

Ref: CINTRA/SOP/012.00	Date of issue: 01 Jun 2018	Next review date: 31 May 2021
Title : CINTRA SOP on Good Housekeeping		
Audience : All Staff and Researchers in CINTRA		

1. PURPOSE

These procedures describe how a cleaning and housekeeping program for a laboratory in the CNRS International NTU-Thales Research Alliance (CINTRA) be performed.

2. SCOPE

The procedures detail guidelines on housekeeping apply to all workplaces within CNRS International NTU-Thales Research Alliance (CINTRA); including office, pantry area, laboratories, storage facilities, workshops, etc.

3. DEFINITION

3.1 CINTRA – refers to CNRS International NTU-Thales Research Alliance (CINTRA)

3.2 Cubicle - refers to any place within lab premise allocated to a research staff or research student for his personal use.

3.3 5S – refers to the Housekeeping Technique adopted

3.4 Shall - indicates an essential requirement

3.5 Should - indicates a recommendation

CONTROLLED COPY:

Printed copies of this document are considered uncontrolled. This copy is only valid only at the time of printing. For current and validated version, please refer to document available at CINTRA Safety Website.

4. RESPONSIBILITIES

4.1 CINTRA Safety Committee shall establish and oversee the implementation of the housekeeping standard on behalf of the Centre, including the disciplinary actions to be taken.

4.2 CINTRA Safety Officer shall check that housekeeping standards are being followed; that the controls are effective and to issue stop work order if the workplace is found to be cluttered.

4.3 Person-In-Charge (PIC) shall:

Implement a roster in their respective work area and ensure that the tasks assigned are completed.

Implement a system to regular remove clutter by organizing frequent housekeeping events in collaboration with other users every last week of the month.

4.4 Researchers and Administrative staff shall:

Maintain their own cubicle and/or demarcated area in the laboratory in a clean and tidy manner on a daily basis, complete the rostered tasks assigned and assist in removal of any clutter related to equipment or work areas during the housekeeping event.

Abide by the standard of housekeeping set at all times and when in doubt, ask.

5. GENERAL HOUSEKEEPING RULES

5.1 Clean up after yourself. Pick up your trash and debris and dispose of it properly, or place it where it will not pose a hazard to others.

5.2 Good housekeeping should always be maintained. Have a personal routine cleaning schedule.

5.3 Keep your cubicle clean throughout the day. This will minimize the amount of time needed to clean a "larger mess" at the end of the day.

CONTROLLED COPY:

Printed copies of this document are considered uncontrolled. This copy is only valid only at the time of printing. For current and validated version, please refer to document available at CINTRA Safety Website.

- 5.4 Storage of combustibles and flammables at your cubicle such as empty cardboard boxes, paper documents with no proper filing, should be avoided as it may pose as a FIRE hazard.
- 5.5 Do not bring in or store any hazardous, flammable or toxic materials to personal cubicle that may pose any risk / harm to others.
- 5.6 Personal items used or displayed must not irritate or pose any risk to others.
- 5.7 Do not use other cubicle other than the one allocated to you.
- 5.8 At the end of the day, make sure chair is stowed away, cubicle not cluttered with scrap papers or wrappers, rubbish thrown away properly and dust swept up.
- 5.9 Ensure that floors, sidewalks and all other walking and working surfaces kept free of debris and materials that can cause tripping and falling.
- 5.10 Regular cleaning of cubicle so that there be no dust, mould and mildew collected.
- 5.11 Regular disinfection to prevent potential health problems.
- 5.12 Regular housekeeping of all aisles and passageways to make sure you can exit the cubicle quickly and safely in an emergency.
- 5.13 Make sure there is no standing water that could be a breeding ground for mosquitos that spread dengue or other diseases.
- 5.14 Stack research papers articles, stationeries, materials and supplies orderly and secure them so they would not topple.
- 5.15 The eating area should be separate from the cubicle area, if possible.
- 5.16 Practice 5S of Housekeeping by following the standard established in the Centre as displayed (See Appendix 1).

