

University of Delaware  
Department of Occupational Health and Safety  
Laboratory Exit/Renovation/Decommissioning Procedure and Checklists

Research scientists and science instructors at the University of Delaware are responsible for the safe operation of their laboratories. If you are relocating, renovating or vacating your laboratory, you are also responsible for leaving your laboratory in a state suitable for re-occupancy or renovation. Department of Occupational Health and Safety must be notified of all moves in laboratory spaces. This form should be completed and forwarded to DOHS **at least 45 days prior** to exiting a laboratory due to renovation, moving to another laboratory, or separation from the University. If there is more than one laboratory involved in this laboratory exit process, forms should be submitted **at least 90 days in advance** of the exit.

Increased public concern over environmental issues has led to a major expansion of federal and state environmental laws in recent years. Aggressive enforcement of these laws by regulatory agencies has also increased. This enforcement follows “cradle to grave” accountability for hazardous chemicals, biohazards, infectious waste and radioactive material. To this end, **Researchers** are required to properly “decommission” areas where these materials are used or stored. To comply with this requirement, the Department of Occupational Health and Safety has prepared checklists for **Principal Investigators (PI), Departmental Staff or F, P & C Project Managers** who may be vacating or responsible for a lab where these materials are used, or who may be planning renovations to such areas.

All decontamination and decommissioning work shall be completed in accordance with all University Policy and Procedures. Chemical, biological and radioactive waste will be disposed through the Department of Occupational Health and Safety. Contractors will possess appropriate experience and meet the forty hour training requirements outlined in 40 CFR 1910.120, Hazardous Waste Operations and Emergency Response training, as well as the required eight hour annual refresher training. All personnel, including contractors and laboratory workers will wear the necessary personal protection equipment, including but not limited to safety glasses, lab coats or chemical protective clothing and appropriate chemical protective gloves, while completing a laboratory decontamination.

These checklists serve as guidance to assist PI's in the safe decommissioning of their laboratory. This is not meant to be an all-inclusive list, as each lab may have unique hazards that must be addressed.

**University of Delaware**  
**Department of Occupational Health and Safety**  
**Laboratory Exit/Renovation/Decommissioning Form**  
 Complete a Separate Form for Each Individual Laboratory or Space

<b>Principal Investigator:</b> _____ <b>Ext.:</b> _____	<b>Department:</b> _____ <b>Chair:</b> _____		
Primary Contact Person: _____ Ext. _____ E-Mail: _____	Secondary Contact Person: _____ Ext. _____ E-Mail: _____		
Reason for Closeout (Renovation, Move, Leaving, etc.): _____	Laboratory Location: _____		
Date of Move or Separation: _____	New Laboratory Location (If lab is moving): _____		
Do you have materials or chemicals that have been stored in cold rooms or freezers outside of your laboratory?  If you answer Yes, complete separate forms for each space.	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
Is Facilities, Planning and Construction (F, P & C) involved in the renovation, move or project?  If Yes, who is the Project Manager: _____	<input type="checkbox"/> <b>Yes</b>		<input type="checkbox"/> <b>No</b>

**Please complete all of the following checklists for each space. All checklists must be signed.**

**Please forward the completed form to the Environmental Health Specialist by Campus Mail to:** Department of Occupational Health and Safety

### Radioactive Materials Checklist

Has the Radiation Safety Officer been notified of plans to vacate the room at least two weeks in advance (x1434)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all radioactive freezers, refrigerators, and other storage units been searched for radioactive samples and stock containers?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all items used for radioactive experiments been checked for contamination and, if found contaminated, been cleaned or disposed to radioactive waste?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have arrangements been made for the collection of all radioactive wastes in the room? (x8475)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Has a contamination survey been conducted throughout the entire room and any areas of contamination cleaned? (Do not remove radiation warning tape/signs from benches, hoods, storage units, etc. This will be performed by the Radiation Safety Officer.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all radiation dosimeters (badges) been located and transferred to the Radiation Safety Officer?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Has fixed radiation detection equipment (e.g. liquid scintillation counter) been relocated to another approved location? Have portable radiation survey meters (e.g. Geiger counter) been transferred to another suitable lab or to the Radiation Safety Officer for redistribution?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Has the Radiation Safety Officer been notified concerning your need to transfer radioactive stocks/samples to a new location?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

For assistance with the above items, contact the Radiation Safety Officer at x1434.

