

SAFETY

AND

ENVIRONMENTAL PROTECTION

HANDBOOK

FOR CONTRACTOR'S WORK

VERSION	ISSUE DATE
1.0 (1 st Issue)	August 1996
1.1 (1 st Revision)	July 1998
1.2 (2 nd Revision)	November 1999
1.3 (3 rd Revision)	March 2001
2.0 (2 nd Issue)	November 2003
3.0 (3 rd Issue)	June 2009
3.1 (1 st Revision)	July 2010
3.2 (2 nd Revision)	October 2014
3.3 (3 rd Revision)	December 2015
3.4 (4 th Revision)	January 2017
3.5 (5 th Revision)	March 2025

Facilities Management Office

CONTENTS

		<u>Page</u>
1.0	OBJECTIVE	4
2.0	TERMINOLOGY	4
3.0	RESPONSIBILITIES	
3.1 3.2 3.3 3.4 3.5 3.6 3.7	Duty Liability Contractor's Safety Officer Role Supervision Safety Guidelines and Standards Supervision Plan Disciplines of Workmen	5 5 5 6 6
4.0	INDUSTRIAL ACCIDENT, EMERGENCY, TYPHOON AND RAINSTORM	
4.1 4.2	Site Contact Person and Reporting of Accidents / Incidents Typhoon and Rainstorm Actions	6 7
5.0	SITE BOUNDARY	
5.1 5.2 5.3 5.4 5.5	Security and Surveillance Maintenance of Unobstructed Fire Escape Routes Lighting for Pedestrian Hoarding Site Activities	7 8 8 8 8
6.0	SITE MANAGEMENT	
6.1 6.2 6.3 6.4 6.5 6.6	Site Cleanliness and Debris Removal Adverse Weather Condition Work in Hot Environment First Aid Fire Fighting Equipment No Smoking First Aid Provision	8 8 9 9 9
6.7 6.8	Personal Protective Equipment Provision Fencing	9 9

<u>Page</u>

9

9

9

6.12	Entry to High Risk Areas	10
6.13	Working Hours	10
7.0	PROTECTION OF ENVIRONMENT AND THIRD PARTIES	
7.1	Protection against Personnel, Existing Equipment, Furniture and Installation	11
7.2	Protection against Dust and Noise Generation	11
7.3	Warning Notices	11
7.4	Maintenance of Clear Means of Access and Egress	11
7.5	Transportation of Materials within the Communal Areas	11
7.6	Foul Drain Treatment	11
8.0	TEMPORARY ELECTRICAL WORKS	
8.1	Registered Electrical Workers	12
8.2	Connection of Temporary Power	12
8.3	Temporary Electrical Wiring	12
8.4	Protection of Live Electrical Items	12
9.0	SAFETY MEASURES FOR SPECIAL PROCESSES	
9.1	Grinding and Cutting of Metals	12
9.2	Electrical Welding	13
9.3	Gas Welding and Cutting	13
9.4	Dangerous Goods / Harmful Substances	14
9.5	Woodworking	14
9.6	Use of Compressed Air Tools	14
9.7	Use of Mobile Aluminum Tower / Working Platform	15
9.8	Erecting Truss-out Bamboo Scaffold	15
10.0	CONTROL PROCEDURE FOR SITE SUPERVISION	16
11.0	GENERAL HOUSE RULES	16
12.0	WORK NOTICE	17
13.0	ENVIRONMENTAL GUIDELINES FOR CONTRACTOR	17

6.9

Working at Height

6.10 Working in Confined Spaces

6.11 Application of Flammable Liquids

1.0 OBJECTIVE

- 1.1 The Contractor's attention is drawn to this Handbook whenever they carry out repairs, maintenance, construction, alterations, improvements, extensions and additions within the City University's Campus or building. They are to observe the requirements as set out in this Handbook. It must not be assumed that the contents of this Handbook contain every safety and health aspects which may arise relating to the Contractor's work. This Handbook does not relieve the Contractor of responsibilities to his employees and his liabilities under the Conditions of Contract, Preliminaries, Specification, etc. that he has entered into with the University. The Contractor shall in every respect observe his obligations under the local statutory regulations.
- 1.2 This Handbook acts as a supplement to the Conditions of Contract and does not take precedent over the Contract conditions. If there are conflicts between conditions or requirements in this Handbook and the Conditions of Contract, the latter will prevail.
- 1.3 The Contractor shall note that the guidelines contained in this Handbook cover minimum requirements and not preclude other safety and health precaution measures which the Contractor shall implement to mitigate any possible hazardous event arising.

