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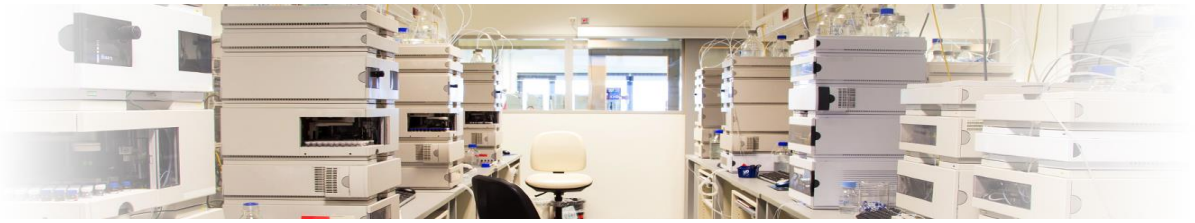
RESIZING YOUR LAB



Whether you are relocating, downsizing, or making a change to your facility, lab transitions can be challenging and chaotic. This white paper will serve as a guide for navigating these scenarios and a resource for your organization during the project.

The first step in preparing for a move or closure is to prepare an updated inventory of all the assets in your facility. This can range from lab equipment and instrumentation to IT assets and furniture.

Whether you have an up-to-date account of your inventory or need to compile one, here are some important considerations:

Establish an Equipment Inventory

- ✓ Which equipment is owned and which equipment is leased?
- ✓ Location of equipment in your facility
- ✓ What equipment will be retained?
- ✓ What equipment must go and how?
    - Re-dispositioned internally within the organization
    - Monetized/sold/liquidated
    - Donated
    - Recycled/disposed of
- ✓ Timeframe/deadline by which equipment needs to be out of facility

If you need assistance with your inventory process, contact us at info@biosurplus.com.

Preparing for the Move

Now that you know what you have, it is time to prepare your assets for removal. Here are some important things to consider:

Decontamination of Equipment

The following is intended as a general guideline to help you spot potential issues. It is recommended that you consult with a decontamination professional so that all industry and safety standards are met.

Generally, the minimum requirement is that all instruments should be wiped down with soap and water or an all-purpose cleaner. A visible examination should be made to check for evidence of spills. All instruments should be cleaned of residue and encrusted material.

In addition, a potential hazard determination must be made regarding the materials currently and previously used or stored in the instrument/equipment being dispositioned. Some potential hazards include but are not limited to:

Chemical | Where there is the potential for hazardous chemical contamination, it is critical to initiate a material-appropriate decontamination process. It is important that laboratory personnel properly decontaminate their laboratory equipment from hazardous chemicals (flammable, corrosive, reactive, toxic) prior to allowing the moving contractor to transport the equipment. Check every piece of equipment that once held chemical samples to ensure that any remaining samples or standards have been removed. If any laboratory equipment has appreciable chemical contamination on the outside surface that presents a hazard to anyone handling it, the equipment needs to be properly decontaminated with soap and water or all-purpose cleaner.

Radioactive | Radioactive materials can be particularly hazardous. For items used in conjunction or in contact with radioactive materials, ensure that no radioactivity can be detected with survey equipment and/or incidental swipe tests. It is recommended that you consult with a professional when dealing with radioactive materials to ensure safety.

Infectious Biohazard | Disinfect all surfaces where infectious/biohazardous materials were used or suspected with material-specific effective disinfectant.

When hazards have been successfully removed by decontamination, remove all hazard warning labels or signs. Best practice dictates that a certificate of decontamination be completed and signed for the equipment.

Decontamination Guidance for Specific Equipment

Refrigerators and Freezers | Remove all contents including mercury thermometers, chemical reagents, radioactive isotopes. Any frozen tissues or specimens must be treated either by incineration, autoclave and/or taken away by a qualified biohazard waste vendor. Defrost the refrigerator/ freezer according the manufacturer guidelines if there is a buildup of ice around the freezer compartment. Decontaminate if the equipment held any radioactive isotopes, infectious agents or toxic chemicals. Follow Radiation Decontamination for surveying refrigerators used to store radioactive isotopes. The units must be completely empty prior to being moved.

Ovens | Remove all mercury thermometers or containers holding samples or liquids. For outdated ovens, check the lining for the presence of asbestos (inhalation hazard).

Incubators | Remove any remaining samples and drain the water from the jacket and any pans. Remove mercury thermometers. Laboratory equipment which was used for infectious agents must be wiped down with appropriate disinfectant or receive a professional decontamination with paraformaldehyde performed. Radioactive isotopes or hazardous chemicals must be properly decontaminated by a professional.

Biosafety Cabinets | Remove any tubing and glassware connected to the hood. Wipe the workspace and walls with soap and water or an all-purpose cleaner. Have the biosafety cabinet professionally decontaminated with a paraformaldehyde or comparable treatment.

Centrifuges | Inspect for centrifuge tubes holding water or samples to insure they have been removed from the rotor system. Centrifuges which were used with infectious agents, radioactive isotopes or hazardous chemicals must be properly decontaminated.

Water Baths | Drain the water from the unit and remove any remaining samples or mercury thermometers.

Balances or Scales | Wipe clean to remove any remaining chemical contamination inside the balance or on the scale.

