**CU Boulder**

**Laboratory Ramp-Down Checklist**

Preparation:

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| ITEM | Complete | N/A | Notes |
| Identify all non-critical activities that can be ramped down, curtailed, suspended or delayed. |  |  |  |
| Identify personnel able to safely perform critical activities. |  |  |  |

Communications:

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| ITEM | Complete | N/A | Notes |
| Create a contact list including all lab personnel, principal investigator, lab administrative director, research operations manager, and building proctor. |  |  |  |
| Ensure the contact list is saved where it can be remotely accessed by everyone in the lab.  Include home and cell phone numbers. |  |  |  |
| Test your phone tree, email, or Slack group to facilitate emergency communication amongst lab researchers and staff. |  |  |  |
| Ensure your [BioRAFT](https://ehs.colorado.edu/) record is updated with the correct lab phone numbers, as well as the lab’s Group Compliance Liaison. |  |  |  |
| Update your compliance and safety point of contact for all potential hazards in use |  |  |  |
| Ensure that emergency contacts listed on lab placards are up to date and posted on outside of lab doors. |  |  |  |

Shipping/Receiving:

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| --- | --- | --- | --- |
| ITEM | Complete | N/A | Notes |
| Do not order any new research materials except those items needed to support minimal critical functions. |  |  |  |
| Cancel orders for non-essential research materials if they have not yet shipped. |  |  |  |
| Contact loading dock/mail services personnel to notify them of any expected incoming shipments. Consult with [Distribution Services](https://www.colorado.edu/fm/divisions/dc) for current delivery options and details. 303-492-6564.  If receiving services are shut down, PIs might expect to meet delivery vehicle to take possession of shipments. |  |  |  |
| Notify Radiation Safety at [radsafety@colorado.edu](mailto:radsafety@colorado.edu) of any expected shipments of radioisotope or sealed sources. |  |  |  |

Research Materials:

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| --- | --- | --- | --- |
| ITEM | Complete | N/A | Notes |
| Freeze down any biological stock material for long term storage. |  |  |  |
| Verify freezer monitors, alarms and call out lists |  |  |  |
| Consolidate storage of valuable perishable items within storage units that have backup systems.  (Consider storing critical agents in two separate locations in case of failure of one location.) |  |  |  |
| Fill dewars and cryogen containers for sample storage and critical equipment. Distribution Services will continue completing order requests for liquid nitrogen through the normal online ordering process. They will be monitoring their main phone (303-492-6564) as well. DIST can be consulted for dry ice inquiries. |  |  |  |
| Consult with [OAR](https://www.colorado.edu/researchinnovation/oar) (or [sara.hashway@colorado.edu](mailto:sara.hashway@colorado.edu) or 303-492-3411), [IACUC](https://www.colorado.edu/researchinnovation/iacuc) (or [althea.lantron@colorado.edu](mailto:althea.lantron@colorado.edu) or [iacucoffice@colorado.edu](mailto:iacucoffice@colorado.edu))about current animal care recommendations. |  |  |  |
| Properly close all chemicals and hazardous materials, and place in their appropriate storage cabinet/area. Refer to the [Chemical Storage](https://ehs.colorado.edu/resources/laboratory-safety-guidelines/#ichemicalstorage) section of our [EH&S Lab Safety Guidelines](https://ehs.colorado.edu/resources/laboratory-safety-guidelines/) |  |  |  |
| Ensure all flammables are closed and stored in flammable storage cabinets. Refer to the [Chemical Storage](https://ehs.colorado.edu/resources/laboratory-safety-guidelines/#ichemicalstorage) section of our [EH&S Lab Safety Guidelines](https://ehs.colorado.edu/resources/laboratory-safety-guidelines/) |  |  |  |
| Ensure that all items are labeled appropriately. All working stocks of materials must be labeled with the full name of its contents and include hazards. |  |  |  |
| Remove all chemicals from benchtops and fume hoods and store in their appropriate cabinets or shelving. |  |  |  |
| If using Piranha solution, ensure that the bottle has a proper ventilated cap. If you do not have a ventilated cap, leave the bottle in secondary containment in the fume hood with its cap slightly open. |  |  |  |
| Remove biological materials from biosafety cabinets, and autoclave, disinfect, or safely store them as appropriate. |  |  |  |
| Confirm inventory of controlled substances and document in logbook. |  |  |  |
| Consider additional measures to restrict access to controlled substances. |  |  |  |
| Secure physical hazards such as sharps. |  |  |  |
| Ensure all radioactive materials, sealed sources, stock vials, aliquots and waste containers are secured in their authorized locations. If you have questions about proper storage of radioactive materials, contact the Radiation Safety office at [radsafety@colorado.edu](mailto:radsafety@colorado.edu) |  |  |  |
| Ensure dosimeters for all laboratory personnel are stored together in a low-background location (not near waste containers or isotope/source storage). |  |  |  |