2.0 TERMINOLOGY

2.1	CityUHK -	City University of Hong Kong
2.2	Project Manager -	The designated staff of Facilities Management Office of CityUHK who leads the project or manages the Contract. He has the right to stop the Contractor's work if the working process or environment poses risk to safety and health.
2.3	Safety Manager -	The Safety Manager appointed by CityUHK to oversee safety and health matters within the Campus and quarters. He will give advice on the safety and health matters to protect CityUHK's interest.
2.4	Supervision Plan -	The Government of the Hong Kong Special Administrative Region has issued a code of practice for site safety supervision relating to construction work. The Supervision Plan is a document which contains the risk assessment for the construction work. It shall include detailed statements which demonstrate the Contractor's understanding of what measures the Contract will take to prevent exposure to any health or safety risk. Procedures and method statements shall be iterated to detail what is required to ensure safe working conditions and how those safe conditions will be achieved.

3.0 **RESPONSIBILITIES**

3.1 Duty

In general, the Contractor is required to observe his duties and liabilities in respect of both safety and health within the site, to protect against fire, industrial accidents and third parties laid down in the regulations by the Labour Department and other Authorities. It includes, but not limited to, recruitment of a safety officer, regular and proper supervision of safety matters, provision of personal protective equipment and fire fighting equipment, safety measures for protection of third parties and adequate safety training to the employees. In particular, when the site work has been registered by the Contractor and Authorised Person with the Building Authority, the related regulations in respect of safety and health under the Building Ordinance shall also be observed.

3.2 Liability

The Contractor shall bear the liabilities in association with his responsibility with respect to safety and health as specified in the Buildings Ordinance Chapter 123 and other statutory regulations. Notwithstanding this, the Contractor shall bear the loss suffered by CityUHK if it is directly due to Contractor's negligence in observing safety procedures. The Contractor's strict observance of his liability to the third party is essential in working with CityUHK as his work area is literally open to the public.

3.3 Contractor's Safety Officer Role

The Contractor shall follow the regulations as laid down by the Labour Department to appoint a qualified Safety Officer for his Site. The Safety Officer shall exercise his duties properly to advise the Contractor on safety matters within the site boundary and to report accidents and to co-ordinate actively with the Safety Manager of CityUHK for safety and health issues which may affect CityUHK's property and occupants during the construction period.

3.4 Supervision

The Contractor shall have responsibility to institute safety measures during the construction process and appoint site supervisors to monitor his employees and sub-contractors to work in a safe manner. The supervisors are required to provide all necessary superintendence during the execution of the works on site and to exercise their authority to enforce safety procedures, house rules and guidelines of CityUHK. In the past, most of the accidents affecting CityUHK are mainly due to inadequate supervision of the workers by the Contractor.

3.5 Safety Guidelines and Standards

Publications on safety and health (such as pamphlets, booklets, posters, etc.) are obtainable from the <u>Labour Department (LD)</u>, <u>Buildings Department (BD)</u>, <u>Fire Services</u> <u>Department (FSD)</u>, <u>Electrical and Mechanical Services Department (EMSD)</u>, <u>Environmental Protection Department (EPD)</u> and <u>Occupational Safety and Health Council (OSHC)</u>. This handbook nonetheless shall only indicate those critical and particular items pertaining to either fire, environmental protection, safety and health which have direct bearing on occupants. While for the safety policy, planning, training of employees, safe operation of equipment, and others, the Contractor shall refer to the appropriate Guides published by above mentioned departments of HKSAR Government and statutory bodies for promoting safety and health at work, including but not limited to:-

