1. INTRODUCTION:

1.1. The purpose of this policy is to provide information and protection to individuals receiving, repairing, servicing, moving, and/or disposing of equipment in and from laboratory and clinical areas. Equipment used in laboratories and/or clinics may become contaminated with biological, chemical, or radioactive materials. While individuals in these environments are protected from potential hazardous exposures through safety controls and administrative practices, anyone receiving such equipment has a right to expect that the equipment is clean and decontaminated. Whether equipment requires service and/or repair, has outlived its useful lifespan, or simply needs to be moved from one location to another, decontamination is required before handling.

2. RESPONSIBILITY:

2.1. Ensuring that equipment is cleaned and decontaminated is the sole responsibility of the owner of the equipment. Potentially this could be an individual or the department owning the equipment. If an individual abandons equipment at the Texas A&M Health Science Center (TAMHSC), the responsibility for decontamination and/or paying for decontamination falls to the department with which the individual was affiliated. Equipment owners shall submit a completed TAMHSC Equipment Decontamination Form to the receiving entity and to TAMHSC Environmental Health & Safety (EHS) to initiate the process of TAMHSC EHS performing a visual inspection and validation of documentation for equipment or furniture originating from a lab or clinic prior to staging, shipment, or transfer of ownership.

2.1.1. Further, it is the responsibility of the equipment owner, whether a department or an individual, to ensure:
2.1.1.1. that those personnel assigned to perform any decontamination work are adequately trained to perform those tasks based on the potential hazards present, and
2.1.1.2. that documentation of the training received by those performing the decontamination is maintained for audit.

2.2. TAMHSC EHS has published minimum requirements for proper decontamination of used laboratory and/or clinic equipment and furniture that may have been exposed to chemical, biological, and/or radiological contaminants.

2.3. NOTE: Equipment originating from the Texas A&M Health Science Center School of Public Health (SPH) or Reynolds buildings on the College Station campus should be decontaminated and documented as such according to TAMHSC EHS policies and procedures. An exception to the above is that Texas A&M University (TAMU) EHS policies and procedures shall take precedence in the case of equipment in use under their radioactive materials permits/licenses in the SPH and Reynolds facilities.

3. PROCEDURE:

3.1. Lab and/or clinic personnel shall determine whether or not the equipment or furniture requires decontamination. For example, if the equipment was used in an office and/or had no potential for exposure to biological, chemical, or radioactive materials, no additional precautions are required. All equipment originating from a laboratory, laboratory support area, clinic, or clinic support area must be documented as free of contamination.

3.1.1. A laboratory or laboratory support area shall be defined as any room or space that is used for the purpose of experimentation, research, observation, practice and/or teaching in a science field, and in which potentially hazardous materials (including chemical, biological, and radiological materials), research animals, and/or equipment (such as lasers or electrical or mechanical equipment) may be found.

3.1.1.1. Included in this definition are chemical store rooms, laboratory support facilities, autoclave rooms, and service corridors.

3.1.1.2. Not included in this definition are mechanical rooms, shops, chase-ways, or other facility support areas.

3.1.2. A clinic or clinic support area shall be defined as any room or space that is used for the purpose of an outpatient healthcare facility which provides direct
medical, surgical, or dental advice, services, or treatment to patients who remain
less than 24 hours.

3.1.2.1. Included in this definition are chemical and pharmaceutical store rooms,
clinical support facilities, autoclave rooms, waste storage areas, service
corridors, and clinical diagnostic labs.

3.1.2.2. Not included in this definition are mechanical rooms, shops, chase-ways, or
other facility support areas.

3.1.3. Hereafter, the term equipment shall include furniture used within the laboratory
and/or clinic as defined above.

3.2. Lab and/or clinic personnel shall clean and decontaminate the equipment as
appropriate for the potential hazard (see section 4).

3.3. Lab and/or clinic personnel shall:

3.3.1. Complete one TAMHSC Equipment Decontamination Form per piece of
equipment. The form can be found on the TAMHSC EHS website under
the Laboratory Safety section.

3.3.2. Ensure that the person performing the decontamination procedures described
on the TAMHSC Equipment Decontamination Form signs certifying that those
procedures were followed.

3.3.3. Ensure that the responsible party (Principal Investigator or equipment owner)
signs the TAMHSC Equipment Decontamination Form certifying that the
equipment meets the criteria for release to TAMHSC Surplus or for transfer or
repair as described on the form and in this procedure.

3.3.4. Where applicable, contact the responsible radiation safety officer (RSO) or laser
safety officer (LSO) to sign as appropriate releasing the equipment.

3.3.5. Attach the original completed TAMHSC Equipment Decontamination Form to the
equipment in a visible location, retain a copy for their records, and scan and
submit a copy via the online EHS TAMHSC Equipment Decontamination
Submission link in the Laboratory Safety section of the TAMHSC EHS website to
initiate the validation process described in Section 5 below. The receiving entity
shall retain the original for their records.

