

SOP for E-Waste Identification, Handling & Disposal

GSFC University Academic Division

Office Order No. Provost/052024/85 Date: 07.06.2024

Preamble:

The University is committed to reducing environmental pollution through proper disposal of waste generated from used electrical and electronic devices and raising awareness among its staff and students for continual improvement in environmental performance, ensuring best practices.

The discarded and end-of-life electronics products ranging from computers, equipment used in Information and Communication Technology (ICT), appliances, audio, Lab equipment and video products and all of their peripherals are popularly known as electronic waste (E-waste).

In view of this, the SOP for E-Waste Identification, Handling and Disposal was prepared in line with the principles of 5S in GSFC University and approved on May 26, 2024. The final SOP is enclosed in *Annexure - 1*.

All concerned individuals and departments are required to follow and adhere to SOP for E-Waste Identification, Handling & Disposal.

GSFC University

To:

All Teaching and Non-Teaching Staff GSFC University

Copy to,

President Office, GSFC University - For kind information, Please Provost's Office, GSFC University
Director (Adm) & Registrar Office, GSFC University
Dept. Dir. (Adm) & Director Campus GSFC University
Dean / Associate Deans - GSFC University



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- Version 1.0

Doc.No.: GSFCU/E-Waste SOP/Version 1.0 GSFC University

Release Details:

Standard Operating Procedures for Identification, Handling & Disposal E-Waste at GSFC University – Version - 1.0

Sr. No	Version Number	Date	Revision Details	Prepared by GSFCU IT	Approved by management	Final Approval from Management
1	1.0	23/05/2024	First Release	Mr. J G Simon, (SM-IT)	Prof. G R Sinha (Provost)	Shri. P K Taneja (President)

Contents

1.	Scope	4
2.	E-Waste: Statement for Identification, Handling & Disposal	4
3.	Objectives and Strategies	4
	A. IDENTIFICATION OF E_WASTE AND E-WASTE GOVT. REGISTERED	
	RECYCLERS:	5
	B. HANDLING OF E-WASTE	6
	C. DISPOSAL OF E-WASTE	7
4.	Review	8
5.	Contact	9
	FORM No: I – Department Approval for Disposal	10
	FORM No: II Administration Disposal Form – Vendor Copy	11
	FORM No: III Administration Disposal form – Audit Log	12

1. Scope

This SOP of the University may be called "E-Waste Identification, Handling & Disposal SOP GSFC University". It shall come into force from the date of its approval & circulation thereof. The University is covered under the definition of Rule 3(b) of the rules under 'Bulk Consumer' as per E-Waste (Management and Handling) Rules, 2011. The records of disposal will be kept in a standard format described in the e-Waste SOP.

2. E-Waste: Statement for Identification, Handling & Disposal

'E-Waste' means electronics and electrical equipment, whole or in part discarded as waste by user and concerned Department as well as rejected by the manufacturing, refurbishment and repair process.

GSFC University is committed to protect the Environment pollution through proper disposal of wastes generated from used electrical/electronic devices and bringing awareness among its staff/students for continual improvement in environmental performance ensuing the best practices. The University tries to meet demanding standards of E-Waste management in all aspects in operations, as per E-Waste Rules - Ministry of Environment, Forest & Climate Change - 2022

3. Objectives and Strategies

With the pervasive use of electrical and electronic equipment in our daily operations, disposal of electrical and electronic equipment/items is increasingly posing a -threat to our environment comprising health aspects. As part of 5S implementation, the scope for e-waste disposal is addressed in this SOP.

Thus, there is a need to handle such disposals - referred to as "E-Waste" - in a responsible manner in line with emerging best practices and standards. The lifecycle of all E-Waste equipment/items spanning from acquisition to disposal shall be managed in a manner that conforms to environmental norms as notified in the e-Waste Rules - Ministry of Environment, Forest & Climate Change - 2022

Implementation Plan: E-Waste work-flow Diagram:



A. IDENTIFICATION OF E_WASTE AND E-WASTE GOVT. REGISTERED

RECYCLERS:

• The GSFC University is Committed to adhere to the following steps:

- i. Ensure environmentally sound disposal /management of electronic & electrical waste.
- ii. Abide by major applicable Legislations, Codes, Standards and requirements for effective management of E-Waste and its procedures as notified in the e-Waste Rules Ministry of Environment, Forest & Climate Change 2022
- iii. Equipment that has outlived its prescribed life has become obsolete technology-wise and can't be upgraded needs to be identified and disposed of.
- iv. When repair cost is considered too high, exceeding 50 % of the equipment value (taking depreciation into account) need to be disposed of with the concurrence of the Finance Department.
- v. All departments are to be made aware of the E-Waste list (Mentioned in Schedule I [page no. 8]) and told to fill out the **E-Waste Disposal Form-I** and send it to the Administration Department for pick-up and deposition in the relevant E-Waste site after due checking of point **3.A.iii & iv.**
- vi. All laboratory electronic/electrical items must be surveyed before being declared e-waste.
- vii. Once the equipment has been identified, it should be removed and kept in the area allocated for scrapped equipment.
- viii. All necessary data available within the peripheral identified must be backed up/ destroyed before declaring it as E-Waste.
 - ix. Maintain Mandatory records relevant to E-Waste generated/handled and channelised in a common format and also make such records available for scrutiny by concerned Authorities/Agencies/GPCB.
 - x. Disposal shall be done through a tendering process, with bids invited from recyclers/reprocessors of e-waste vendors registered with the state pollution board.

