

## Restarting Research at Sacramento State

### Ramp-Down Checklist

This ramp-down checklist was created to help labs during the COVID-19 pandemic. Using this checklist will minimize safety issues while there are minimal staff in the lab or when the lab is left unattended for long periods of time.

Please contact EH&S (<https://www.csus.edu/campus-safety/environmental-health-safety/>), Department Chair or Dean directly with any further questions about how to secure hazards or safely suspend research operations in your laboratory.

### Laboratory Ramp-Down Checklist

PREPARING			
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 essential activities.			
COMMUNICATION			
ITEM	Complete	N/A	Notes
Create a contact list including all lab personnel, Principal Investigator, lab and/or department administrator, EHS Safety Advisor, and other appropriate personnel.			
Ensure the contact list is saved where it can be remotely accessed by everyone in the lab. Include email addresses and home and cell phone numbers.			
Test your phone tree or email group to facilitate emergency communication amongst lab researchers and staff.			
Ensure the emergency contacts listed on laboratory door signs are up to date and posted outside lab doors. (If not on the EHS signs, add a separate sheet.)			



SHIPPING/RECEIVING			
ITEM	Complete	N/A	Notes
Do not order any new research materials except those items needed to support minimal critical functions.			
ITEM	Complete	N/A	Notes
Stop ordering radioactive materials and other materials that require specialized handling.			
Contact loading dock/mail services personnel to notify them of any expected incoming shipments.			
Do not place any packages potentially containing dry ice in a walk-in cold room or freezer.			
RESEARCH MATERIALS			
ITEM	Complete	N/A	Notes
Freeze down any biological stock material for long term storage.			
Consolidate storage of valuable perishable items within storage units that have backup power supply.			
Fill dewars and cryogen containers for sample storage and critical equipment.			
Ensure containers with cryogenic liquids are vented to prevent internal pressure.			
Consult with IACUC about current animal care recommendations.			
Properly secure all hazardous materials in long-term storage.			
Ensure all flammable liquids are stored in flammable storage cabinets.			
Ensure all biological, chemical, and radioactive material containers are closed.			
Ensure all items are labeled appropriately. All working stocks of materials must be labeled with the full name(s) of the contents and include the hazards.			

ITEM	Complete	N/A	Notes
Remove all chemicals and glassware from benchtops and fume hoods, and store in cabinets or appropriate shelving.			
ITEM	Complete	N/A	Notes
Request waste pickups for peroxide forming compounds or other chemicals (i.e. piranha etch) that may become unstable over time. This applies to containers with expiration dates.			
Collect contents of any acid/base baths and request waste pickup. All other hazardous waste that can safely remain in labs, should remain. All acutely hazardous waste should also be tagged and requested for pickup.			
Remove infectious materials from biosafety cabinets, and autoclave, disinfect, or safely store them as appropriate.			
Ensure aisles are not obstructed. All floors and counter spaces should be cleared of hazardous materials.			
Confirm the inventory of Controlled Substances, document in logbook, and ensure they are locked away appropriately.			
Consider additional measures to restrict access to Controlled Substances.			
Recover glassware and other essential items from shared areas such as autoclave rooms, washrooms, and microscopy rooms.			
Ensure all radioactive materials/sources are secured in locked housing (refrigerator, freezer, cabinet, or lockbox).			
Perform a final area survey (meter and wipe tests) to confirm that no radioactive contamination is present in the lab. Include stock vial storage areas and radioactive waste storage areas.			
PHYSICAL HAZARDS			
ITEM	Complete	N/A	Notes
Ensure all gas valves are closed. If available, shut off gas to area.			



ITEM	Complete	N/A	Notes
Check that all gas cylinders are secured and stored in an upright position. Remove regulators and use caps.			
Ensure all vacuum valves are closed.			
Turn off appliances, computers, microscopes, hot plates, sterilizer ovens, water baths, and other equipment. Unplug equipment from energy source, if possible.			
Turn off lasers (e.g. inside microscopes).			
Elevate equipment, materials, and supplies, including electrical wires and chemicals, off the floor to protect against flooding.			
Secure physical hazards, such as sharp objects, in a safe place (e.g. razor blades inside a petri dish).			
Inspect all equipment requiring uninterrupted power for electricity supplied through an Uninterrupted Power Supply (UPS) and by emergency power (emergency generator).			
EQUIPMENT			
ITEM	Complete	N/A	Notes
Check that refrigerator, freezer, and incubator doors are tightly closed. Consider taping the door shut and/or installing monitoring devices.			
Biosafety cabinets: surface decontaminate the inside work area, close the sash, and turn the power of the unit off. <b>Do NOT leave the UV light on.</b>			
Fume hoods: Clear the hood of all hazards and close the sash.			
Shut down and unplug sensitive electric equipment. Power down all non- essential equipment. Essential equipment should be on backup power system, if possible. Review proper shut down procedures and measures to prevent surging.			



ITEM	Complete	N/A	Notes
Cover and secure or seal vulnerable equipment with plastic.			
<b>DECONTAMINATION</b>			
ITEM	Complete	N/A	Notes
Decontaminate areas of the lab as you would routinely do, at the end of the day.			
Decontaminate and clean any reusable materials that may be contaminated with biological material.			
Disinfect and empty all vacuum collection flasks throughout the lab including those used at the biosafety cabinets.			
<b>WASTE MANAGEMENT</b>			
ITEM	Complete	N/A	Notes
<b>CHEMICAL WASTE:</b> Ensure all hazardous chemical waste is properly contained, labeled, segregated and prepared for removal.			
<b>BIOLOGICAL WASTE:</b> Disinfect and drain dispose liquid in aspirator collection flasks and other biological liquids, as appropriate. Collect all solid biological waste in appropriate containers and submit a biomedical waste pickup request to have the waste removed or bring it to the nearest biomedical waste cart location.			
<b>RADIOACTIVE WASTE:</b> Collect, label and secure all radioactive waste in appropriate containers. Waste that can safely remain in the labs. If necessary, submit a radioactive waste pickup request.			
Follow the Laboratory Waste Disposal guidelines to help identify how all laboratory waste streams should be collected, packaged, labeled, segregated, and stored in the lab.			



SECURITY			
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.			
Take valuable personnel items such as laptops home.			
If Controlled Substances are needed during wind-down or animal emergencies, ensure that those performing the essential tasks know how to access it.			
GENERAL AREA			
ITEM	Complete	N/A	Notes
Remove all perishable and open food items for the lab's break areas, lockers, personal spaces.			