

Kalitheerthalkuppam, Puducherry - 605107 Ph: 0413 2643007 Website : mvit.edu.in

# **Standard Operating Procedure**

### for

## WASTE MANAGEMENT

Approved in the Governing body meeting held on August 21, 2024 (Updated in 2024)



(An Autonomous Institution) Kalitheerthalkuppam, Puducherry - 605107 Ph: 0413 2643007 Website : mvit.edu.in

Ref.No: MIT / Notification/2024-25/19

Date: 23.08.2024

#### **NOTIFICATION**

In pursuance of the approval passed in the Governing Body meeting held on August 21, 2024, it is hereby notified that Manakula Vinayagar Institute of Technology has published the updated Standard Operating Procedure (SOP) for Waste management.

The SOP for Waste Management would serve as a detailed guideline to be observed and followed with immediate effect.



Dr.S. Malarkkan

Principal

MANAKULA VINAYAGAR INSTITUTE OF FECHNOLOGY KALITHEERTHALKUPPAM PUDUCHERRY-605 107

RINCIPAT

#### PREFACE

A sustainable and healthy college campus depends on efficient disposal of waste generated. Segregation, collection, treatment, and disposal of solid and liquid waste are all included in this standard operating procedure (SOP). The participation of stakeholders including faculty, staff, and students is vital for effective waste management in the campus. It ensures compliance with waste policies, enhances recycling and composting efforts, promotes environmental awareness, and reduces contamination and safety risks.

### STANDARD OPERATING PROCEDURE FOR WASTE MANAGEMENT IN MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY, PUDUCHERRY

The standard operating procedure (SOP) for waste management in the college campus provides a comprehensive framework designed to ensure the effective segregation, collection, and disposal of various waste items, including general, recyclable, organic, and hazardous waste. It delineates the roles and responsibilities of various stakeholders to guarantee strict adherence to relevant regulations and institutional standards. The SOP not only promotes environmental sustainability but also aims to serve as a guide that provides precise instructions for handling, disposal, collection of waste and recycling which in turn reduces potential health hazards associated with improper waste management.

#### **OBJECTIVES**

The objectives of the SOP for Waste Management are:

- To develop comprehensive protocols for the management of waste generated in the campus.
- To enhance health and safety among various stakeholders including faculty, staff and students.
- ✤ To advance environmental sustainability.

#### WASTE MANAGEMENT FACILITIES

The types of waste generated in the campus include both solid and liquid waste, each necessitating tailored disposal methods to ensure effective management and environmental protection.

#### 1. Solid Waste Management:

The types of solid waste generated in the campus can be segregated into **biodegradable** and **non-biodegradable** waste, with specific management strategies for each.

Solid waste management can be achieved by internal usage and consumption or by contracting with a licensed firm to handle collection and disposal. More than a hundred containers have been placed all across campus to gather and dispose of solid waste that comes from various departments, labs, housekeeping, and other operational or process-based activities. These bins would be color-coded to distinguish them as belonging to the solid waste category viz.

Green – Biodegradable, organic waste like cooked food, vegetables, fruit, leaves etc.

Blue – Recyclable waste like paper, cartons, cans, metallic items etc.

**Red** – Non-biodegradable waste like glass, blades, expired first aid medicine, bandages etc.

#### i. Non – Biodegradable Solid Waste:

Collection and disposal of all non-biodegradable solid waste has been outsourced to authorized agencies. The college has tied up with the local (Waste disposal) contractors for the disposal of non-degradable solid waste at the dumping yard approved by Government of Puducherry. Plastic waste would be segregated and recycled by sending it to industry. E - Waste management system has been out sourced to a private (Waste disposal) contractor. They would collect and dispose the waste items as per environmental norms.

#### **Biodegradable waste:**

Biodegradable waste refers to organic materials such as food scraps, paper products, dried leaves from the trees inside the campus and certain biodegradable plastics that can decompose naturally through the action of micro-organisms.

This waste is collected separately and directed to on-site composters. In composting systems, microorganisms break down the organic matter into nutrient-rich compost, which can be used to enrich soil and support sustainable landscaping practices in the campus. Proper segregation and timely processing are essential to avoid odors and other issues associated with decomposition.

#### 2. Liquid Waste Management:

The sources of liquid waste come from various activities of department laboratories, wash room areas, bathroom & wash rooms in the hostel premises, kitchen waste water from mess and other activities.

**i.** Sewage Treatment Plant (STP): A sewage treatment plant of 1000 KLD actively operates for collection and treatment of sewage in campus. Wastewater received from various sources would be treated by removing toxic materials that may otherwise cause damage to the environment. The treated sewage would be used for irrigating gardens and for landscaping purposes. The dried sludge from STP would be used as manure for trees & plants inside the campus.

#### 3. Recyclable Waste Disposal:

The College has implemented minimum and necessary guidelines for the use of paper and other recyclable materials, contributing to resource conservation. Used recyclable materials and waste paper would be gathered from labs and departments and delivered to the relevant private recycling units operating in and around Puducherry.

S.No	Type of Waste	Schedule for Disposal
1	Solid Waste such as food waste, dried leaves paper products such as paper cups & plates.	Daily basis
	Liquid Waste (i)Water recycling system	
2	Used Paper	Monthly once

#### WASTE DISPOSAL FREQUENCY

In view of the above, Manakula Vinayagar Institute of Technology, Puducherry aims at:

- Elevating campus cleanliness and advancing environmental stewardship through sustainable practices.
- Optimizing waste management efficiency by integrating comprehensive recycling and advanced disposal systems.
- Fostering a deep understanding of waste management techniques and providing targeted education for students, staff, and stakeholders on effective waste collection and disposal strategies.
- Promoting a pro-planet mindset among the campus community to align personal actions with environmental goals and sustainability initiatives.

Sd/-Dr. S.Malarkkan Principal

