



सत्यमेव जयते

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

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

Sub: Environmental Clearance -Application for environmental clearance for the Residential project in Survey Nos. 60/39 and 60/50 at Manjeri Village and Survey No. 108/1 at Payyanad Village, Manjeri Municipality, Eranad Taluk and Malappuram District, application of Dr. Febin Puthillath for M/s IMA Welfare and Research Society - E.C Granted- Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 907/SEIAA/KL/3586/2015

dated, Thiruvananthapuram 08-08-2016

- Read:-**
1. Application dated 01-09-2015 by Dr. Febin Puthillath, Secretary, M/s IMA Welfare and Research Society, 672/13, IMA House, IMA Jn. Vayapparappady, Manjeri, Malappuram, Kerala-676121.
 2. Minutes of the 56th meeting of SEAC held on 06/07-06-2016.
 3. Minutes of the 55th meeting of SEIAA held on 16th July 2016.

ENVIRONMENTAL CLEARANCE NO. 119 /2016

Dr. Febin Puthillath, Secretary, M/s IMA Welfare and Research Society, vide his application received on 07/09/2015 sought for environmental clearance under the EIA Notification, 2006 for the Residential Apartment project in Survey Nos. 60/39 and 50 at Manjeri Village and Survey No. 108/1 at Payyanad Village, Manjeri Municipality, Eranad Taluk and Malappuram District. The project comes under the Category B, 8(a) of Schedule of EIA Notification 2006. No forest land is involved in the present project. Other details of the project are as follows:

Basic Details	
Name of the Project	M/s IMA Welfare and Research Society
Survey Numbers	Survey Nos. 60/39, 60/50 in Manjeri Village and Survey No. 108/1 in Payyanad Village.
Village	Manjeri & Payyanad
Tehsil	Eranad

District	Malappuram
Extent of land in hectors	0.5460 ha. (5,460.14 sq.m.)
Is the property forest land/Govt. land/ own land	Own Land
Latitude	11° 6'52.38" N to 11° 6'46.62" N
Longitude	76° 8'28.11" E to 76° 8'24.01" E
Total Plot area	5,460.14 sq. m
Built up area (in m ²)	22,828.98 sq. m
Vacant area/open to sky	3,327.63 sq. m
No. of Apartments	118 only
Maximum height from ground level	58.50 m
Facilities proposed	118 Apartments with recreational area with first aid facility
Expected cost of the project	Rs. 62.01 Crores
Interlinked project (if any)	None
Whether CRZ is applicable	Not Applicable
Status of litigation / complaint / cases	Nil as declared by the proponent.
Permanent or temporary change on land use, land cover or topography	There will be permanent change in land use, land cover or topography.
Topography of land and elevation	There are some native species of trees and different varieties of shrubs, herbs, grass & climbers at site. The elevation of the site is about 119 m. MSL
Vegetation	There are some of native species of trees and different varieties of shrubs, herbs, grass & climbers at site.
Nearest water body	Kadalundipuzha - about 2.5 km.
Proneness to natural hazards	None
Environmental Parameters Considered	
Water	
Water (expected use and sources in KLD)	The total domestic water requirement of about 82 KLD (which includes daily fresh water requirement of about 54 KL). Treated water from STP to be used for flushing of toilets (about 28 KLD) and horticulture (5 KLD) requirement. Source :- Stored Rain water, Wells, KWA water supply and treated water from STP.
Sources of generation and facilities for liquid waste treatment	Sewage Treatment Plant for treatment of domestic sewage generated from the project site.
Facilities for liquid waste treatment	The domestic sewage of about 66 KL/day will be generated which will be treated through proposed Sewage Treatment Plant to be installed within the project premises.
Water quality meeting requirements	The source of water for the proposed project will be from stored rain water during rainy days & non-rainy days for non-flushing purposes & treated sewage for meeting the flushing water requirement. It is proposed to have Sewage Treatment Plant (STP) for treatment of domestic sewage. Also, it is proposed to have WTP for filtration & disinfection of rain water before its use. The water quality of the well water of the project site is collected and

