflets to 30,000 houses in Karukutty, Koratty and 	6.0

S No	Environment	Activity	Cost in Rs Lakhs
		ParakkadavPanchayats o Cost of leaflet printing and distribution = Rs 20	
		Training programmes for school children from Karukutty, Koratty and ParakkadavPanchayats regarding source segregation of waste o Cost per training programme = Rs 15,000 o Per year 30 schools to be covered from 3 Panchayats (10 schools per Panchayat) o Training programme for 3 years	13.5
		Providing colour coded bins in important public places in Karukutty, Koratty and ParakkadavPanchayats and Angamaly and other institutions for 300 bins @Rs. 1,500 per bin (50 L bins with wheels)	4.5
		Providing colour coded bins, 2 numbers for each household, for 5,000 households (total 10,000 bins of 12 L) and improving the collection efficiency through proper training programmes of the collection staff (Kudumbasree) and assisting in the identification of third party contractors for the sale of recyclable material.	40.0
		PPE for staff of Angamali Municipality and KarukuttyPanchayat, who are engaged in waste collection Cost of one set of PPE including gumboot, work wear gloves, helmet and mask and goggles = Rs 2,500 Average number of workers for door to door waste collection and transportation = 400	10.0
5.	Socio-Economic Environment	Renovation of PHCs in the 3 Panchayats with drinking water, basic infrastructure, toilets and plantation Lumpsum of Rs 90.0 L, as the requirements may be different for the different PHCs	90.0
		Drinking water supply for Angamaly Bus Stand and other public places in the 3 Panchayats (Karukutty, Koratty and ParakkadavPanchayats) (total 16 public	25.0

S No	Environment	Activity	Cost in Rs Lakhs
		places) Cost per RO plant = Rs 1.56 L	
Total Fund allocated for Remediation Measures			551.1

Year wise implementation plan with budgetary provisions

S No	Environment	Year-wise budgetary provision in INR (Lakhs)			Cost in Rs Lakhs
		2020-21	2021-22	2022-23	
1.	Water environment	46.0	64.0	85.1	195.1
2.	Ecological environment and noise control	30.4	46.6	54.0	131.0
3.	Air Environment	12.0	12.0	12.0	36.0
4.	Land Environment	37.0	24.0	13.0	74.0
5.	Socio-economic environment	48.0	21.5	45.5	115.0
	Total	173.4	168.1	209.7	551.1

16) Based on the discussions, the Committee decided to recommend to the SEIAA for accepting the remediation and natural resource augmentation plan submitted by the proponent subject to the following conditions:

1) A monitoring committee with following members shall be formed.

- | | | |
|---|---|----------|
| a) Ernakulam District Officer of KSPCB | - | Chairman |
| b) Proponent or his nominee | - | Convenor |
| c) Local ward member of Karukutty GP | - | Member |
| d) An NGO working in the locality | - | Member |
| e) Representatives of Local Self Government | - | Member |
| Institutions included in the project | | |
| f) Representative of KFRI | - | Member |

2) The monitoring committee shall finalize details of the project proposal within three months from the date of acceptance by SEIAA and details must be furnished to SEIAA.

3) The monitoring committee shall meet once in every three months to monitor the progress of implementation of remediation plan.

4) Minutes of the monitoring committee must be included in the half - yearly compliance report to be filed by the project proponent to SEIAA.

17) The Committee also decided to recommend that further on accepting the Remediation & Community and Natural Resources Augmentation Plan (5% of project cost), Environmental Clearance may be issued on receipt of details of bank guarantee for Rs 5.511 Crores remitted to KSPCB.

18) The proposal was finally placed in the 102nd meeting of SEIAA held on 10th & 11th February 2020. This project is proposed as expansion of existing facilities with a total built up area of 73379.68 m² out of this the existing built up area is 29381.02 Sq.mts. The expansion includes facilities for hospital, restaurant, hotel & residential buildings aiming at providing hospital and allied services. As per para 7(ii) of EIA Notification, EC can be issued for expansion of existing projects.

19) The proponent was given an opportunity of being heard once again. During the personal hearing the proponent stated that the present proposal is for the expansion of the existing facilities and he has submitted a letter giving a detailed break up of the existing built up area as well as proposed built up area for which EC is required which is detailed as below.

