

## Guidelines<sup>1</sup> for Partial Closing Down of Laboratories and Buildings at Academia Sinica

### I. General Considerations:

1. These guidelines have been developed to help laboratory heads who are reducing or shutting down laboratory activities to implement a plan to protect laboratory equipment, materials, and research from loss and to prevent hazardous conditions from developing.
2. It is assumed that there will **NOT** be a complete shut down for any building at Academia Sinica that would include cutting off of power supply, water and central ventilation. Guidelines related to complete shutting down of facilities and instruments particularly those sophisticated ones that require special procedure and expertise are thus omitted. Nonetheless, Institutes hosting such facilities are encouraged to develop such protocol as precautionary measures.
3. Unless the situation escalates further for the worse, we strive to keep all essential operation at AS functioning. If a building needs to be closed down for 14 days, we anticipate that essential instruments and facilities would still be powered on. We also aim to resume normal operations with minimum lag time and loss when permitted to do so.
4. In general, all non-essential research operations should be deferred or transitioned to remote activities wherever possible during this partial closure period. Each laboratory should therefore evaluate their continuity plans and communicate their critical operations to their Directors. Any SOP developed and to be enforced should be made available to all laboratory staff in advance.
5. Needless to say, the Director and Laboratory Heads should maintain a contact list through which any one of the staff and lab members can be contacted and any emergency situation can be reported. It will also be helpful that the security guards be assigned duty that includes taking patrol at scheduled time, and be on alert for any alarm. Scheduled remote log in by PI (or designated persons) with strategically placed WebCAM to ensure nothing unusual happens inside each lab and common areas will also be desirable.

### II. Shutting Down the Laboratory for an Emergency Closure

- Safely store and secure all hazardous (chemical, biological, and radioactive) materials.
- Cap liquid waste and ensure there are no open flasks containing solvents in chemical hood. Then move all solvent bottles to proper flammable storage either under the fume hood or in the solvent cabinet.
- Close the sash on chemical fume hoods.
- Check pressure-, temperature-, air-, or moisture-sensitive materials and equipment. All vacuum, air, water, and gas valves should be tightly closed and gas cylinders secured.
- Reactions in progress should be terminated. Water-reactive materials should be placed in sealed containers and stored in areas that are unlikely to become wet.
- Turn off heat-generating equipment (e.g., hot plates, stir plates, ovens) and nonessential electrical devices.
- Check that refrigerator, freezer, and incubator doors are tightly closed. Freezers, refrigerators, and critical research equipment should be plugged into emergency electrical outlets, if they have not already been so.
- Ensure critical research data is backed up.
- Take all you personal electronics and necessary data home with you.
- Exit the laboratory, lock the door, and follow the instructions for a planned closure.

If experimental animals/plants are in use, special precautions may need to be taken into account for disruptions to care and feeding. Likewise, continuity plan to maintain critical cell/tissue cultures should also be drawn up.

Unless we are enforcing a complete shutdown, trained personnel with proper precaution taken may be allowed into the building to attend to the cells/tissues and animals/plants at pre-arranged specific time, under the full knowledge of the governing body housing the facilities.

A Chinese version of checklist based on that developed for IBMS and ICOB is provided as a separate document for your reference, which can be modified according to your own need.

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<sup>1</sup> This set of guidelines for potential closure of buildings and laboratories is based on the examples provided by Caltech, incorporating some by University of Alberta (courtesy of Todd Lowary), and modified by CAAC. No attempt is made to avoid plagiarism (some are directly copied and reproduced). General regulatory procedures already in place and not related specifically to laboratory shutdown are not included.