	analyzed through an accredited laboratory. It is observed that the analyzed values physical, chemical parameters of the well water analyzed is fit for potable purposes to meet the drinking water standards as per IS 10500 except iron contents. Therefore appropriate treatment would be done before it's consumption.	
Water Regime	Stored rain water in tanks and well water for meeting the non-flushing water requirement.	
Land		
Access road to the site – Width & Condition	The access road to the project site is from 7.5 m. wide, Mubarak School Road which is connected to entire District.	
Proximity to forest lands	None within the study area	
Storage of explosives /hazardous substances	All precautionary measures in storage & handling of HSD shall be followed.	
Hazardous waste management	Used Oil from the D.G. Sets will be stored in HDPE drums and will be kept at a separate place and sold to CPCB approved recyclers. Therefore there is no risk of contamination due to used oil. The storage of used oil shall be in such a way that no spillage of hazardous materials.	
Facility for solid waste management	Solid waste generation will be about 236 Kg/day and which will be collected separately as Bio-degradable 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 would be sent to the bio-gas generation plant, with in the site. Further, the spent oil from the D.G. sets (defined as hazardous waste) will be sold to C.P.C.B. approved recyclers.	
Top soil, overburden etc.	Excavation of earthwork will be carried out at site. The top soil which is fertile will be kept at site for landscaping work, back filling & internal road construction purposes.	
Env't Mgmt plan/ Eco restoration plan (brief details	MANAGEMENT PLAN:	
	Air pollution	Provision of stack will be made for D.G. sets for dispersion of flue gas and green belt development will also help to manage air pollution.
	Water pollution	Provision of STP for treatment of sewage and treated water from STP will be used for meeting the requirement for flushing & horticulture water requirement within the site.
	Noise	Provision of acoustic enclosure will be made for D.G. sets as noise control measures.
	Solid Waste Management	Provision of bio-gas plant within the site for disposal of the bio-degradable solid waste.
	Eco restoration	As part of the eco restoration, large number of saplings of native species would be planted.
Noise		
Sources of noise pollution control measures	The D.G. sets which would be used for within the project will be with sound proof acoustic enclosures and hence there will be no impact to the	

	surroundings. The D.G. sets to be attached with proper anti vibration pads to reduce any vibration impact to the site surrounding.			
Noise level monitoring	Noise level survey should be carried out at proper intervals in the corners of the project site both in day time as well as in night time and should be maintained the noise level with in prescribed limit.			
Air				
Likely emissions affecting environment	Emissions from D.G. sets and from the vehicles only.			
By deposition of pollutants emitted to air into the land or into water	There is no emission except of D.G. sets. By use of HSD diesel, the emission from the D.G. sets will be maintained within the norms, applicable.			
Air quality monitoring	Ambient air quality monitoring will be carried out and standards as applicable would be maintained.			
Energy				
Energy requirement	The total power requirement is estimated to be 1,200 kW and will be met from Kerala State Electricity Board & D.G. Set (standby). The project will make provision of D.G. Sets (500 kVA x 2 nos. + 125 kVA x 1 no.) as standby arrangement of electricity.			
Biodiversity				
Presence of any endangered species or red listed category	No			
Loss of native species and genetic diversity	For the development of the project, existing trees, different varieties of shrubs, herbs, grass & climbers will be cleared.			
Eco restoration programmes	It is proposed to have large numbers (mostly flowering, medicinal & shady trees) of tree plantation (native species) within the green belt development area.			
Social Aspects				
Proximity to nearest densely populated or build-up area (In detail)	The project site is in Manjeri & Payyanad Village limits and several houses located within the 500 m. radius.			
CSR related to the project (In detail)	Proposed common CSR Budget			
	Sl.No.	Particulars	Amount Rs. In lakhs	
			Non-recurring	Recurring
	1.	Development of Schools	8.40	0.70
	2.	Health care	--	16.20
	3.	Environmental sustainability	2.20	3.50
	4.	Infrastructure development	10.00	1.0
	Total Amount	20.60	21.40	
GENERAL				
Details of Authorised Signatory &	Dr. Febin Puthillath, Secretary, M/s IMA Welfare and Research Society, IMA House, Manjeri, Opp. GLP School, Vayapparapadi, Manjeri,			