3.3.6. NOTE: Equipment returned to a manufacturer, or vendor may require the
completion of a separate decontamination form. Check with the manufacturer
for specific instructions.
3.4. Receiving Entity shall:

3.4.1. After TAMHSC EHS validation and upon receipt and acceptance of any item via this process, promptly remove any copies of the TAMHSC Equipment Decontamination Form and/or any validation sticker or mark attached to the item.

3.4.1.1. Once the item is returned to service, it is no longer considered decontaminated and/or validated by TAMHSC EHS. Any future transfers require this process to be repeated.

3.5. Equipment decontaminated for maintenance work or moving while still operational:

3.5.1. Equipment decontaminated for maintenance:

3.5.1.1. For equipment within a lab or clinic that is in need of maintenance, but is not being transferred or moved, lab and/or clinic personnel shall comply with Sections 3.2, 3.3, and 4 of this document.

3.5.1.2. After submission of the TAMHSC Equipment Decontamination Form(s) for each item decontaminated for maintenance via the online EHS TAMHSC Equipment Decontamination Submission link in the Laboratory Safety section of the TAMHSC EHS website, TAMHSC EHS shall schedule and complete the validation process described in Section 5 of this document.

3.5.1.3. Upon completion of Sections 3.5.1.1 and 3.5.1.2 above, the lab or clinic personnel may submit the work order or arrange for the vendor to perform the maintenance work as necessary.

3.5.2. Equipment decontaminated for moving while operational:

3.5.2.1. For equipment within a lab or clinic that must be moved within the facility in which it is currently housed, but is not being transferred, lab and/or clinic personnel shall comply with Sections 3.2, 3.3, and 4 of this document.

3.5.2.1.1. Equipment being moved under this section is only required to be decontaminated on those surfaces likely to be handled during the move subject to Section 5.3.3.1.

3.5.2.1.2. Moving the equipment from indoors to outdoors, from one building to another, where it could potentially expose members of the public or TAMHSC employees not trained in hazard identification or hazardous materials handling, **IS PROHIBITED** under this section.
3.5.2.1.2.1. For equipment moving on public roads or in a manner that could result in exposure to members of the general public or those TAMHSC employees not trained in hazard identification or hazardous materials handling, contact EHS for more information.

3.5.2.2. After submission of the TAMHSC Equipment Decontamination Form(s) for each item decontaminated for maintenance via the online TAMHSC Equipment Decontamination Submission link in the Laboratory Safety section of the TAMHSC EHS website, TAMHSC EHS shall schedule and complete the validation process described in Section 5 of this document.

3.5.2.3. Upon completion of Sections 3.5.2.1 and 3.5.2.2 above, the lab or clinic personnel may move or submit the work order to move the equipment.

4. METHODS:

4.1. Biological Decontamination:

4.1.1. The minimum personal protective equipment (PPE) to wear when decontaminating lab and/or clinic equipment shall be a lab coat, gloves, and chemical splash goggles. Additional PPE may be required depending upon contaminants and disinfectants used.

4.1.2. All equipment used to handle or store biological agents or located in a laboratory and/or clinic (ex. freezers, incubators, centrifuges, etc.) must be decontaminated with an appropriate disinfectant for the contaminant and/or equipment.

4.1.2.1. An appropriate disinfectant is one that has demonstrated efficacy with regard to the contaminant of concern and has been shown to not create additional hazards during use with the materials in question (i.e., bleach used on urine can produce ammonium chloride gas).

4.1.2.2. Consult the following website for information concerning EPA-registered disinfectants: [http://www.epa.gov/oppad001/chemregindex.htm](http://www.epa.gov/oppad001/chemregindex.htm)

4.1.2.3. Additional information is available through the TAMHSC’s Bloodborne Pathogen Program, your site safety officer, the TAMU Office of Research Compliance and Biosafety, or through laboratory SOPs.

4.1.3. Allow disinfectant to remain on the equipment for the appropriate contact time. In most cases, 15-30 minutes is sufficient, however, consult laboratory and/or clinic SOPs or the disinfectant’s label for specific instructions.
4.1.4. Some disinfectants may leave a residue that should be removed prior to handling of equipment. Please consult laboratory and/or clinic SOPs or the disinfectant’s label for specific instructions on removal of residue.

4.1.4.1. When removing residue, do not reuse towels and when possible wipe from the outside in, reducing the size of the contaminated area.

4.1.5. Complete the TAMHSC Equipment Decontamination Form as described in Section 3.

4.1.6. NOTE: Biological Safety Cabinets that will be moved from the building or will require extensive repairs must be decontaminated by a certified vendor prior to moving or working on the cabinet. Contact the TAMU Office of Research Compliance and Biosafety or TAMHSC EHS for more information.