6 HOUSEKEEPING RULES FOR LABORATORY

Housekeeping refers to the general condition and appearance of a laboratory to be observe at all time the following:

CONTROLLED COPY:

Printed copies of this document are considered uncontrolled. This copy is only valid only at the time of printing. For current and validated version, please refer to document available at CINTRA Safety Website.

- 6.1 All work areas and storage areas should be clean, neat and tidy.
- 6.2 Keeping all areas of the laboratory (include benches, fume hoods, refrigerators, cabinets, chemical storage cabinets, sinks, trash cans, etc) free of clutter, trash, extraneous equipment, and unused containers.
- 6.3 All aisles, stairways, passageways, means of exit, and entrances should be kept free from obstructions. Tripping hazards such as bottles, boxes, equipment, electric cords, etc. combustible materials may not be stored in exits (including corridors and stairways),
- 6.4 Keeping areas around emergency equipment such as fire extinguishers and fire hose reels clean and free of clutter.
- 6.5 Access points to emergency cut-off switches, valves, taps and alarms should be kept free of obstructions at all times.
- 6.6 Keeping a minimum of 1 metre of clearance between benches and equipment.
- 6.7 In sprinklered rooms, all storage, including both combustible (such as paper, boxes, plastics, etc.) and non-combustible materials, must be kept at least 0.5 metre below the level of the sprinkler head deflectors to ensure that fire sprinkler coverage is not impeded.
- 6.8 Tools, equipment, machinery, laboratories and other work areas are to be maintained in a clean and safe manner.
- 6.9 Return tools and equipment to their proper places when not in use.
- 6.10 Chairs and stools should be returned to their correct position at the completion of the day.

7. REASONS FOR HOUSEKEEPING

Good housekeeping has obvious health and safety benefits and can have a positive mental effect on laboratory personnel who work in a clean environment, which can lead to increased productivity. A clean and tidy workplace can contribute to the maintenance of a safe work environment, and can considerably reduce the risk of fire and other hazards.

CONTROLLED COPY:

Printed copies of this document are considered uncontrolled. This copy is only valid only at the time of printing. For current and validated version, please refer to document available at CINTRA Safety Website.

Housekeeping is not just cleanliness. It includes keeping work areas neat and orderly; maintaining floors free of slip and trip hazards; and removing of waste materials (e.g., paper, cardboard) and other fire hazards from work areas. It also requires paying attention to important details such as the layout of the whole workplace, aisle marking, the adequacy of storage facilities, and maintenance.

Effective housekeeping can eliminate some workplace hazards and help get a job done safely and properly. Poor housekeeping can frequently contribute to accidents by hiding hazards that cause injuries.

Effective housekeeping is also a basic part of accident and fire prevention.

The route to a safer, clutter-free lab is to make it a group effort. All lab users should make it part of their daily routine.

8. PROCEDURE

The PIC shall implement a good housekeeping programme identifies and assigns responsibilities for the following:

8.1 Tools

- 8.1.1 The orderly arrangement of tools
- 8.1.2 Requiring the users to return them promptly after use. This reduces the chance of being misplaced or lost.
- 8.1.3 Regularly inspected, cleaned and repaired all tools and take any damaged or worn tools out of service.

8.2 Equipment

- 8.2.1 The Person-in-Charge shall produce the roster and nominate the **time and day at the last week** of the month where all lab users are to attend to their allocated task.
- 8.2.2 All persons working in the area (including researchers and academics where appropriate) shall participate in the roster. They are responsible to perform the task allocated.
- 8.2.3 At the end of the project, all equipment must be returned to the respective storage area where they were taken.

CONTROLLED COPY:

Printed copies of this document are considered uncontrolled. This copy is only valid only at the time of printing. For current and validated version, please refer to document available at CINTRA Safety Website.

- 8.2.4 The orderly arrangement of equipment is important to remove any resemblance of clutter.
- 8.2.5 Faulty / obsolete equipment not used after 5 years shall be properly disposed off.

