1.0 OBJECTIVE

This procedure states the measures to be taken in the management of contractors working in laboratories and halls of residences so as to ensure a safe working environment for the contractors, the staff and students of the University.

2.0 SCOPE

2.1 This SOP is applicable to the following types of work:
   a. Any contractors involved in lab cleaning, servicing of laboratory equipment or minor works in laboratories.
   b. Any contractors involved in maintenance and renovation works in the following workplaces such as Residence Hall, Staff Housing, F&B Outlet, Landscaping and UHWC. Reference should also be made to OED’s SOP on contractor management.

2.2 This SOP does not apply to new building construction work in the University. Reference should also be made to OED’s SOP on contractor management.

3 RESPONSIBILITIES

3.1 Contract Awarding Party
The Contract Awarding Party has to ensure that the contractors are aware of the Safety & Health policies of NUS. The Contract Awarding Party shall liaise between the contractor and the party in-charge where the work is being carried out (E.g. the Principal Investigator / Laboratory Officer / Hall or Residence Manager / Faculty Safety & Health Officer).

3.2 Designated Officer
Prior to the commencement of any work by a contractor, the designated officer in the Contracting Awarding Party is to ensure that the scope of works is clearly defined with the contractor and informing the contractor of his Safety & Health responsibilities.

3.3 Principal Investigator / Laboratory Officer / Hall or Residence Manager
a. Informing and brief contractors regarding the specific hazards in their work area and in the work they will be doing, and the Safety & Health policies and safe work practices they are required to follow;
   b. Scheduling time for the contractors to attend designated training sessions;
   c. Monitoring contractors working in their areas of management comply with the safety management system and safe operating procedure.
3.4 Responsibility of a Contractor
   a. The Contractors shall be:
      i. Suitably qualified and experienced to perform the tasks.
      ii. In possession of all necessary licenses, permits, registrations and insurance required to perform the works safely and in compliance with appropriate regulations.
      iii. Notified of any potential hazards associated with the location or use of the area where the works are to be carried out.
      iv. Made aware of the University Emergency Procedures, inducted in the Universities Safety & Health Policies and on campus requirements.

   b. The duties of a contractor at the workplace are to undertake the works in a responsible and safe manner, and as outlined in the scope of works and contract documentation.

   c. The duties of a contractor at the workplace relate only to matters over which, and the extent to which, the contractor has control or can reasonably be expected to have control at the site. Contractors are defined as employers if they engage other sub-contractors to carry out some of their work.

   d. Contractors and their Sub-Contractors have a responsibility to ensure that new employees engaged by them are familiar with the University’s procedures outlined in relevant University policies, SOPs and the contract documentation.

   e. Strictly follow warning signage/ labeling / color codes of dangerous locations, containers, packing etc to ensure their own safety. If in doubt, the contractor should get instructions from the Designated Officer.

   f. Ensure the signage notice “Contractor Control-Hazard Notice” is prominently display at their work area.

4 DEFINITION

Standard: Singapore standards or international standards related the specific subject.


Employee: A person by whom work is done under a contract of employment;

Employer: A person by whom an employee is employed under a contract of employment
Code of Practice: A code of practice approved by the University

Contractor: The person, partnership or corporation bound to execute the work under the contract and shall be responsible for the supervision of the works so as to ensure the works are carried out in accordance with the contract.

Sub-Contractor: The person, partnership or corporation bound by the contractor to execute work under the contract.

Contract Awarding Party: A NUS staff (either from OED or Individual Hall) who appointed contractors on behalf of NUS to carry out work in University premises.

Hazard: means in relation to a person, anything that may result in injury to the person; or harm to the health of a person.

Induction: Instruction and training on the safety and health requirements of the workplace.

Plant: Any machinery, equipment, appliance, implement, or tool and any component or fitting thereof or accessory thereto.

Principal Investigator (PI): The primary individual in charge of a research grant, cooperative agreement, training or public service project, contract, or other sponsored project or directs a research project or program or the lead scientist for a particular well-defined science project, such as a laboratory study or clinical trial. (E.g. PI may share or own more than one laboratory unit).

Laboratory officer (Lab officer): A University employee nominated to the contractor as the representative of the University.

