

Laboratory Shutdown Checklist

The following is a checklist of items when preparing for a potential laboratory shut down.

PIs and researchers should review the full list below and consider how best to adapt it to the specific needs of their particular laboratory.

At this time, labs should implement the following:

- Stock up on critical supplies.
- Assess supply chain/vendor delivery of regular consumables, such as liquid nitrogen, that cannot be bulk purchased and stored ahead of time.
- Prepare equipment if there is routine upkeep required.
 - Consider any necessary steps to extend the time between required maintenance tasks.
- If certain tasks or equipment use can be deferred, consider implementing this process now, particularly if the shutdown process requires preparation and time.
- Implement use of remote access.
 - Ensure researchers have remote access to data and essential computer programs.
 - Back up computers and electronic notebooks.
- Check Lab Safety Plans (and lab signage) to make sure emergency contacts are up-to-date.
- Review the full shutdown checklist for additional actions to consider starting now.

If University of Idaho requires that non-critical research be suspended, guidance will come from upper administration (President, Vice President of Research, and/or Deans/Department Heads) on when a shutdown must be implemented. At that time, the following shutdown checklist, with any lab-specific additions, should be implemented.

General

- Clean glassware and store appropriately, do not leave dirty equipment out.
- Turn off the lights.
- Cancel deliveries, if possible.

Biologicals

- Samples should be appropriately stored for long term.
- For cultures that cannot be frozen down, ensure you have approval from Dean/Department to continue work, and enough supplies and personnel to maintain cultures.
- Dispose of all biological materials appropriately.
- Ensure the cryostorage units have enough liquid nitrogen.
- Turn Biosafety Cabinetss off and close the sash.
- Disinfect and empty aspirator collection flasks by the biosafety cabinets and benchtops.
- Turn off UV light.

Chemicals

- Be diligent in returning chemicals to their proper storage location immediately after use and verify chemicals are properly stored prior to exiting the lab.
- Move chemicals from laboratory benches and fume hoods and store in secondary containment with compatible chemicals.
- Label and securely cap every container, unless doing so would cause a hazardous situation.
- Move hazardous waste with completed waste tag to the satellite accumulation area designated to your lab for collection by Environmental Health and Safety.
- Close sashes on chemical fume hoods.
- Store compressed gas cylinders, not in use, with their valve caps tightly secured and chained.

Radiation

- Close and secure (refrigerator with lock or lockbox) any radioactive vials in the lab. Turn off your Geiger counter, so that batteries do not run down. Do not remove batteries, this will require re-calibration.
- Store radiation waste appropriately. Label with isotope, amount and date for I-25 and P32 items undergoing decay.

Equipment

- Electrical equipment
 - Review proper shut down procedures to prevent surges.

- Check that essential equipment is on backup generator power supply for emergency power.
- Incubators
 - Consider the availability of CO₂, and plan to consolidate and shut down unneeded incubators to conserve supplies.
- Fridges/Freezers/-80s
 - Check that essential equipment is on backup generator power supply for emergency power.
- NMR/SQUID/other superconducting devices; MRI/other magnets requiring cryogenics
 - Contact cryogen suppliers to make any special delivery arrangements/changes necessary.
 - If it is necessary to perform cryo fills during a shutdown, do not perform these alone. A reduction in building traffic means a reduction of odds of assistance in an emergency. (Contact EHS to request a lab assistance)
- Lasers
 - Turn off all lasers and remove the key from the power source.
- Shut down microscopes, hot plates, sterilizers, water baths, and all other equipment that is not being used. Unplug from energy source, if possible.
- Shut down water sources to cooling columns, water purifiers, etc.
- Shutdown furnaces and ovens.
- Other equipment to assess for issues regarding turning off power, providing needed maintenance/supplies, or determining additional specific needs:
 - Gas Chromatography/MassSpec equipment
 - PET scanners
 - Electron microscopes, confocal microscopes
 - Irradiators
 - Cleanrooms
 - Glove Boxes
 - Solvent Purification Systems

Shared Space, Laboratory and Building Requirements

- Post signage on building entry doors about shut down.
- Autoclaves: close doors or shut down completely.
- Check laboratories for appropriate shutdown.
 - Check all gas spigots to be sure they are closed with no leakage.
 - Check that equipment is turned off.
- Shut down glass washing facilities.
- Check mechanical rooms.
- Check water distillation units.
- Check shared equipment and shared facilities (chemical storage/waste areas, gas storage areas).
- Shut off copy machines, printers, computers.
- Communicate with all delivery personnel and set a time for essential deliveries, if needed.