8.3 Equipment Maintenance

- 8.3.1 Each item of equipment that requires regular maintenance and/ or cleaning should have a *Maintenance Log* kept in a plastic sleeve or folder located on or adjacent to the equipment.
- 8.3.2 Procedures for the frequency of maintenance and cleaning should be written as part of the *Standard Operating Procedure* or as a separate maintenance procedures, depending on the complexity of the equipment.
- 8.3.3 Smaller items of equipment not requiring additional maintenance is be listed on a separate cleaning checklist based on their frequency of cleaning (ie the monthly or semester schedule).
- 8.3.4 Broken floor surfaces broken or damaged items are to be replaced as quickly as possible.

8.4 Waste Disposal

- 8.4.1 Allowing material to build up on the floor wastes time and energy since additional time is required for cleaning it up. Placing scrap containers near where the waste is produced encourages orderly waste disposal and makes collection easier.
- 8.4.2 All waste receptacles should be clearly labelled (e.g., recyclable glass, plastic, scrap metal, etc.).
- 8.4.3 At the end of the project, all scrap materials, leftover and samples must be properly disposed off.

CONTROLLED COPY:

Printed copies of this document are considered uncontrolled. This copy is only valid only at the time of printing. For current and validated version, please refer to document available at CINTRA Safety Website.

8.5 Storage

- 8.5.1 The location of the stockpiles should not interfere with work but they should still be readily available when required.
- 8.5.2 Stacking cartons and drums on a firm foundation and cross tying them, where necessary, reduces the chance of their movement. Stored materials should not obstruct aisles, stairs, exits, fire equipment, emergency eyewash fountains, emergency showers, or first aid stations. All storage areas should be clearly marked.
- 8.5.3 Flammable, combustible, toxic and other hazardous materials should be stored in approved containers in designated areas that are appropriate for the different hazards that they pose.
- 8.5.4 Storage of materials should meet all requirements specified in the fire codes and the regulations.

9. 5S: GOOD HOUSEKEEPING TECHNIQUE

5S is the acronym for five Japanese words: Seiri, Seiton, Seiso, Seiketsu and Shitsuke and they represent the five steps for a systematic technique for good housekeeping as indicated in Table 1 below:

Table 1

Step	Action
Seiri (Sort)	Throw away unnecessary & unrelated material in your workplace
Seiton (Set in Order)	Set everything in proper place for quick retrieval and storage
Seiso (Shine)	Clean your workplace and looks for way to keep it clean
Seiketsu (Standardise)	Standardize the way of maintaining order and cleanliness
Shitsuke (Sustain)	Practice '5S' daily – make it a way of life; this is also means 'commitment'

CONTROLLED COPY:

Printed copies of this document are considered uncontrolled. This copy is only valid only at the time of printing. For current and validated version, please refer to document available at CINTRA Safety Website.

Appendix 1 – 5S Standard for workplace – A place for everything and everything in its place

SORT/CLEARING

Throw away unnecessary & unrelated material in your workplace

SET/ORGANIZE

Set everything in proper place for quick retrieval and storage

SHINE/SWEEP

Clean your workplace

STANDARDIZE

Standardize the way of maintaining order and cleanliness

SUSTAIN

Practice '5S' daily – make it a way of life; this is also means 'commitment'



OK CONDITION



CHECK EVERY POINTS WHEN LEAVING

- Turn off equipment and Personal Computer before leaving
- Turn off the lights before leaving
- Tidy up your workplace before leaving
- Report any problems immediately to the Person-in-Charge (PIC).

CONTROLLED COPY:

Printed copies of this document are considered uncontrolled. This copy is only valid only at the time of printing. For current and validated version, please refer to document available at CINTRA Safety Website.

Version History

This Table below reflects the summary of changes made to the document. The full change information is indicated with yellow highlight in the document content.

Revision	Section	Details of Change	Author	Effective Date	Approved By
00	-	Initial Release	Wang Xingli (Dr)	01 Jun 2018	Dinh Xuan Quyen (Dr)

CONTROLLED COPY:

Printed copies of this document are considered uncontrolled. This copy is only valid only at the time of printing. For current and validated version, please refer to document available at CINTRA Safety Website.