Risk: The probability that a hazard will result in an injury to a person or damage to property.

Safety & Health Management System: Written documentation detailing the safety and health policies and procedures that employees and their Contractors are required to adhere to.

Scope of Works: All the work referred to in the contract documents, all variations thereto instructed, sanctioned or required under the terms of the contract and all minor terms of work inferred there from for the proper execution and completion of the works.
The University: The NUS - including all Faculties/ residence hall / departments/ Campuses, and any other areas owned and maintained by the National University of Singapore.

Workplaces: A place, where by employees, contractors work or are likely to be in the course of their work within the NUS Premises. The workplaces as defined are as follows: Residence Hall, Staff Housing, F&B Outlet, Landscaping and UHWC.

Hall or Residence Manager: A person delegate by the Hall Master to be in-charge of the day to day operation of the Hall.

Office of Estate & Development (OED): Department overseeing campus development and services.

Standard Operating Procedure (SOP): Standard guideline or operating procedure to define how an activity is to be carried out in a structured manner

5  PROCEDURES

5.1  Legislative Requirements
a.  The Contractor shall comply with all relevant Acts & Regulations of Singapore Standards, Codes of Practice and NUS Safety & Health manual. The Contractor shall ensure that their employees and Sub-Contractors comply with the above mentioned requirements.

b.  If, during any stage of the contractual works it is brought to the attention of the PI/Lab officer/Hall or Residence Manager that Safety & Health standards, organizational requirements, or legislative requirements are not being adhered to, the PI/Lab officer/Hall or Residence Manager may stop the works until the Contractor has rectified the situation.

5.2  Policy Requirements

5.2.1  Prior to Commencement of Work, the Contractor is required to:
   a.  Confirm with the Lab officer/Hall or Residence Manager that they are in receipt of all safety-related information regarding the contract works to be undertaken;

   b.  Discuss with the Contract Awarding Party in the University’s and the Contractor’s safety and health responsibilities necessary to undertake the contract of works. The responsibilities are to be agreed by all parties.
c. Provide the University with a copy of relevant documentation for the job, including all licenses and permits where applicable;

d. Sign and return the Contractor Risk Management Checklists (Appendix 1 for Laboratory and Appendix 2 for Workplaces) to the Lab officer (Appendix 1)/Hall or Resident manager (Appendix 2) to indicate that they understand the administrative and legislative procedures expected to be followed whilst undertaking work at the University. Contractors will be expected to complete and return the checklists upon their initial appointment and subsequently on project basis;

e. For cleaners engaged in the task for cleaning work to sign and return the Safety & Health Rules For Cleaners Working in NUS (Appendix 3 for Laboratory and Appendix 4 for Workplaces). This form to be given to the PI/Lab Officer (Appendix 3)/Hall or Residence Manager (Appendix 4) when new cleaner commence work in the university by the contractors.

5.2.2 Prior to the commencement of any work the Lab officer / Hall or Residence Manager are required to:

a. Provide the Contractor with details regarding the hazards that the University is aware of with respect to working at a specific site; and

b. Be in receipt of the completed and signed copies of Appendix One (for Lab Officer) and two documents (For Hall or Residence Manager).

c. Issued the “Contractor Control-Hazard Notice” sign to the contractor for display at their work area.

5.3 Planning and Design

a. Prior to any work being undertaken, the Contractor shall take appropriate steps to ensure that adequate planning and design of the systems of work and processes have been carried out, for example erecting warning signs and barriers, to avoid any foreseeable safety and health issues. It is the Contractor’s responsibility to ensure that employees under their control and supervision are aware of and comply with the relevant legislative Safety & Health requirements.

b. The Contractor shall ensure that adequate supervision of its employees, or sub-Contractors undertaking the work are provided and that staff are appropriately trained for the tasks, which they are required to undertake.
This includes possessing all relevant certificates of competency and training.

5.4 Deviations from the Original Contract of Works
If the Contractor is required to undertake any work which deviates from the original contractual arrangement, the Contractor must, before undertaking the deviation obtain approval to proceed from the person who originated the contract of works and ensure that appropriate measures are taken to reduce the risk associated with their works.