• FINAL IDENTIFICATION OF E-WASTE

- i. The E-Waste, as identified by the user departments, would be scrutinized by Two members (preferably one from ITeS and one from CSE) to inspect these items classified as E waste and then advise whether they are in working condition or not and also whether repairable or not. The ITES department shall also explore a buyback option for disposing of the old ICT system against the purchase of the new system and Tag it accordingly.
- ii. **In case:** If the items are not in working condition and are scrap only, they should be shifted to the E-Waste site and handled as per **Point 3 B.**
- iii. If the items are found repairable/workable, then the team shall send it back to the respective departments for further use.

B. HANDLING OF E-Waste

The following steps are to be followed:

- i. Take all necessary actions to ensure safe storage of E-Waste.
- ii. E-waste, once identified, should be disposed of within 180 days through government-authorized agencies. Depending upon the lot size, the concerned authority may decide by recording whether to arrange for disposal or wait for the lot to be further increased by adding subsequent deposits of E-Waste as generated in different stores/locations. OR, ensure that the E-Waste generated is channelised through the collection center or Dealer of the Authorized Producer or Dismantler or Recycler or through the designated take-back service provider of the producer to the authorized Dismantler or Recycler.
- iii. Norms of storage of E-Waste: E-Waste storage should be done in a way so that it reduces the risk of accidentally damaging the electronic asset marked as E-Waste that may create health and safety hazards.
- iv. Also it must be ensured that unauthorized access to the E-Waste should be restricted in order to avoid breach of data.

C. DISPOSAL OF E-WASTE

After the declaration of E-Waste, the Administration Department will dispose of as follows:

- 1. For all items wherein they qualify as E-Waste, the e-Waste registered vendor dealing into buying and disposing of e-Waste will be contacted by filling up *FORM No: II Administration Disposal Form Vendor Copy.*
- 2. All electronic items collected by the service provider for disposal shall be bound by a non-disclosure agreement signed separately by the service provider.
- 3. It will be the responsibility of the Service provider to protect all information in embedded, encrypted, stored, or written form available in/on the storage devices and no pilferage, sharing, decoding, or copying shall be allowed in whatsoever form till the point of erosion and complete sanitisation of the data in a Scientific and internationally acceptable manner.
- 4. For Record keeping and Audit purposes, Administration will maintain a Register of e-Waste by filling up *FORM No: III Administration Disposal form Audit Log.*

Categories of electrical and electronic equipment, including their components, consumables, parts and spares, are covered under this SOP.

SCHEDULE - I

SN	Category	Item
1	Computers, Laboratory/Electrical items	Server/Desktop computer (CPU, Monitor, Keyboard and Mouse), Laptop, Notebook, Dumb terminal, etc. or similar type ITeS. Lab equipment and Electrical equipment.
2	Printer and accessories	Printer, Scanner, Printer, Cartridge, Copying M/c etc. Or similar type items
3	Network equipment's And IT Accessories	Routers, Switches, Patch panel, Modem, Converter, VSAT equipment, etc. Or similar type items TV Tuner box, Floppy, CD and DVD, Pen Drive, External Hard Disk, External CD/DVD writer, DAT Drive, Speaker, Laptop Hand Held device, VC equipment, Data Cartridge, Electronics typewriter, Telex, Cameras etc. Or similar type items
4	Audio Visual Equipment And accessories	Projectors, Mikes, Amplifier, Audio /Video Switchers, Speakers etc. or similar type items
5	Telephones	Telex, Telephones, Telephone exchanges, Pay Telephones, Cordless Telephones, Cellular Telephones, etc. or similar type items
6	Batteries	Electric Vehicle batteries, portable batteries, automotive batteries and industrial batteries

- The categories mentioned are illustrative.
- Refer to Annexure "A" for the authorized list of E-Waste dismantler's recyclers through the GPCB official website (i.e. December 2023).

4. Review

- This guideline may be reviewed and revised every 3 years to incorporate the changes in National/State relevant policies, Acts etc.
- The SOP may change as and when it is considered appropriate and new SOP or changes in SOP will take effect immediately after a brief announcement by any means, including email printed notices.
- Generate awareness within the organization on E-Waste SOP and procedures.
- The organization will regularly review and improve SOP and guidelines to adapt to changing steps and content as per government rules and regulations.
- The Provost of GSFC University has approved the E-Waste SOP for GSFC University.

5. Contact

For Comments or questions? Email us at it@gsfcuniversity.ac.in.

FORM No: I – Department Approval for Disposal

(TO BE FILLED BY ALL DEPARTMENTS)

Faculty / Department / Office E-waste Raised by: Sr Item Description			Location:	
Sr Item Description			Sign:	
No. (Make & Model)	Qty	PO reference number and date	Purchased Value	Justification / Reason
1				
2				
3				
B) Account Departmo	ent's sign	ature with a date fo	r Write Off Approval	: Form Ref No
· · · · ·				
B) Account Department Name			Designation	
Name	t's signatu	re with date for Col	Designation Date	•

FORM No: II Administration Disposal Form - Vendor Copy

(TO BE FILLED BY ADMINISTRATION DEPARTMENT)

Disposal Ite	m table
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Sr No.	Item Description (Make & Model)	Qty	Vendor name	Date of Disposal	Value of Product
1					
2					
3					

A) Store Department's signature with date

Name	Designation	
Signature	Date	
B) Head of Store Departmen	s's signature with date	
Name	Designation	
Signature	Date	

FORM No: III Administration Disposal form - Audit Log

(TO BE FILLED BY ADMINISTRATION DEPARTMENT)

Disposal Item table

Sr No.	Item Description (Make & Model)	Qty	Vendor name	Date of Disposal	Value of Product
1					
2					
3					

A) Store Department's signatur	re with date
Name	Designation
Signature	Date
B) Head of Store Department's	signature with date
Name	Designation
Signature	Date
C) Account Department's signa	ature with date
Name	Designation
Signature	Data