**By my signature, I certify that I have completed the Radioactive Materials Checklist correctly.**

Completed by Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reviewed by DOHS: \_\_\_\_\_ Date: \_\_\_\_\_

### Biohazardous Materials Checklist

Have all sharps (syringes, Pasteur pipettes, serological pipettes, razor blades, etc) been placed in a sharps container for disposal through appropriate waste stream or through infectious waste?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all solid media and used supplies been disposed of in red biohazard bags?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all agents, media, specimens been removed from refrigerators and freezers?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all unused supplies been reallocated to the new lab or other labs within the department or disposed through the infectious waste program?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all liquid media been decontaminated by autoclaving or appropriate disinfectant before drain disposal?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all potentially contaminated equipment and work surfaces been decontaminated with an appropriate disinfectant prior to relocation and vacating the lab?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all biohazard signs and labels been removed from equipment, cabinets, doors, etc.?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Has DOHS been notified concerning transporting biological materials or select agents?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all materials/biohazardous waste been removed from Biological Safety Cabinets and laminar flow benches?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Has DOHS been contacted regarding biosafety cabinets or laminar flow benches which are to be relocated or discarded?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Has DOHS been contacted to re-certify biosafety cabinets and laminar flow benches after a move to ensure filter integrity?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

For assistance with the above items, contact the Biosafety Officer at x1433.

**By my signature, I certify that I have completed the Biohazardous Materials Checklist correctly.**

Completed by Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reviewed by DOHS: \_\_\_\_\_ Date: \_\_\_\_\_

### Lab Fume Hoods Checklist

First, if radioactive materials have been used in the fume hood, contact the Radiation Safety Officer (x1434) for a radiation clearance survey. After receiving clearance from Radiation Safety, proceed with the following steps:

How many fume hoods exist in the laboratory?			
Have all debris and equipment been removed from the fume hoods?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have solid surfaces, bench tops and accessible fume hood surfaces been properly decontaminated using a HEPA vacuum and neutralizing cleaners such as "Mean-Blue" or "Simple Green"? To be performed by trained laboratory personnel or DOHS approved contractor only. Custodial Services can't	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all signs and placards been removed from the fume hood?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Has DOHS been notified for evaluation of any fume hood where Perchloric Acid was used?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all rinseates and chemical, biologically or radioactively contaminated materials been disposed of in accordance with the DOHS Waste Disposal Policy and Procedures?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<b>Fume Hood Demolition Only (Completed by a DOHS Approved Contractor)</b>			
Have all the utilities, including pressurized gas been disconnected?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all sink traps been removed and checked for chemical and mercury contamination?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all panels and solid surfaces been removed and/or decontaminated (both sides) using a HEPA vacuum and neutralizing cleaners such as "Mean-Blue" or "Simple Green"?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Was fume hood duct work decontaminated, using HEPA vacuums and a neutralizing cleaner such as "Mean-Blue" or "Simple Green", at least to the fume hood motor or to the first elbow?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If panels are asbestos transite panels, have they been doubled wrapped in clear polyethylene plastic and has the appropriate Asbestos Crew been contacted for removal?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have arrangements been made for the decontaminated scrap to be recycled or land-filled?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all rinseates and chemical, biologically or radioactively contaminated materials been disposed of in accordance with the DOHS Waste Disposal Policy and Procedures?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

For assistance with the above items, contact the Environmental Health Specialist at x0690.