5.5 Selection of Contractors
a. During the selection stage, the safety and health competence and performance of the Contractors should be taken into consideration.

b. Only Contractors who have been assessed by the PI/Lab officer/Hall or Residence Manager, as meeting the safety and health competence requirements for the work required should be considered for further evaluation. Selection criteria should be assessed using preliminary information provided by the contractor and based on the contractor’s general technical competence.

c. Further evaluation should be conducted e.g. document presentation, interview or an audit, depending on the size and/or complexity of the contract.

d. The University reserves the right to use other Contractors as it sees fit.

5.6 Reporting Procedures Prior to Commencing Work
a. Before commencing work at the University, the PI/Lab officer/Hall or Residence Manager who is coordinating the work is to ensure that the University is receipt of:

i. The Contractors Safety & Health Management Plan or other documents, where applicable, demonstrating that the Contractor has considered occupational safety and health in the work activities;

ii. The Induction record, Undertaking letter and any applicable licenses, permits, certificates etc that are required to perform the work.

b. On arriving at the University to perform work, the Contractor is to report to the PI/Lab officer/Hall or Residence Manager or the Designated Officer.

5.7 Workplace Procedures
The PI/Lab Officer/Hall or Residence Manager shall brief the Contractors and/or their employees on workplace specific safety related SOPs.
5.8 Safety Signage Notice

5.8.1 Proper risk assessment has to be conducted prior to deciding the sign to be selected. The risk assessment exercise has to be conducted according to prescribed risk assessment framework.

5.8.2 The standard format for sign to be posted at the work area is shown in Appendix 5. The OSHE Contractor Control-Hazard Sign Generator software for the generation of signage is posted on OSHE website (https://wws.nus.edu.sg/workplacesign/con_ctrl_sign.aspx).

5.8.3 The PI/Lab Officer/Hall or Residence Manager has to select the appropriate hazard signs according to the hazards present in the workplace. Other information on the sign has to be duly filled.

5.8.4 The standard sign shall be printed in colour on a standard A4 sized paper (minimum size). The sign must be clear and can be seen clearly from a distance of 5 meter away. Sufficient numbers of sign to be post in prominent location of the work areas.

5.8.5 The sign must be enclosed in a transparent plastic folder or laminated. The sign must be firmly affix on the work areas.

5.8.6 The signage must be review every time there is change in the work activities of the particular work area or when the scope of work changes.

5.8.7 Sign to be removed by the contractor when work on the area completed and the work area render free from any hazard.

5.9 Procedures upon completion of work

5.9.1 Contracted Work Fully Completed

a. When the contract work is fully completed, the contractor is to notify the Lab officer/Hall or Residence Manager for a final inspection to ensure that works have been completed to the University’s satisfaction.

b. The Contractor and its employees are to ensure that the work site is left free from hazards and presents no risk of injury to any person who comes into contact with the site. This includes making sure that all refuse and materials are removed from the site on completion of the works.
c. Should there be wastes left at the site on completion of works the Contractor shall remove them from the University at their own expense in a non-hazardous environmentally friendly manner. If the contractor fails to make a work site safe and free of hazards and waste at the completion of a contract it may be removed from the preferred Contractors register.

5.9.2 Contracted Work Not Fully Completed

If the Contractor, Sub-Contractor, or their employee(s) advise the Lab officer/Hall or Residence Manager that the contract work is not complete and that they are leaving the University’s grounds, the contractor is to ensure that the work site is left in a clean and safe condition free from any hazards that may affect University staff, students and/or visitors.

6 RECORDS

Contractor Risk Management Checklists and Safety & Health Rules For Cleaners Working in NUS to be retained by PI/Lab Officer/Hall or Residence Manager for one year.

7 REFERENCES

a. OED’s contract document
b. SOP on warning signage and labeling.
c. Faculty Safety & Health Management System.