Physical Hazards:

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| ITEM | Complete | N/A | Notes |
| Ensure all gas valves are closed. If available, shut off gas to area. |  |  |  |
| Turn off appliances, computers, hot plates, ovens, and other equipment. Unplug equipment if possible. |  |  |  |
| Check that all gas cylinders are secured and stored in an upright position. Remove regulators and use caps. |  |  |  |
| Elevate equipment, materials and supplies, including electrical wires and chemicals, off of the floor to protect against flooding from broken pipes. |  |  |  |
| Inspect all equipment requiring uninterrupted power for electricity supplied through an Uninterrupted Power Supply (UPS) and by emergency power (emergency generator). |  |  |  |
| Make sure all x-ray machines are locked in “off” position and consider whether to unplug while no one is in the lab. |  |  |  |

Equipment:

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| ITEM | Complete | N/A | Notes |
| Check that refrigerator, freezer, and incubator doors are tightly closed. |  |  |  |
| Biosafety cabinets: surface decontaminate the inside work area, close the sash and power down. Do NOT leave the UV light on. |  |  |  |
| Fume hoods: Clear the hood of all hazards and completely shut the sash. |  |  |  |
| Review proper shut down procedures and measures to prevent surging. |  |  |  |
| Shut down and unplug sensitive electric equipment. |  |  |  |
| Cover/seal and secure vulnerable equipment with plastic. |  |  |  |

Decontamination:

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| ITEM | Complete | N/A | Notes |
| Decontaminate areas of the lab as you would do routinely at the end of the day. |  |  |  |
| Decontaminate and clean any reusable materials that may be contaminated with biological material. |  |  |  |
| Complete a final contamination survey of laboratory radiation use areas and report monthly surveys to Rad Safety using [online form](https://ehsonline.colorado.edu/radsurveys/). |  |  |  |

Waste Management:

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| ITEM | Complete | N/A | Notes |
| Place all chemical hazardous waste in your lab’s Satellite Accumulation Area. Weekly Inspections documented on BioRAFT will not be required for the time-being. You do NOT need to send in your hazardous waste if lab activities are being suspended. |  |  |  |
| Ensure every waste container is clearly labeled, and fully sealed/closed. |  |  |  |
| Separate incompatible chemicals by means of a physical barrier (e.g., plastic secondary bins or trays). |  |  |  |
| EH&S will continue to pick up chemical wastes only from labs performing ongoing critical research activities. Submit chemical waste tags through the normal process via campus mail. |  |  |  |
| Biological waste: Disinfect and empty aspirator collection flasks. |  |  |  |
| EH&S will continue to pick up autoclaved biowastes only from labs performing ongoing critical research activities. Process and tag autoclaved biological waste per existing protocols. |  |  |  |
| Collect radioactive material into the appropriate waste containers. EH&S has suspended pickups of rad waste, but ask that [rad waste requests are submitted to plan for future pickups](https://ehs.colorado.edu/lab-support/radioactive-materials/radioactive-and-mixed-waste/). |  |  |  |

Security:

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| ITEM | Complete | N/A | Notes |
| Lock all entrances to the lab. Ensure key personnel who will support critical functions have appropriate access. |  |  |  |
| Ensure windows are closed. |  |  |  |
| Secure lab notebooks and other data. |  |  |  |
| Log off and lock all computers. |  |  |  |
| Take laptops home. |  |  |  |

Please contact your lab’s Principal Investigator, your Lab Manager and/or Group Compliance Liaison, or EH&S at [ehs@colorado.edu](mailto:ehs@colorado.edu) with questions about how to secure hazards or safely suspend research operations in your laboratory.

*This checklist has been adapted from a similar form in use at Harvard.*