**By my signature, I certify that I have completed the Fume Hood checklist correctly.**

Completed by Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reviewed by DOHS: \_\_\_\_\_ Date: \_\_\_\_\_

### Cabinets/Bench Tops and Work Area Checklist

First, if radioactive materials have been used in the Laboratory, contact the Radiation Safety Officer (x1434) for a radiation clearance survey. After receiving clearance from Radiation Safety, proceed with the following steps:

Have all debris and equipment been removed from the cabinets, bench tops, drawers and work areas?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have solid surfaces, bench tops, cabinets and floors been properly decontaminated using a HEPA vacuum and neutralizing cleaners such as "Mean-Blue" or "Simple Green"? To be performed by trained laboratory personnel or DOHS approved contractor only. Custodial Services cannot decontaminate areas where chemicals were used or stored.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all signs and placards been removed from the cabinets, table tops, benches and doors?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all rinseates and chemical, biologically or radioactively contaminated materials been disposed of in accordance with the DOHS Waste Disposal Policy and Procedures?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<b>Lab Demolition Only (Completed by a DOHS Approved Contractor)</b>			
Have all the utilities, including pressurized gas been disconnected?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all cabinets and drawers been checked for chemicals and equipment? Chemicals will be managed according to DOHS Procedures. All drawers and solid surfaces will be vacuumed with a HEPA vacuum	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all sink traps been removed and checked for chemical and mercury contamination?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all solid surfaces, bench tops, cabinets and floors been removed and/or decontaminated (both sides) using a neutralizing cleaner such as "Mean-Blue" or "Simple Green"?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If decontaminated surfaces are asbestos transite panels, have they been doubled wrapped in clear polyethylene plastic and has the appropriate Asbestos Crew been contacted for removal?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have arrangements been made for the decontaminated scrap to be recycled or land-filled?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have all rinseates and chemical, biologically or radioactively contaminated materials been disposed of in accordance with the DOHS Waste Disposal Policy and Procedures?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

For assistance with the above items, contact the Environmental Health Specialist at x0690.

**By my signature, I certify that I have completed the Cabinets/Bench Tops and Work Area checklist correctly.**

Completed by Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reviewed by DOHS: \_\_\_\_\_ Date: \_\_\_\_\_

### Chemical Disposal Checklist

Are there chemicals located in any of the following areas?			
<b>Fume Hoods</b>	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
<b>Cabinets</b>	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
<b>Drawers</b>	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
<b>Bench Tops</b>	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
<b>Storage Cabinets</b>	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
<b>Refrigerators/Freezers</b>	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
<b>Cold Rooms</b>	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
Have all other shared rooms or facilities, such as stock rooms or shared cold rooms or shared freezers been checked for chemicals?	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
Are there any chemicals in squeeze-bottles, beakers, flasks or anything else that cannot be sealed with a lid? These materials must be placed into a sealed container.	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
Do you have any <b>Reactive</b> Chemicals such as old ethyl ether, organic peroxides, aluminum alkyls, p-Dioxanes, tetrahydrofuran, picric acid, etc.?	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
Do you have any <b>compressed gases</b> ? All attempts must be made by the researcher to have the gas supplier pickup gas cylinders. Disposal costs will be charged back to the department if DOHS handles the waste.	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
Have all unknown chemicals been identified? If No, a DOHS approved contractor will be brought in to identify the chemicals. The Department will be responsible for any costs associated with identification of unknown chemicals.	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
Have chemicals been packaged according to DOHS procedures for disposal ( <a href="http://www.udel.edu/OHS/chemwstcalen.html">http://www.udel.edu/OHS/chemwstcalen.html</a> ) or redistributed around the department/University ( <a href="http://www.udel.edu/OHS/redistdown.html">http://www.udel.edu/OHS/redistdown.html</a> )?	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>
Has a complete inventory of chemical waste materials been sent to DOHS for pick-up? ( <a href="http://www.udel.edu/OHS/waste/chemwstindex.html">http://www.udel.edu/OHS/waste/chemwstindex.html</a> )	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>N/A</b>

For assistance with the above items, contact the Environmental Health Specialist at x0690.

**By my signature, I certify that I have completed the Chemical Disposal Checklist correctly.**

Completed by Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reviewed by DOHS: \_\_\_\_\_ Date: \_\_\_\_\_