Chemical Storage | Cabinets such as flammable or corrosive cabinets must have all the chemical containers removed prior to moving the cabinet. Decontaminate the chemical storage cabinet of any remaining spills or residues.

Chemical/Fume Hoods | All of the chemical containers must be removed prior to moving. Decontaminate the cabinets and workspace of any remaining spills or residues.

Vacuum Pumps Containing Vacuum Pump Oil | Vacuum oil that is grossly contaminated with toxic chemicals or other hazardous materials should be drained into an appropriate waste can.

Heating Blocks | Remove samples and mercury thermometers. If necessary, decontaminate the heating block.

Photo-Processing Equipment | There are typically three storage tanks holding caustic developer, acidic photographic fixer, and rinse water. Drain the storage tanks into appropriate chemical waste cans (also supply and drain hoses) prior to the move. Silver recovery cartridges which are connected to photo-processing units contain slightly acidic photographic fixer and silver salts. Have the silver recovery cartridge recycled through your supplier.

Gas Chromatographs (GC) | GC systems that have electron capture detectors contain a radioactive source. This needs to be handled by a professional.

High Performance Liquid Chromatography (HPLC) | HPLC may have containers, solvent lines, and columns that contain organic solvents. Drain the columns and waste lines into appropriate chemical waste containers. Wash system and columns thoroughly with deionized water.

Tissue Dehydrating Units | Remove or drain all the ethanol and xylene from the storage tanks. Dispose of the solvents through Health & Safety as chemical waste. Paraffin wax and tissue samples may also need to be removed from the tissue dehydrating unit.

Colorimeters | They may contain cuvettes holding liquids (remove them).

Spectrophotometers | They may have automatic sample feeders with sample containers or standards (remove them). Flush lines with deionized water if applicable.

Desiccators | They may contain drying agents (Drierite, Sodium hydroxide, phosphorus pentoxide). Discard the spent drying agents in an appropriate waste container.

Water Purification Systems | Remove all the free-standing water from the purification cartridges prior to the move.

Automated Liquid Handling Systems | They may contain toxic compounds that were involved in the small molecule drug screening (may be an inhalant hazard). Wipe down all surfaces. Drain any liquids from the system. Rinse lines with copious amounts of deionized water.

This document is strictly a guideline and may not be inclusive of all hazards. It is the responsibility of the company (owner of the equipment) to ensure that all equipment is certified as clean and free from all contamination.

Deinstallation of Equipment

- ✓ Be sure you properly deinstall or decommission equipment, particularly analytical instruments. Failure to properly deinstall equipment can lead to expensive repairs and, in some cases, can ruin delicate instrumentation. We recommend that you contract a third-party, such as the manufacturer or a specialist, to deinstall equipment whenever possible.
- ✓ Identify equipment that is hardwired or built into the building as it will require proper deinstallation.
- ✓ Make sure to erase proprietary data from computers but not the software or operating system. Instruments without the computer and software have significantly lower resale value and software licenses can be hard to recover. Make sure that username and passwords for the OS and software are properly saved/stored and accessible or reset usernames/passwords to factory settings or generic username/password. Keep dongles with computers.

Other Considerations

- ✓ Identify any potential constraints for contractors or movers, such as doorways, elevators, and loading docks.
- ✓ Make sure that hours and access to facilities are known and communicated to all contractors involved in your project.
- ✓ Make sure to keep any required dongles or proprietary accessories with the system.

Maximizing the Value of Your Equipment

Once you have identified the equipment you do not intend to retain and have properly decontaminated and deinstalled it, you want to ensure that you receive its maximum resale value. Here are some things to keep in mind for each asset:

- ✓ Compile detailed information about each item (age, operating condition, components, etc.)
- ✓ Take photos that show the condition (ideally on the lab bench)
- ✓ Provide all parts/accessories required to run the system (especially software and license keys/dongles)
- ✓ Research the market demand and avenues for reselling

For more information on how to get the most return on your surplus equipment check out this article: Guide to Selling Used Lab Equipment published by Lab Manager.

Resale Options

Once you decide to sell your equipment, you have several options for monetization. The avenue you select will depend on your most pressing needs. Each method has advantages and disadvantages.

DIRECT SALES

- ✓ Instant cash
- ✓ Known return
- ✓ Fast Turnaround

Note: While this method of monetization is typically the fastest both in terms of access to cash and in exiting your facility, it typically yields the lowest return.

CONSIGNMENT

- ✓ High dollar price
- ✓ Hassle-free pickup and storage of equipment
- ✓ Frees up space or allows you to exit your facility quickly

Note: Consigning equipment with a reseller will typically yield a higher return per piece of equipment you wish to sell, but the returns will usually be realized over time.

AUCTION

- ✓ Liquidates a large set of equipment at once, including entire facilities
- ✓ Utilizes the logistics and marketing of one service provider to monetize your assets
- ✓ Efficient and structured to fit your timeline

Note: Auctioning equipment is a turnkey solution and is most suitable for entire labs or large sets of equipment.

Summary

This document is a general guideline for navigating both the physical and thought processes involved in resizing, restructuring, or moving your lab. The steps provided here will navigate you through the planning and execution of the process and assist your efforts to yield maximum efficiency and return. However, we understand that every situation is unique and different. When you need any assistance or have questions, we're here to help. Simply contact us at info@biosurplus.com.