8 APPENDICES

Appendix 1: Contractor Risk Management Checklist (For Laboratory)
Appendix 2: Contractor Risk Management Checklist (For Workplaces)
Appendix 3: Safety & Health Rules for Cleaners Working in NUS (“DOs” AND DON'Ts”) (For Laboratory)
Appendix 4: Safety & Health Rules for Cleaners Working in NUS (“DOs” AND DON'Ts”) (For Workplaces)
Appendix 5: Contractor Control-Hazard Notice (Sample)
Appendix 1:

NATIONAL UNIVERSITY OF SINGAPORE
CONTRACTOR RISK MANAGEMENT CHECKLIST

DUTIES AND RESPONSIBILITY FOR CONTRACTOR’S SUPERVISOR
(For Laboratory)

Scope of Work: _________________________________________________________________

Contractor Supervisors are to:

1. Submit risk assessment for the work activities to be conducted prior to start work and
   their workers brief on the risk involved.

2. Give adequate instruction to their workers on the possible dangers in the labs
   and keep a record showing that the contractor has briefed their workers
   before they commence work.

3. Monitor and supervise their worker’s safety and health regularly.

4. Inform departments / OED immediately of all accidents / incidents to their
   staff or any third party within NUS.

5. Instruct their workers not to start hot work without permit.

6. Provide all necessary personal protective equipments such as but not limited to gloves,
   safety spectacle, mask etc. to every single worker.

The above MUST be complied with to prevent accidents and injuries to contractors,
staff and students.

I, ________________________________ (name of supervisor) acknowledge that I
have received, read and understand the duties and responsibility for Supervisor. I
agree to abide by these rules to the best of my ability while working in NUS.

________________________________    ______________
Contractor Supervisor’s Signature      Date

_________________________________________  _______________
Name and signature of representative      Date
of NUS contract awarding party
NATIONAL UNIVERSITY OF SINGAPORE
CONTRACTOR RISK MANAGEMENT CHECKLIST

HAZARD NOTIFICATION/ BRIEF RECORD

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<tr>
<td>Date of work start and completion:</td>
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The above contractor was briefed on _________________ (date) on the following points involved and protection measures to prevent potential and existing hazards:

1. Type of hazards and risks involved;
2. Personal Protective Equipment required
3. Procedures in the event of any accident/ incident
4. First aid measures

(Include below any specific hazard identified and measures taken to eliminate or minimize hazard)

5. ______________________________________________________
6. ______________________________________________________
7. ______________________________________________________
8. ______________________________________________________

<table>
<thead>
<tr>
<th>Name/Signature of the Lab Officer</th>
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Appendix 2

NATIONAL UNIVERSITY OF SINGAPORE
CONTRACTOR RISK MANAGEMENT CHECKLIST
DUTIES AND RESPONSIBILITY FOR CONTRACTOR’S SUPERVISOR
(For Workplaces)

Scope of Work: __________________________________________________________

Contractor Supervisors are to:

1. Submit risk assessment for the work activities to be conducted prior to start work and their
workers brief on the risk involved.

2. Give adequate instruction to their workers on the possible dangers in the workplace and keep
a record showing that the contractor has briefed their workers before they commence work.

3. Inform the Designated Officer immediately of all accidents/incidents.

4. Monitor and supervise their worker’s safety and health regularly.

5. Instruct their workers not to work from height without safety harness and shock absorber to be
installed when potential falling distance exceed 6m.

6. Instruct workers not to work on the roofs in wet weather and/or without proper fall arrest
system in place (e.g. Life line, Life line anchor point design by PE & safety harness).

7. Where work cannot be accessible safely by ladder (e.g. work above 3m from ground to feet
level), scaffold/working platform to be used. Scaffold/working platform to be erected according
to local standard/statutory requirement.

8. Instruct their workers not to start hot work without permit

9. Instruct their workers to wear safety shoes and helmets at all time

10. Provide all necessary personal protective equipments such as but not limited to gloves, safety
spectacle, mask etc. to every single worker.

The supervisor MUST comply with every single point stated above to prevent accidents and
injuries to workers, staff and students.

I, ____________________________ (name of supervisor) acknowledge that I have
received, read and understood the duties and responsibility as a Supervisor. I agree to abide by
these rules to the best of my abilities while working within the NUS premises.