Building Block Name	Built up area (m ²)
Total built up area	73379.68
Existing built up area	29381.02
Additional proposed built up area for which EC is required (hospital, restaurant, hotel, residence)	43998.66 (A)
Area constructed without EC for the hospital building below the threshold level of 20,000 m ²	19955.0 (B)
Area for which EC is presently required (hospital, restaurant, hotel, residence)	24043.66 (C) = (A-B)

20) The proponent has also given an undertaking on 11.02.2020 to the effect that :-

- 1) No further construction beyond the threshold limit of 20000 m² will be taken up without obtaining the Environmental Clearance.

- 2) The Proponent has agreed to implement the damage assessment and remediation plan costed at 551.1 lakhs which was prepared based on a detailed EIA report and approved by SEAC.
- 3) He will not violate any rules and regulations under EIA Notification 2006 of MoEF & CC, GoI, and other rules and regulations applicable to this project under Government of Kerala during construction & operation phase of the project

21) Authority noted that the hospital & allied facilities proposed in this project will largely help in providing the health care facilities to needy people and also in generation of employment opportunities to unemployed local youth and weaker section of the society. Authority noted that SEAC has appraised the project and already recommended for issue of EC in its 101st meeting held on 1st & 2nd August 2019.

22) Under the circumstances, Authority decided to issue EC for 7 years covering additional built up area of 24043.66 Sq.mts for hospital, restaurant, hotel & residential buildings as detailed in his letter dated 11.02.2020, subject to the following specific conditions in addition to the general conditions.

- 1) *Proponent shall scrupulously follow the conditions agreed upon in his undertaking given on 11.02.2020.*
- 2) *He shall make all the arrangements for the production of bank guarantee for Rs.551.1 lakhs to the State Pollution Control Board as agreed with SEAC.*
- 3) *Storm water should not be directly fed to RWH pond.*
- 4) *Roads surrounding hospital buildings should have sufficient width for free fire engine movements.*
- 5) *Proper dust control measures are to be taken during construction phase.*
- 6) *The proponent shall make all the arrangement for the proper segregation and disposal of biomedical waste by installing suitable on site biomedical waste treatment plants.*
- 7) *The Project Proponent shall adhere to the objectives and monitorable environmental conditions as given in appendix IV of the Environmental Protection Act (Amendment) 2006. The compliance of the same shall be*

included in the half yearly compliance report which will be monitored by SEAC at regular intervals.

- 8) *The Proponent shall implement the damage assessment and remediation plan costed at 551.1 lakhs, prepared based on a detailed EIA report approved by SEAC. The monitoring of the implementation of the remedial plan will be carried out by the Committee already suggested by SEAC.*
- 9) *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 (Circular No.J-11013/41/2006-IA.II(I) of GoI, MoEF dt.22.09.2008).*

23) The Project Proponent has produced a copy of the bank guarantee for Rs.551.1 lakhs in favour of Kerala State Pollution Control Board which is counter signed by the KSPCB.

24) In this circumstance, Environmental Clearance as per the EIA Notification 2006 is hereby granted to the proposed expansion project of M/s Adlux Medicity & Convention Centre Pvt. Ltd by Dr. Sujith Sudheesan, Director, Adlux Medicity & Convention Centre Pvt. Ltd, Adlux Junction, Karakutty P.O, Angamaly, Ernakulam- 683576, in Re- Survey No.35/2 at Karukutty village, Aluva Taluk, Ernakulam District, Kerala subject to the condition in para 15 of this order and the usual general conditions for projects other than mining appended hereto. Also the following green conditions should be strictly adhered to.

Green Conditions.

1. *Adequate rain water harvesting facilities shall be arranged for.*
2. *Technology and capacity of the 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, solid wastes, non-biodegradables and separate parking facility for the buildings shall be provided.*

7. *Generation of solar energy to be mandatory for own use and/or to be provided to the grid.*
8. *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.*

25) The Clearance will also be subject to full and effective implementation of all the undertakings given in the application form, all the environmental impact mitigation and management measures undertaken by the project proponent in the documents submitted to SEIAA, and the mitigation measures and waste management proposal as assured in the Form - 1 and Form-1A, Environment Management Plan and Remediation Plan as submitted. The assurances and clarifications given by the proponent in the application and related documents will be deemed to be part of these proceedings as conditions as undertaken by the proponent, as if incorporated herein.

26) Validity of the Environmental Clearance will be for seven years from the date of issuance of E.C, subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of any of the conditions stipulated herein or genuine complaints from residents within the scrutiny area of the project.

27) Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its agencies and also by the Regional Office of the Ministry of Environment and Forests, Govt. of India, Bangalore.

28) Necessary assistance for entry and inspection by the concerned officials and staff should be provided by the project proponents.

