





Environmental Sustainability Plan (ESP)

- 1. Name of the AU: TAMIL NADU AGRICULTURAL UNIVERSITY
- 2. Date of project implementation:
- 3. Name of Nodal Officer: Dr S Karthikeyan, Professor (Microbiology), Dept. of Renewable Energy

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S. No	Proposed Interven- tions / Activities	Compliances applicable	Possible Environment al Impacts	Mitigation Measures	Scope for the integration of best practices under environmental Sustainability concerns	Resources Required (budget, technical support etc.)
1.	Laboratory renovation	Municipal Solid Wastes (Management and Handling) Rules, 2000 Construction & Demolition Waste Management Rules, 2016 – Notification	Generation of the minor debris	Debris will be put to alternate use such as landfilling in consultation with Local Bodies. Will follow constructional operations: The workers will be provided with safety gears Use of child labour will be avoided as ensured with the contractor		
		National Building Code of India 2005	Existing lighting system is energy intensive Power supply is erratic Lack of fire safety measures and awareness	Fitting of LED lamps and energy star rated appliances where applicable Integrate solar passive as part of renovation considering the following parameters viz., sufficient space, ventilation, lighting etc. Regular and stabilized electricity supply should be ensured.	Provision of standby source for power supply to sensitive and costly equipment is ensured. Proper earthing is done for human and equipment safety. Laboratories were equipped with fire fighting facilities Fire safety instruction displayed in the form of poster and orientation to all students, staff and non-teaching staff	

		The Noise Pollution (Regulation and Control) Rules 2000)	Laboratory renovation works will create noise pollution.	Civil contract should provide for only usage of equipment within the allowed threshold of noise standards prescribed for institutional complexes	The noise level in construction area will not exceed the ambient air quality standards in respect to noise (55/65 dB)	
2.	UG practical and experimen ts (NABL Complex)	Hazardous Wastes Management and Handling Rules (1989 and Amendment Rules, 2000 & 2003) Environment Protection Act (1986)	Disposal of laboratory waste (chemicals) in to open gutter may contaminate the soil, ground wateretc Some microorgani sms may be released into the environment may impact on health	Collection of waste separately in mini tub / tank. Consultation and visits of the PCB for advisory. SOPs will be made available in the laboratories Release of harmful micro-organisms into the environment - will follow the guidelines as per the act	Dedicated pipelines and collection chambers for hazardous and non-hazardous wastes emanating from the laboratories On campus effluent treatment plant Waste treatment before disposal is required. This mechanism is already adopted in TNAU campus.	
3.	Greening of the campus			-	One Student - One Tree Programme IDP – Alumni agroforestry programme One lakh native tree planting programme	
4.	Green building				Provision of solar energy systems based on the load in the NABL complex and Students integrated Kitchen and dining hall of the Hostel	

Nodal Officer

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Principal Investigator

Date 4 11 2019

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