Address for correspondence)	Malappuram, Kerala-676121
Details of NABET approved EIA consultant Organisation	M/s Environmental Engineers & Consultants Pvt. Ltd. (Sr. No. 58 as per MoEF&CC list of Accredited Consultant Organization) Head Office :- A1-198, Janak Puri, New Delhi. Branch Office:- C-306, Kanchanjunga Apartments, Palarivattom P.O., Kochi, Kerala.

3. The proposal was first considered in the 56th meeting of SEAC held on 06/07-06-2016. The engineer made a brief power point presentation about the salient features of the project. The Committee appraised the proposal based on Form 1, Form 1 A and conceptual plan. The proposal was recommended with the following specific condition:

- 1) The local body should ensure that the width of the access road shall be a minimum of 7 mts.

4. The proposal was considered by SEIAA in its 55th meeting held on 16th July 2016. The Authority accepted the recommendation of SEAC and decided to issue E.C to the proposed residential project for M/s IMA welfare and Research Society in Survey Nos. 60/39 and 60/50 at Manjeri Village and Survey No. 108/1 at Payyanad Village, Manjeri Municipality, Eranad Taluk, Malappuram District, with the above specific condition and the usual general conditions for non-mining projects.

5. Validity shall be 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 security area of the project. Environmental clearance as per the EIA notification- 2006 is therefore granted to the proposed residential project of M/s IMA welfare and Research Society in Survey Nos. 60/39 and 60/50 at Manjeri Village and Survey No. 108/1 at Payyanad Village, Manjeri Municipality, Eranad Taluk, Malappuram District, subject to the specific condition in para 3 above, the usual general conditions for non-mining projects other than mining appended hereto and the following green conditions to be adhered to, strictly.

Green conditions

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. Solid wastes, non-biodegradables and separate parking facilities for the building 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

6. The clearance issued 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-1 A, Environment Management Plan as submitted; and 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.

7. Compliance of the conditions herein will be monitored by the Authority or its agencies and also by the regional office of the Ministry of Environment & Forests, Government of India, Bangalore.

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

8. The given address for correspondence with the authorised signatory of the project is Dr. Febin Puthillath, Secretary, M/s IMA Welfare and Research Society, 672/13, IMA House, IMA Jn. Vayapparappady, Manjeri, Malappuram, Kerala-676121.

Sd/
V.S. SENTHIL, I.A.S.,
Member Secretary (SEIAA)
&
Addl. Chief Secretary
Environment & Forests Department
Government of Kerala.

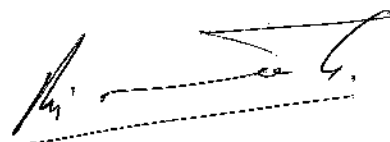
To,

Dr. Febin Puthillath,
Secretary & Authorized Signatory,
M/s IMA Welfare and Research Society,
672/13, IMA House, IMA Jn.
Vayapparappady, Manjeri,
Malappuram, Kerala-676121.

Copy to,

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E& F Wing, II block, Koramangala, Bangalore-560034.
2. Additional Chief Secretary to Government, Environment Department.
3. The District Collector, Malappuram.
4. The District Town Planner, Malappuram
5. Secretary Kerala, State Pollution Control Board, Pattom, Thiruvananthapuram-4
6. The Secretary, Majeri Municipality, Manjeri P.O., Ernad Taluk, Malappuram-676121
7. Chairman, SEIAA
8. Website
9. E.C file
10. Stock File
11. O/C

Forwarded / By Order



G. Rajeev
Administrator, SEIAA



SELA

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 conforming 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


For Member Secretary, SEIAA

G. M. A. J. S. W.
Administrator

State Environmental Impact Assessment Authority
Pollution Control
Tel: 0471 2740204
Phone: 0471 2740204



SELA