



LABORATORY EQUIPMENT DECONTAMINATION GUIDELINES

INSTRUCTIONS: A laboratory employee knowledgeable of the hazardous materials used in the equipment must:

1. prepare the equipment according to the instructions below;
2. complete the form on page 2;
3. tape the form to equipment as verification that it is safe to handle.

EQUIPMENT USED TO PROCESS OR STORE CHEMICALS AND/OR BIOLOGICAL MATERIALS.

- Remove all hazardous materials stored in the equipment.
- For potential biological contamination: decontaminate with an appropriate disinfectant (e.g., 70% ethanol, 10% bleach, quaternary ammonium, etc.) and allow adequate contact time. If bleach is used, it may be necessary to rinse the metal surfaces with water and/or 70% ethanol, as bleach will corrode the metal.
- Surfaces must be cleaned with soap and water.
- Contact JABSOM EHSO for specific guidance on decontaminating equipment used to store/process chemicals and for disposal of unwanted chemicals and waste.

EQUIPMENT USED TO PROCESS OR STORE RADIOISOTOPES

A thorough radiation survey of all accessible surfaces must be performed with an appropriate instrument. If radioactive contamination is detected, the equipment must be cleaned until a survey shows that contamination has been removed or meets an acceptable level per the UH Radiation Safety Program. Contact the **UH Radiation Safety Office (956-6475)** for guidance.

LABORATORY EQUIPMENT DISPOSAL REQUIREMENTS

- The equipment must be cleaned and decontaminated inside and out so that it is safe to handle by Facilities or contractors without the use of personal protective equipment (e.g., gloves).
- If the equipment contains hazardous or regulated components, e.g., coolant from a refrigerator, mercury containing bulbs from a microscope, oil from a vacuum pump, contact JABSOM EHSO about the safe removal of these components.
- All labels, signage, and hazard warnings (e.g., universal biohazard symbol) must be removed or defaced.
- If the equipment is on the UH Inventory, complete the process to remove equipment from the inventory and remove inventory decals.

When the tasks above have been completed, contact JABSOM EHSO for guidance on how to proceed. Note: In most cases, electrical equipment **may not** be discarded in the normal trash or the trash compactor.

IF THE EQUIPMENT CANNOT BE DECONTAMINATED OR HAZARDOUS/REGULATED COMPONENTS CANNOT BE REMOVED, CONTACT JABSOM EHSO.



LABORATORY EQUIPMENT DECONTAMINATION FORM
COMPLETE AND ATTACH TO EACH PIECE OF EQUIPMENT

Contact Name:	Phone:
Department/PI:	Location of Equipment:

LAB EQUIPMENT (e.g., Microwaves, Freezers, Incubators, Water Baths, Centrifuges, Fume Hoods, Biosafety Cabinets)
 The following equipment was decontaminated according to the guidelines on page 1.

Type of Equipment:

Make:	Model No.:	Serial No.:
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Decontamination Method:

Decontamination Date:

HAZARDS To the best of my knowledge: the following hazardous materials were used and/or stored in the equipment: (check all that apply)

Radiologicals (list):

Biohazards (list):

Chemicals (Toxics/Poisons/Reactives) (list):

CHEMICAL FUME HOODS (FH) & BIOSAFETY CABINETS (BSC) ONLY
 The following actions were taken to prepare the FH or BSC for repair/maintenance/certification:

<input type="checkbox"/> Stopped all experiments and/or manipulations in the FH or BSC	<input type="checkbox"/> All materials and apparatus have been removed from the interior	<input type="checkbox"/> All surfaces (interior and exterior) have been properly decontaminated	<input type="checkbox"/> Obstructions have been removed to allow access to the FH or BSC
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The equipment will be serviced and must not be used until repair/maintenance is complete.

The equipment will be disposed and has been removed from the UH Inventory, if applicable.

I have removed all known hazardous materials from this equipment. All exposed surfaces have been cleaned and decontaminated. If applicable, I have prepared the equipment or FH/BSC according to the guidelines on page 1 & 2. To the best of my knowledge, this equipment is safe to handle and does not pose a hazardous materials risk to personnel.

Name (print)	Phone
Signature	Date



Aloha:

Kaka'ako EHSO coordinates the disposal of research equipment at the Kaka'ako campus. Before any property disposal, each item must be officially recognized as “disposed” per the APM. This applies to any piece of equipment even if it is not on inventory and doesn't have a UH decal. See below for links to the APM. It is the responsibility of the custodian that proper disposal procedures are followed.

Your signature below confirms that all disposal procedures per the APM have been completed prior to disposal submittal. EHSO and Facilities will not accept any equipment for disposal until the custodian signs below. Submit a copy of this memo with a list of the equipment to be disposed of to kakaako-ehso@lists.hawaii.edu. Once approved by EHSO, custodians are responsible for moving it to the mailroom for disposal and placing it on the designated pallets. A work order request to Facilities may be generated if assistance is needed for moving equipment to the mailroom, with the discretion of Facilities Management personnel.

APM link:

<http://www.hawaii.edu/policy/archives/apm/spp/a8518.pdf>

Disposal application for all disposals (non-refrigerated and refrigerated):

Please see Disposal Application Form (FMIS-76) attached to this document.

I certify that all disposal procedures per the APM have been followed and completed prior to disposal.