Contractor Supervisor’s Signature ____________________________ Date __________

Name and signature of representative ____________________________ Date __________
of NUS contract awarding party
<table>
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<td>Company:</td>
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<tr>
<td>Date of work start and completion:</td>
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The above contractor was briefed on ______________________ (date) on the following points involved and protection measures to prevent potential and existing hazards:

9. Type of hazards and risks involved;

10. Personal Protective Equipment required

11. Procedures in the event of any accident/ incident

12. First aid measures

(Include below any specific hazard identified and measures taken to eliminate or minimize hazard)

13. ______________________________________________________

14. ______________________________________________________

15. ______________________________________________________

16. ______________________________________________________

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Appendix 3:

SAFETY & HEALTH RULES FOR CLEANERS WORKING IN NUS ("DOs" AND DON'Ts")
(For Laboratory)

Cleaners are to:
1. Report to their Supervisors immediately if:
   a. There is any accident resulting in personal injury.
   b. They unintentionally disrupt experimental setups.
   c. They accidentally cause spills.
   d. There are any unusual wastes they have encountered during their waste collection.
2. Wear proper protective gloves when clearing the rubbish.
3. Sign in and out and report to the laboratory Officer when entering the laboratory.
4. Empty the waste paper basket along the corridor (ONLY)

Cleaners are NOT to:
1. Clean any lab workbenches, shelves, cupboards, instruments, refrigerators, equipment or chemical bottles.
2. Move or touch any experimental set up, chemical bottles on any work benches, equipment or instrument in the labs.
3. Be involved in the chemical or broken glass disposal, this job is to be handled by the lab staff only.
4. Enter into the labs without the approval from the lab staff.
5. Sweep or mop the labs without the approval and supervision of the lab supervisor.

The above MUST be strictly complied with to prevent accidents and injuries to contractors, staff and students.

I, ____________________________ (name of Cleaner) acknowledge that I have received, read and understand the above Safety & Health Rules for cleaners. I agree to abide by these rules to the best of my ability while working as a cleaner in NUS laboratory.

______________________________   __________________
Cleaner’s Signature         Date

Explained to Cleaner by the Contractor Supervisor in:
* □English □Malay □Mandarin □Tamil

______________________________   __________________
Contractor’s Supervisor Name & Signature         Date
*Please tick one
Appendix 4:

SAFETY & HEALTH RULES FOR CLEANERS WORKING IN NUS (“DOs” AND DON’Ts”) (For Workplaces)

Cleaners are to:
1. Report to their Supervisors immediately if:
   a. There is any accident resulting in personal injury.
   b. They unintentionally disrupt the office area setups.
   c. They accidentally cause the spillage of detergent and contaminant water from the washing/toilet area into the storm drain.
   d. There are any unusual waste/items found in the work area.
   e. Spot any illegal dumping of rubbish/trash.

2. Wear proper protective gloves when clearing the rubbish.

3. Collect the rubbish/trash into the designated bin as assigned by the NUS staff in the central collection area.

Cleaners are NOT to:
1. Cause/spill the detergent or dirty washing/toilet water into the common area or storm drain.

2. Move/remove/relocated any bin/office item/staff personnel from their original assign area without approval from the NUS staff.

3. Dump the rubbish/trash collect in unauthorized area.

4. Enter into any room/common area not authorized to him/her.

The above MUST be strictly complied with to prevent accidents and injuries to contractors, staff and students.

I, ______________________________________ (name of Cleaner) acknowledge that I have received, read and understand the above Safety & Health Rules for cleaners. I agree to abide by these rules to the best of my ability while working as a cleaner in NUS.

__________________________________       __________________
Cleaner’s Signature         Date

Explained to Cleaner by the Contractor Supervisor in:

* □ English    □ Malay    □ Mandarin    □ Tamil

__________________________________       __________________
Contractor’s Supervisor Name & Signature    Date

*Please tick one
Appendix 5

Contractor Control - Hazard Notice

Hazards in the General Workplace

- Tripping Hazard
- No Entry - Except Authorized Personnel

Personal Protection Required

- Foot Protection
- Head Protection

Special Procedures or Precautions

None

Admittance to Authorized Personnel Only

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<th>Contact After Office Hour</th>
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<td>9XXX XXXX</td>
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<td>6XXX XXXX</td>
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Emergency Contact Numbers

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<td>Wellness Centre</td>
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Project Description Alteration & Addition Work to OSHE Office
Project Location Alumni Basement, OSHE NUS
Project Period 03 Jun 2008 - 12 Jun 2008
Date Posted: 09 Jun 2008