4.1.6.1. For any Biological Safety Cabinets sent to TAMHSC Surplus, the decontamination certification documentation provided by the certified vendor must be submitted via the online EHS TAMHSC Equipment Decontamination Submission link in the Laboratory Safety section of the TAMHSC EHS website along with the TAMHSC Equipment Decontamination Form.

4.1.6.1.1. It is the responsibility of the lab and/or clinic personnel to provide this documentation.

4.2. Chemical Decontamination:

4.2.1. The minimum personal protective equipment (PPE) to wear when decontaminating lab and/or clinic equipment shall be a lab coat, gloves, and chemical splash goggles. Additional PPE may be required depending upon chemical hazard and decontamination method used.

4.2.2. Generally, mild detergent and water will suffice for removing chemical residues from work surfaces and equipment. Consult manufacturer recommendations for instructions on cleaning equipment surfaces. Use caution and consult Safety Data Sheets for information on the specific chemical hazards with which the equipment or work surface may be contaminated (e.g., water reactive chemicals).

4.2.3. Equipment that contains oil or refrigerants (e.g. air conditioners or refrigerators) or that has a water jacket must be properly drained of its contents prior to disposal. It is the owner’s responsibility to make arrangements to have the equipment drained and to ensure chemicals are properly disposed.
TAMHSC EHS if guidance is needed or assistance with chemical disposal is required.

4.2.3.1. Contact TAMHSC EHS prior to draining oil in the case of X-ray equipment or if equipment is suspected of containing PCB’s.

4.3. Radiological Decontamination:

4.3.1. Lab and/or clinic personnel shall swipe-test any equipment that contained a radioactive source or that potentially came in contact with radioactive materials and shall decontaminate as appropriate per the TAMHSC Radiation Safety Manual.

4.3.2. After swipe-tests and decontamination are complete, lab and/or clinic personnel shall contact either their site safety officer or the TAMHSC Radiation Safety Officer (RSO) to perform follow-up swipe-tests prior to release of equipment.

5. Validation

5.1. Scheduling Validation

5.1.1. All TAMHSC Equipment Decontamination Forms shall be submitted via the online EHS TAMHSC Equipment Decontamination Submission link found in the Laboratory Safety section of the TAMHSC EHS website no fewer than seven (7) business days prior to the scheduled transfer of the equipment to allow time to schedule the verbal interviews, acquire necessary resources, and perform the validation process.

5.1.2. Items submitted within (7) business days of the scheduled transfer may be included in the validation at the discretion of the TAMHSC EHS personnel.

5.2. Document Review:

5.2.1. In order for equipment to be released to a receiving entity, the person who signed the TAMHSC Equipment Decontamination Form as having performed the decontamination procedure shall meet with TAMHSC EHS prior to the shipment to the receiving entity to complete the document review for each individual piece of equipment to be released.

5.2.2. TAMHSC EHS shall be given verbal attestation at the time of document review by the person who signed the TAMHSC Equipment Decontamination Form as having performed the decontamination procedure that the form has been completed properly for each individual piece of equipment to be released.

5.2.2.1. The verbal attestation confirms that:
5.2.2.1.1. the equipment is represented by the lab personnel as having been cleaned from all applicable hazardous materials,

5.2.2.1.2. the correct cleaning method and medium is represented by the lab personnel as having been employed, and

5.2.2.1.3. that lab personnel represent no additional cleaning need be performed prior to the release of the equipment.

5.2.3. As noted in Section 3.3.4, the releasing entity shall ensure that, if the TAMHSC Equipment Decontamination Form indicates equipment use with radioactive materials and/or, the presence of a radioactive source, x-ray tube, or laser system the TAMHSC RSO and/or LSO have signed the document to confirm follow-up surveys and source removal as appropriate.

5.2.3.1. The signature of the TAMU RSO and/or LSO shall suffice for equipment originating from within the SPH and/or Reynolds buildings on the College Station campus.

5.2.3.2. The signature of the TAMUK RSO shall suffice for equipment used with or containing radioactive materials originating from the College of Pharmacy Kingsville campus.

5.2.3.3. The signature of the BCD RSO and/or LSO shall suffice for equipment originating from the Dallas campus.

5.2.3.4. The signature of the Veterans Administration (VA) RSO and/or LSO shall suffice for equipment originating within the VA building at the Temple campus.

5.2.3.5. The signature of the Baylor-Scott & White (BS&W) RSO and/or LSO shall suffice for equipment owned by BS&W at any Temple campus location.

5.3. Visual Inspection:

5.3.1. In order for equipment to be released to a receiving entity, the person who signed the TAMHSC Equipment Decontamination Form as having performed the decontamination procedure shall meet with TAMHSC EHS prior to the equipment being shipped to the receiving entity.