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

30) The Half Yearly Compliance Report (HYCRs) with its contents, covering letter, compliance report and environmental monitoring data have to be in PDF format merged into a single document. The email should clearly mention the name of the project, EC No and date,

period of submission and be sent to the Regional Office of MoEF & CC by email only at email ID rosz.bng-mefcc@gov.in . Hardcopy of HYCRs shall not be acceptable.

31) The given address for correspondence with the authorized signatory of the project is Dr. Sujith Sudheesan, Director, Adlux Medicity & Convention Centre Pvt. Ltd, Adlux Junction, Karakutty P.O, Angamaly, Ernakulam- 683576.


SHAHER BANU
Administrator, SEIAA

To,

Dr. Sujith Sudheesan,
Director,
Adlux Medicity & Convention Centre Pvt. Ltd,
Adlux Junction, Karakutty P.O,
Angamaly, Ernakulam- 683576

Copy to:

- 1) MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.(through e-mail: rosz.bng-mefcc@gov.in)
- 2) The Principal Secretary to Government, Environment Department
- 3) The Director, Directorate of Environment & Climate Change, 4th Floor KSRTC Bus Terminal, Thampanoor, Thiruvananthapuram, Kerala 695001
- 4) The Principal Secretary to Government, Environment Department
- 5) The District Collector, Ernakulam
- 6) The District Town Planner, Ernakulam
- 7) The Tahsildhar, Aluva Taluk, Ernakulam District
- 8) The Member Secretary, Kerala State Pollution Control Board
- 9) The Secretary, Karukutty Village Office, Railway Station Road, Karukutty, Kerala
- 10) Chairman, SEIAA, Kerala
- 11) Website
- 12) Stock file
- 13) O/C

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 environmental safeguards contained in the EIA Report should be implemented in letter and spirit.
- (xv) Provision should be made for supply of kerosene or cooking gas and pressure cooker to the labourers during construction phase.
- (xvi) Officials from the Regional of MOEF, Bangalore who would be monitoring the implementation of environmental safeguards should be given full co-operation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional Office of MOEF, Bangalore.
- (xvii) These stipulations would be enforces among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control Pollution) at 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.

- (xviii) Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.
- (xix) Any appeal against this Environmental Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.
- (xx) 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. 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.
- (xxi) A copy of the clearance letter shall be sent by the proponent to concerned GramaPanchayat/ 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.
- (xxii) 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.
- (xxiii) 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.
- (xxiv) 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.

SPECIFIC CONDITIONS

I. Construction Phase

- i. "Consent for Establishment" shall be obtained from Kerala State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- ii. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- iii. A First Aid Room will be provided in the project both during construction and operation of the project.
- iv. Adequate drinking water and sanitary facilities should be provided for construction workers at the site, Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- v. All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.

- vi. 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.
- vii. 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.
- viii. 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.
- ix. Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Kerala State Pollution Control Board.
- x. The diesel generator sets to be during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- xi. 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.
- xii. 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 the applicable air and noise emission standards and should be operated only during non-peak hours.
- xiii. Ambient noise levels should conform to residential standards both during day and night. 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/KSPCB.
- xiv. Fly ash should be used as building material in construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August 2003. (The above condition is applicable Power Stations).
- xv. Ready mixed concrete must be used in building construction.
- xvi. Storm water control and its re-use per CGWB and BIS standards for various applications.
- xvii. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xviii. Permission to draw ground shall be obtained from the Computer Authority prior to construction/operation of the project.
- xix. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- xx. 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.
- xxi. Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on airconditioning. If necessary, use high quality double glass with special reflective coating in windows.
- xxii. Roof should meet prespective requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.
- xxiii. Opaque wall should meet perspective requirement as per energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfil requirement.

- xxiv. The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.
- xxv. 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.
- xxvi. 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 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 effluent emanating from STP shall be recycled / reused to the maximum extent possible. Treatment of 100% grey water by decentralised treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Kerala State Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.
- ii. 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.
- iii. 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 Kerala State pollution Control Board.
- iv. 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.
- v. 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.
- vi. Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- vii. 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.
- viii. The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- ix. Traffic congestion near the entry and exit points from the roads adjoining the purposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- x. A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.

- xi. 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.
- xii. Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.
- xiii. The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

III Post Operational Phase

Environmental Monitoring Committee with defined functions and responsibility should foresee post operational environmental problems e.g. development of slums near the site, increase in traffic congestion, power failure, increase in noise level, natural calamities, and increase in suspended particulate matter etc. solve the problem immediately with mitigation measures


Administrator, SEIAA