



**Office of Laboratory Safety and Environmental Health (OLSEH), IISc,
Bangalore**

**Laboratory Shutdown Safety Guidelines
(Manadated Shutdown During COVID-19)**

Date: 27 March 2020

A few updated guidelines from OLSEH

1) Students/post-doc/project staff authorized by mentor/department chair may report in the labs to sustain research with rare samples and maintenance of critical facility by following standard safety protocols. Anyone entering any of the labs, for any purpose, should do so along with a colleague/friend, so that no one is alone at any time in any lab.

2) Students/post-doc/project staff not authorized by mentor/department chair are strictly **NOT** allowed in the department premises/laboratory.

-----Please see below OLSEH guidelines issued on 19 March 2020 -----

The institute is shutdown to protect against COVID-19. However, there are some members of the community that are still on campus: the skeletal staff in labs, the necessary staff keeping regular hours, and the security personal who may want to respond to an emergency. To ensure their safety we should follow safe shutdown procedures. OLSEH recommends the following guidelines.

Note 1: We understand that some labs might have unique requirements not covered by these general guidelines. In such cases PI's should implement common safety procedures for a safe shutdown. For guidance on safe practices, please refer to the safety manual available at: <https://olseh.iisc.ac.in/>.

Note 2: Please remember, it is the responsibility of the Lab managers/faculty to ensure safety in their labs, even during the shutdown.

1. **Gas Cylinders:** Turn off all gas cylinder valves. If possible, disconnect and move the cylinder to storage mode/area. Exceptions only for N₂ supply to critical equipment like, glove boxes, which require N₂ to function normally. Gas cabinets may be turned-off for non-hazardous gases. Do NOT turn-off gas cabinets for hazardous ones. We want the detectors to continue detecting leaks. All gas lines between cylinders and instruments should be de-pressurized. If you have hazardous gasses pump-out the lines so there is no danger of leaks.
2. **Power/Electrical:** Reduce your electrical loads to a minimum, Goal is to minimize power consumption and associated fire hazard. This means all instruments/apparatus with a power-off switch should be turned-off. Exceptions only for critical storage like, glove boxes, refrigerators, freezers, etc, if essential for the health of equipment, the AC can be

left ON. Shutdown non-essential equipment's like tube lights, fans, heaters, solder guns in labs, computers and printers, local UPS, etc. Wherever possible the local mains (MCBs) can be switched OFF for safety.

3. **Chemicals:** Remove all chemicals and cultures from fume hoods. Don't leave any experiment "running". Store things in bottles inside cupboards or dispose them as per safety guidelines. No open beakers or vials in the laboratory. Chemical waste should only be stored in closed containers. Store solid chemical waste in tied-up garbage bags. Do not leave open containers anywhere in the lab.
4. **Cryogenics:** Safely dispose unpressurized cryogenic liquids. Pressurized containers must be disconnected and valves turned off.
5. **Biological Safety:** All reactions/processes/cultures under process must be terminated safely and cleaned up. However, maintenance of facilities such as Central animal facility, BSL-3 in CIDR, transgenic plant facility, liquid nitrogen facility may continue to function with extreme care by following standard safety protocols. Central Animal Facility will be maintained for minimal essential services such as issue of feed / bedding material to investigators and waste disposal during this period. Please note that the limited number of faculty/lab attender/students (as per the approved list) may report in the biology labs to sustain research with rare samples. Note, this is not an opportunity for running fresh experiments.
6. **Water lines:** Unattended water lines are a flooding risk. To protect other and your equipment. All water lines should be turned off. This includes all cooling water lines, water main lines, chilled water lines, etc. We understand that some equipment require constant water flow. Consider turning off such equipment. If not possible, at least try to reduce their operational capacity.
7. **Utilities:** All compressed air lines, N2 gas lines, process vacuum lines, should be turned off. Close the cabinets, and hood sashes.
8. **Equipments Sensitive to Dust:** Since housekeeping will be limited to common areas, try to leave the lab in a clean and managed condition. If dust is an hazard, especially for optical equipment and high-power lasers, cover the equipment with a tarp
9. **Notice:** All labs should place a notice outside the labs informing that a complete shutdown is in effect. For emergency, mention phone numbers for lab in-charge, faculty in-charge and department Safety Champion. Display the list of equipment that are ON inside the lab (like Deep Freezer, Refrigerator etc).

Emergency Response Directory

Emergency Response Service: 5555/108 (080-2293-5555 from non IISc Phones)

Security office: 080-22932400/22932225

Health Centre/ Ambulance: 080-22932227/22932234

Dharmendra Singh, Safety Officer: 080-22933199

M.S Ramaiah hospital: 080-23608888

Snake Rescue volunteer: 080-22932506

Electricity-General: 080-22932206/22932018