5.3.2. This visual inspection is not quantitative and does not ensure, guarantee, or certify that the equipment is free of any or all contaminants or other hazards.

5.3.3. The visual inspection shall be performed for all surfaces and/or areas of the equipment accessible during normal use.
5.3.3.1. No maintenance panels or other electrical access panels shall be removed or opened as part of the visual inspection.

5.3.3.2. All drawers, cabinets, shelves, or other storage compartments, and all surfaces or areas of the equipment accessible or used during normal operation must be unlocked and inspected.

5.3.3.3. Those items being moved in compliance with Section 3.5.2 above are only required to be decontaminated on those surface likely to be handled during the move (e.g., the interior volume of operational freezers or refrigerators need not be decontaminated before movement).

5.3.3.3.1. The TAMHSC EHS personnel conducting the validation may require additional surfaces be decontaminated at their discretion.

5.3.4. TAMHSC EHS reserves the right, subject to the discretion of the TAMHSC EHS personnel, to refuse validation during the inspection for any reason including but not limited to:

5.3.4.1. stains, rust, or other discolorations,

5.3.4.2. failure to open or demonstrate that any surface or area is unlocked upon demand by TAMHSC EHS,

5.3.4.3. failure to complete and attach a TAMHSC Equipment Decontamination Form to the equipment to the satisfaction of the inspecting TAMHSC EHS personnel,

5.3.4.4. failure of the person who signed the TAMHSC Equipment Decontamination Form as having performed the decontamination procedures to be present at the time of validation for the verbal attestation, or

5.3.4.5. any other reason not specifically described above at the discretion of the inspecting TAMHSC EHS personnel.

5.3.4.6. NOTE: TAMHSC EHS may ask for a verbal confirmation on or a description of the nature of any of the items above or any other potential items of concern identified during the visual inspection at the time of validation.

5.4. Indication of validation:

5.4.1. If equipment passes visual inspection and document review as described above, TAMHSC EHS considers the equipment validated and marks the equipment as such by affixing a green "validation" sticker on the item next to the attached TAMHSC Equipment Decontamination Form.
5.4.1.1. If the item is a box of items, then

5.4.1.1.1. the full list of all items within the box shall be included either on the TAMHSC Equipment Decontamination Form in the “Description of Equipment Use” section or on an attached separate sheet, and

5.4.1.1.2. the box shall be sealed with tamper evident tape by the TAMHSC EHS personnel at the time of validation completion.

5.4.1.2. Equipment with drawers, cabinets, shelves, storage compartments, surfaces, or other areas of the equipment accessible or used during normal operation as described above in the visual inspection process shall be sealed with tamper evident tape by the TAMHSC EHS personnel at the time of validation completion.

5.4.1.3. A unique identification number will be assigned to each validation record by the inspecting TAMHSC EHS personnel.

5.4.2. Upon transfer of the item to the receiving entity and its return to use, the TAMHSC Equipment Decontamination Form and/or any validation sticker or mark shall be removed or defaced by the receiving entity.

5.4.2.1. Returning equipment to service removes the decontaminated and/or validated status of the item. Any future transfers require this process to be repeated.

5.5. Failure to comply:

5.5.1. No equipment that appears to have originated from within a lab or clinic shall be loaded, shipped, transferred, or surplussed if it does not meet one of the following criteria:

5.5.1.1. the TAMHSC Equipment Decontamination Form has been sent to the receiving entity and TAMHSC EHS, is attached to the equipment, and indicates “Category I: This equipment has never been in contact with biological, chemical or radioactive materials” and is signed by the responsible party attesting to the same, OR

5.5.1.2. the TAMHSC Equipment Decontamination Form has been sent to the receiving entity and TAMHSC EHS, is attached to the equipment, and indicates “Category 2: This equipment has had prior contact with either biological, chemical and/or radioactive materials, but has been thoroughly cleaned and decontaminated” and is signed both by the responsible party
and the person who performed the decontamination procedure(s) attesting to the same **AND:**

5.5.1.2.1. Under Biohazardous Materials, indication is given that either those materials were “not used” or that “yes” they were and the cleaning method is described, **and**

5.5.1.2.2. Under Hazardous Chemicals, indication is given that either those materials were “not used” or that “yes” they were and the cleaning method is described, **and**

5.5.1.2.3. Under Radioactive Materials, indication is given that either those materials were “not used” or that “yes” they were and the cleaning method is described and a TAMHSC or TAMU EHS signature is provided to confirm follow-up surveys and/or source removal, **and**

5.5.1.2.4. the green “validation” sticker is completed and attached to the equipment including:

5.5.1.2.4.1. the name of the TAMHSC EHS personnel performing the validation,

5.5.1.2.4.2. a validation date within the last 30 days, and

5.5.1.2.4.3. and a unique identifier number that matches one found on the list generated and kept by TAMHSC EHS.