Custodian: _____ **Date:** _____



TYPES OF EQUIPMENT DISPOSAL:

E-waste equipment:

Apple provides free quarterly pickups from our Kaka'ako campus. Email kakaako-ehso@lists.hawaii.edu and provide a list of e-waste items you would like to dispose of. Please make sure items are listed on the accepted e-waste list (see attached).

Research equipment / small equipment (non-E-waste): (i.e., centrifuges, hot plates, PCR machines, microwaves, etc.):

Please provide a list of equipment to be disposed of, include description, make, model, serial number, or any related information to kakaako-ehso@lists.hawaii.edu. Note if there are any hazardous components in the equipment (mercury, oil). *All research equipment must be properly decontaminated and safe to handle; attach decontamination form to each piece of equipment.* If there is a UH tag on the item, please look it up and see if the item matches the description on KFS. If there is no UH tag, please put down a serial number (please be accurate) as that will help trace the item to its owner.

Refrigeration equipment / Commercial Equipment:

Refrigerated/Commercial equipment will be picked up by *Refrigerant Recycling Hawaii*. There is a charge for disposal of refrigerated pieces of equipment (refrigerators, freezers, refrigerated centrifuges) or commercial equipment (incubators). Please complete a disposal application for each equipment and the Refrigerated/Commercial Equipment Disposal Charge section below, obtain all signatures, and submit to kakaako-ehso@lists.hawaii.edu.

Disposal Fees*: \$30.00: Research Equipment w/refrigeration components, Ultra-freezers, Centrifuges
 \$15.00: Household-type Refrigerator/Freezer Units

Prices are subject to change without notice.



For Refrigerated / Commercial Equipment:

- 1) Complete the portion below and forward to your appropriate principal investigator and fiscal officer for their respective signatures. Forward the completed form to Kaka'ako EHSO kakaako-ehso@lists.hawaii.edu.
- 2) If units are on the UH inventory, submit **FMIS-76 Disposal Application** to **Keenan Lee, MEB, 4th Floor** for approval. Once Disposal Application is approved, remove any UH decals. FMIS-76 Disposal Application (see attached)
- 3) Refrigerated units must be completely defrosted. All items and signage must be removed. *All units must be properly decontaminated inside and out. Attach a copy of the completed Decontamination Form to the unit* (see attached on page 2.) and email a copy to Kaka'ako EHSO.

Refrigerated / Commercial Equipment Disposal Charge:

Description of equipment(s) to be disposed of (Include Make and Model):

	X	\$30.00 =	
# of Refrigerated Research Equipment			Amount to be charged
	X	\$15.00 =	
# of Household-type Refrigerator/Freezer			Amount to be charged

Your account will be charged the amount for the disposal of your units. 4.712% tax will also be charged accordingly.

Account Code	Sub-code	Account End Date
Principal Investigator (Print)	Signature	Date
Fiscal Officer (Print)	Signature	Date

Please route the completed, *original* forms to Kaka'ako EHSO, BSB Rm. 112. If you have any questions/concerns, please contact us at 692-1855 / 692-1854 or kakaako-ehso@lists.hawaii.edu

Thank you for your assistance with this matter.
 Kaka'ako EHSO

Cc: Keenan Lee, JABSOM Fiscal

UNIVERSITY OF HAWAI'I
DISPOSAL APPLICATION
 (See last page for instructions)

CAMPUS: _____

DATE: _____ / _____
 (MM/DD/YY)

DISPOSAL APPLICATION NO. D _____
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PROPERTY CUSTODIAN: _____ TELEPHONE NO.: _____

DEPARTMENT: _____

To comply with state laws and regulations regarding disposal of government assets, please complete the following:

1. Full description of property:

Asset Number	Decal Number	Description	Purchase Price	Acquired Date (mm-dd-yy)	Disposal Code *	Current Estimated Value

Number of items: _____ Total: \$ _____

For **federally-owned property**, provide the following information:

- a) Grant and/or contract no. _____
- b) Written agency approval for property disposal should be attached, if required (Refer to APM A8.535 Disposal or Transfer)

* **Disposal Code:** The primary reason for disposing of the property. **(List one code per item in Section 1.)**

Code	Condition
DA	Damaged beyond economic repair
WO	Worn and unserviceable
TR	Trade-in and/or exchange
OB	Obsolete
TO	Transfer out of University (Attach <u>AGS Form 18</u> if transferring to another State Agency)
TH	Theft (Attach <u>Report of Loss or Damage of State Property & Police/Campus Security Report</u>)
LO	Lost/Missing (Attach <u>Report of Loss or Damage of State Property</u>)
FR	Fire (Attach <u>Report of Loss or Damage of State Property</u>)
OT	Other (Specify here: _____)

2. Trade-In:

The following offers were received:

Firm	Cost w/o Trade	Offer	Cost w/Trade
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Estimated current market value of property \$ _____

3. Request approval to:

Dispose by destruction

Transfer out of University

Dispose by sale

Salvage for parts

Relief of accountability

Trade-in

Other _____

Application to Dispose

Application is hereby made for the disposal of government property under my custody and control. Pursuant to Chapter 130, subtitle II, title 3, Hawai'i Administrative Rules, I do solemnly swear and affirm the accuracy of this application.

Signature of Property Custodian

Date

Signature of Fiscal Officer

F.O. Code

Date

Approval to dispose:

Inventory Management

Date

Disposal Certification

I certify that the property involved has been disposed of in the approved manner and that said property has not been directed or converted to improper use.

Signature

Print/Type Name

Date

(When disposal certification is completed, return the original to Inventory Management)