- Publications for Occupational Safety (LD)
- Publications for Occupational Health (LD)
- Publications for Pressure Equipment (LD)
- <a>

 <br/
-
 www.example.com
 www.example.com
 www.example.com
 www.example.com
 www.example.com
 www.example.com
 www.example.com
 www.example.com
 www.example.com

 www.example.com
 www.example.com
 www.example.com
 www.example.com
 www.example.com
 www.example.com
 wwww.example.com
- <a><Technical Memorandum for Supervision Plans 2009> (BD)
- <Guidelines on the Design and Construction of Bamboo Scaffolds> (BD)
- <Code of Practice for the Electricity (Wiring) Regulations> (2009 Edition) (EMSD)
- Guide Books & Codes of Practice for Environmental Protection (EPD)
- OSH Bookshelf (OSHC)

3.6 Supervision Plan

Depending on the complexity of the work and the environment of the site, within one month after the award of Contract, the Contractor may be required by the Project Manager to submit a safety supervision plan which shall include the detailed procedures, method statements and requirements which, when implemented, will achieve compliance with Contractor's safety and health obligation and responsibilities under the Contract.

3.7 Disciplines of Workmen

The Contractor shall provide safety training to his workmen and keep them informed of the required site safety practices contained in this Handbook. In particular, if their work is likely to cause danger, injury and damage to the staff, students and the public within the CityUHK's Campus, they should be forewarned. In addition to this, should the workmen be found smoking, dressed improperly or any misbehaviour, they should be warned by their supervisor and the CityUHK's Project Manager can request the supervisor to remove the offending workmen from site.

4.0 INDUSTRIAL ACCIDENT, EMERGENCY, TYPHOON AND RAINSTORM

4.1 Site Contact Person and Reporting of Accidents / Incidents

During the construction period, the Contractor shall designate a responsible person on site to report accident and emergency including fire to the Project Manager. This person shall be the site supervisor or other senior officer who is familiar with the site conditions and has authority. A verbal report shall be communicated to the Project Manager or his representative immediately after the incident and a written incident report shall be formally submitted to the Project Manager within two working days.

4.2 Typhoon and Rainstorm Actions

The Contractor shall exercise his duties to provide necessary precautionary measures to protect his work and the affected public in adverse weather which may be either typhoon, rainstorm or adverse weather. Whenever the typhoon signal is hoisted or the rainstorm warning is issued, the Contractor shall take the following precautionary measures:-

- 4.2.1 Secure and fasten the works, scaffolding, working platforms and temporary structures.
- 4.2.2 Fasten all loose materials or move them to a protected area.
- 4.2.3 Stop high risk / dangerous areas works, for instance: floor edges, toe of slopes, excavation trench, work platforms, confined spaces, etc.
- 4.2.4 Demobilize mobile cranes, power-operated elevating work platforms, etc. and retrieve their jibs / booms in correct position.
- 4.2.5 Demobilize and leave all plants in idling position. Provide additional guy wires / lashings where necessary.
- 4.2.6 Brace temporary site offices, storage containers and formwork, and lash to reinforce their security.
- 4.2.7 Inspect the secured site and protect against possible ingress of water.
- 4.2.8 Inspect and remove any blockages to permanent / temporary drainage outlets and channels.
- 4.2.9 Provide flood boards and sandbags to mitigate construction debris drifting from construction site to adjacent drainage outlets and manholes in CityUHK Campus.
- 4.2.10 Inspect the site and report to the Project Manager any damages after the typhoon / rainstorm for insurance purpose.

When Tropical Cyclone Warning Signal Pre-No. 8 or above is hoisted or when Rainstorm Black Warning is issued, the Contractor shall inform his workers to stop work in outdoor areas. The Contractor shall report to the Project Manager on the protection measures having taken before leaving the working site.

The stoppage of work due to Typhoon or Rainstorm shall not vitiate the Contractor's right, duties and liabilities in the Conditions of Contract.

