

(Approved by AICTE and Affiliated to Anna University)

An ISO 9001: 2015 Certified Institution





## 7.1.2 MANAGEMENT OF THE DEGRADABLE AND NON-DEGRADABLE WASTE

### 1) Solid Waste Management: -

Pollution from waste is aesthetically unpleasant and results in a large amount of litter. Solid Wastes, which may cause severe health problems, can be categorized into three types, Biodegradable, Non-Biodegradable, Hazard Waste. Biodegradable waste includes food waste, canteen waste and waste from toilets etc. Non-Biodegradable waste includes plastic, tin, glass, bottle etc. and Hazard waste that is likely to be a threat to the health of the environment like, cleaning chemical and different laboratory related Chemical Products.

Each and every department of PSN Engineering College, Tirunelveli creates some waste and dumps in small waste-bins located in the department. The Biodegradable wastes are effectively converted to fertilizer by composting inside the college campus.



## 2) Liquid Waste Management: -

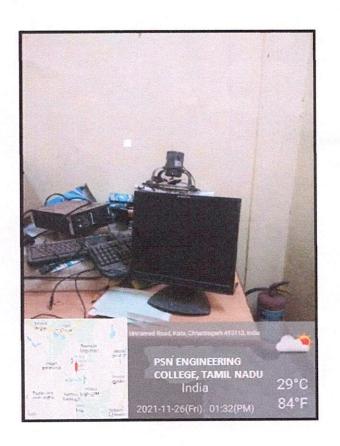
The liquid wastes are mainly drained to improve the ground level of water. Liquid Waste is generated from the S&H laboratories like Chemistry, Physics, Civil Engineering laboratories like Soil Mechanics, Environmental Engineering, Highway Engineering, Concrete Engineering, Hydraulics Engineering, Automobile lab, Tractor and farm engines laboratory and Canteen. The liquid waste generated by the college is of two types:

- 1. Sewage Waste
- 2. Laboratory and Canteen effluent.



## 3) E-Waste Management: -

PSN Engineering College, Tirunelveli has a very efficient mechanism to dispose of E-waste generated from various sources. The E-wastes generated from Computer Lab, Electrical lab, Communication skills Lab, Mechanical lab, S&H laboratories & academic and administrative offices. The E-waste includes out of order equipment or obsolete items like lab instruments, circuits, desktop, laptop and accessories, printers, charging and network cable, Wi-Fi devices, sound system, display unit, UPS, Biometric Machine, and Scientific Instruments etc. All these wastes are put to optimal use. All such equipment which cannot be reused or recycled is being stored in a place for later disposal.



# LIQUID WASTE AUDIT

# PSN Engineering College, Tirunelveli

The PSN Engineering College, Tirunelveli follows the systematic procedure for proper management and disposal of liquid waste. The wet waste from the college, laboratory and canteen is given away to biofertilizer plants for making eco-friendly fertilizers. A sewage treatment plant for the college is being concealed. The treated water is used for gardening and other purposes. College also conducts discussions with students to make them aware about the LWM techniques.

S.No.	Source of Waste	Waste generate (Kgs. per week)		
01	Canteen	250 kg/week		
02	Laboratories			
	a) Chemistry	50 kg/week		
	b) Physics	50 kg/week		
	c) Civil Engineering Department Lab	50 kg/week		
	d) Mechanical Engineering Department Lab	50 kg/week		
51	e) Automobile Engineering Department Lab	50 kg/week		
	f) Computer Science Engineering Department Lab	50 kg/week		
	g) Electrical and Communication Engineering Department Lab	50 kg/week		
	h) Information Technology Department Lab	50 kg/week		
03	Tree droppings	30 to 70 kgs in different seasons		

### **SOLID WASTE AUDIT**

## PSN Engineering College, Tirunelveli

A Solid Waste Audit is our college thought process that is used to determine the amount and types of waste product by college. Notebooks and papers used for different purposes are sent for recycling. Moreover, every bit of paper is utilized to save trees by each and every department for academic and administrative work. Other non-degradable solid wastes are also collected that are disposed of to the municipal waste collection system.

The college implements SWM by enforcing the waste segregation rules. Dust bins are placed in every class room, laboratory, canteen, staff room, office and at different locations in the campus. Sweepers are allotted to each room who manage all the waste generated in the college campus.

S.No.	Department Name	No. of Bin (Small)	No. of Bin (Large)	No. of Trailer	No. of employed sweeper
01	Chemistry Lab	02	02	01	07
02	Physics Lab	01	01		(Contract Basis)
03	Civil Engineering Department Lab	05	02		
04	Mechanical Engineering Department Lab	06	02		
05	Automobile Engineering Department Lab	05	02		
06	Computer Science Engineering Department Lab	04	01		
07	Electrical and Communication Engineering Department Lab	05	02		
08	Information Technology Department Lab	02	01		
09	Office	02	02		
10	Staff Room	02	03		
11	Classroom	02	04		
12	Common Room	02	03		
13	Other Place	02	02		

#### **E-WASTE AUDIT**

# PSN Engineering College, Tirunelveli

The PSN Engineering College, Tirunelveli has undertaken a number of E-Waste Management initiatives with the objective of creating an eco-friendly environment in the campus. Details of E-Waste collected and disposed are shown in the following table: -

S.No.	Material Details	Quantity		
01	CPU	02		
02	Monitor	3		
03	Keyboard	04		
04	Hard Disk	02		
05	RAM	06		
06	Motherboard	03		
07	Printer Dot-Matrix	01		
08	Stabilizer	03		
09	Batteries	04		
10	Printer DeskJet	NIL		
11	Photocopier	NIL		
12	OHP	01		
13	Scanner	NIL		
14	Mouse	08		
15	Ribbon	12		

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