

## Fact Sheet: Preparing Lab Equipment for Service, Transfer, or Disposal

### Background

Laboratory equipment is commonly taken out of service for repairs, transfer to a different lab, lab close-out, storage, or disposal. Regardless of the reason a piece of equipment is removed from service, it **must be** cleaned and decontaminated to protect workers servicing the equipment, others that may come in contact with the equipment, and the environment.



Insuring that equipment is cleaned and decontaminated is the responsibility of the Principal Investigator or the designated lab supervisor. If these individuals are no longer at the university, it becomes the responsibility of the departed Principal Investigator's department.

Equipment will not be accepted for disposal/recycle/reuse unless it has been properly cleaned and decontaminated.

If the laboratory is closing, follow the University's policy for [Lab Closeout With Hazardous Materials](#).

To dispose of hazardous chemical waste, follow procedures in the [Hazardous Chemical Waste Management Guidebook](#).

### Equipment and Contamination Types:

All laboratory equipment used to process/store biological material is included in these procedures, particularly:

- Freezers
- Refrigerators
- Incubators
- Biological safety cabinets
- Water baths
- Centrifuges
- PCR machines
- Walk-in temperature controlled rooms

Contamination includes:

- Biohazardous material (infectious agents, rDNA material, biologically-derived toxins, human material, etc)
- Biological samples
- Radioisotopes
- Any organic material that can support the growth of microorganisms



## Procedures for Biological Decontamination

These procedures are to be followed regardless of the reason that a piece of equipment is taken out of service - either temporarily or permanently.

- Assess the type of contamination that may be present. This may require interviewing several individuals including those in other labs sharing a piece of equipment.  
**Note:** Contact Radiation Protection for radioisotope decontamination assistance, 626-6002.
- Remove all contents.
- If biological material is to be disposed of as waste place in a clear autoclavable bag and follow the procedures outlined in [Autoclaving Biological Waste](#). If no autoclave is available, place material in a red biohazard bag for pick up.
- Wearing gloves clean all surfaces with warm soapy water.
- Sanitize with a 1:9 bleach solution. For equipment that will be returned to service, rinse surfaces after 10 minutes contact time as bleach is corrosive.
- For biological safety cabinet (BSC) decontamination, wipe down the following interior surfaces (except the interior ceiling of the BSC) with an appropriate disinfectant: 1) primary work surface and underlying catch basin, 2) side walls, 3) back wall, and 4) interior surface of the window. For decontamination of catch basin below the work surface, remove front intake grille, lift out work surface tray, and wipe off interior with paper towel soaked with disinfectant. When bleach is used, a second wiping with 70% ethanol is needed to remove the residual chlorine, which may eventually corrode stainless steel surfaces.
- When taking a biosafety cabinet out of service, a [biosafety cabinet certifier](#) must be contacted for gaseous decontamination.
- Special consideration must be taken when selecting a chemical decontaminant to clean a walk-in temperature controlled room as these areas do not have the number of room air exchanges as lab space.

### Equipment Needing Repair:

- Contact the service company to determine if they require written verification of decontamination before they will service equipment. Certifying that equipment has been properly decontaminated is the responsibility of the lab.
- Consult the equipment manual for cleaning/decontamination procedures, policies, and chemical compatibility.
- If it is not possible to decontaminate the equipment, it must be properly packaged to prevent exposure and labeled to inform non-laboratory staff of the potential hazards present.

When a service person (University or outside contractor) needs to work on equipment in the laboratory:

- Prepare a working area which is clean and free of hazards.
- Clear enough space for easy access around the equipment.
- Remove any hazardous items stored near, on, or under the equipment.
- Inform the individual of potential hazards in the laboratory.
- Provide personal protective equipment if necessary.