5.0 SITE BOUNDARY

Whenever the Contractor has taken possession of a well-defined site, he shall observe the following requirements:-

5.1 Security and Surveillance

The Contractor shall provide adequate security to the site boundaries so as to avoid bystanders and intruders getting into the site. Proper surveillance by security guards at the site shall be provided so that untoward accidents, like fire and theft, can be minimized especially at non-working hours.

5.2 Maintenance of Unobstructed Fire Escape Routes

Along the site boundaries and exits, the Contractor shall ensure the escape routes are clear of obstacles, debris and stored goods.

5.3 Lighting for Pedestrian

Should hoarding be required to enclose the site, lighting fixtures shall be installed to supplement the illumination at adjacent environment for pedestrian's movement.

5.4 Hoarding

The Contractor shall provide proper painted hoarding or fencing at the perimeter of the site as required by Buildings Regulation, Specification, Drawings, etc. with warning notices, information regarding the works and contact phone number(s). Material and installation details shall be submitted to the Project Manager for approval before the erection work. Unless otherwise specified in the drawing or specification, the hoarding should be in pressed metal or non-combustible material. Viewing panels at eye-level should be provided at convenient location.

5.5 Site Activities

The Contractor shall ensure that all activities are confined within the site boundary. This applies to storage of construction appliances, equipment, materials, etc. Any unauthorized storage shall be removed without prior warning.

6.0 SITE MANAGEMENT

- 6.1 Site Cleanliness and Debris Removal
 - 6.1.1 All rubbish, crates, surplus materials etc. are to be removed from the site as soon as possible and at frequent intervals during the progress of the works so as to maintain unhindered access to, escape from and easy inspection of all work.
 - 6.1.2 Metal bins with lids are required to hold rags and waste of flammable liquids or materials which shall be removed from the site frequently.
- 6.2 Adverse Weather Condition

Abandon certain operations during severe weather conditions, for instance:-

- 6.2.1 In high wind condition, do not operate tower and mobile cranes and workers should remove themselves from high platform operations.
- 6.2.2 Do not work in deep excavations and confined spaces such as pits, manholes, etc. where there is a possibility of flooding.
- 6.3 Work in Hot Environment

The Contractor shall take appropriate preventive measures to protect his workers against the risk of having heat stroke, especially in hot and humid weather of summer time.

6.4 First Aid Fire Fighting Equipment

Adequate numbers of suitable types of portable extinguishers must be available throughout the site. The extinguishers should be readily available for use and not more than 15m away from the area where highly flammable liquids are used. If work is being undertaken in a room, they should be located just outside the room where they will not obstruct the exits. The Contractor shall ensure that all portable fire extinguishers are in good working condition.

6.5 No Smoking

Smoking is not allowed within the boundary of the University.

6.6 First Aid Provision

All working sites should be provided with at least one first aid box placed in a clearly identified and accessible location. The first aid box should contain sufficient quantities of first aid materials at all times and nothing else.

6.7 Personal Protective Equipment Provision

The Contractor shall provide adequate and appropriate type of personal protective equipment to workers and ensure they use the equipment correctly.

6.8 Fencing

Excavation, shafts or pits, near which persons work or pass, must be protected at the edges by guardrails or barriers, and / or securely covered. Sufficient lighting shall also be provided.

6.9 Working at Height

Ladders shall only be used as a means of access and egress and not be used as a working platform for working at high level. A proper working platform shall be used as a means of support for working at height.

6.10 Working in Confined Spaces

The Contractor shall carry out risk assessment and implement necessary measures for working in confined spaces. Before entering manholes or similar confined spaces (e.g. underground raft space on CityUHK's Campus), the internal atmosphere must be tested for the following conditions in the order given: (1) oxygen content; (2) flammable gases / vapours; and (3) potential toxic air contaminants. Continuous forced air ventilation should be provided while testing carried out periodically. The contractor shall ensure the workers who are required to work in confined spaces are trained and competent.

6.11 Application of Flammable Liquids

There should be provision of suitable storage facilities for materials such as paint solvent or adhesive, sealing off the area to be worked in, adequate ventilation for the operators and the removal of the sources of ignition. Storage of flammable liquids on Campus is prohibited.

6.12 Entry to High Risk Areas

As high risk areas such as (main switch room and laboratories) may contain special equipment or hidden hazards in the atmosphere, necessary special precautions are required from the Contractor to avoid accident resulting from the potential presence of noxious fumes, radiation, toxic gases, oxygen deficiency, excessive heat, electrical shock and humidity.

6.12.1 Entry to Laboratory Rooms

Before entering the laboratory room for construction work, the Contractor shall inform the Project Manager to seek the entry permission from the Laboratory Officer, the top in-charge person of that particular Laboratory. The Laboratory Officer and Safety Manager will then determine the necessary precautionary measures to be taken by the Contractor. For every permit to work, the worker is required to fill in the working details including entry and exit times on the Log Book kept by the Laboratory Officer.

6.12.2 Entry to Main Switch Room

For any inspection or work to be held inside all main switch rooms in CityUHK's Campus, the Contractor shall apply an "Access Permit to Work" through the Project Manager. Normally two working days shall be allowed for the process of "Issuing".

6.12.3 When the worker is working inside the room, he shall take due care practically to protect the switchboard from dust, mechanical or water damage. Workers shall bring with them all necessary protective tools and equipment before entering the room. The worker is not allowed without the Project Manager's permission to work on any parts of the switchboard. Shall any alteration, repairs or inspection work be required for the main switchboard, the work shall be supervised by a Class C registered electrical worker.

6.13 Working Hours

The normal office hours for the University are defined as the period from 8:30 to 17:00 hours for weekdays (Monday to Friday); 9:00 to 12:00 hours for Saturday other than general holidays. If the Contractor intends to carry out his works outside the normal working hours, he should inform the Project Manager at least 3 days in advance so that proper arrangements can be made with the user departments for the matter of security and access. During this working period, the Contractor shall observe the following provisions:-

- 6.13.1 The Site Supervisor shall stay on site to oversee the work at all times.
- 6.13.2 The workers shall observe strict disciplinary measures, including refraining from smoking, wearing uniform, being properly dressed, taking care in protecting the existing equipment and furniture and not wandering in other unrelated working areas.
- 6.13.3 If the situation requires, security guard shall be employed by Contractor at his own cost to safeguard the site.

7. PROTECTION OF ENVIRONMENT AND THIRD PARTIES

7.1 Protection against Personnel, Existing Equipment, Furniture and Installation

The Contractor shall be aware that during the working period, the Campus will be open to both staff and students for various activities. Appropriate precautionary and protective measures shall be taken to carry out the works so as to avoid injury to personnel and damage to the existing equipment, furniture and installations. Appropriate fencing, covers, etc. shall be required as directed by the Project Manager.

7.2 Protection against Dust and Noise Generation

Whenever the working process generates dust to the surrounding areas, plastic sheets shall be used to cover floors, existing furniture and equipment, and dust proofed hoarding / screening so as to restrict dust from spreading to other functional and occupied areas.

The Contractor shall keep the noise generated during the construction to a minimum. The Project Manager shall have the right to stop the work if the noise or dust nuisance affects the activity in adjacent areas. However, the Contractor shall obtain permission from the Project Manager in advance for noisy working processes. This arrangement will reduce the chance of work being stopped.

7.3 Warning Notices

Warning notices stating "Danger! Works in Progress" (e.g. signs and posters) shall be put in the vicinity of the working area at prominent locations. Temporary fencing shall be erected to alert and protect workers, pedestrians and neighbouring users before work commences. Special attention shall be paid to work at high level where there is a risk of falling objects.

7.4 Maintenance of Clear Means of Access and Egress

On any occasions, the raw materials, tools and appliances of the working process shall not obstruct the passageways, lift lobbies, stairways and fire escape routes.

7.5 Transportation of Materials within the Communal Areas

When materials are transported through public areas, care shall be taken to secure the items against falling off and the passers-by shall be alerted of the traffic. Do not damage decorations on ceiling, walls, doors, windows, floor etc. during transportation.

7.6 Foul Drain Treatment

If wastes from the working process is required to be disposed into the drains on site, due care shall be taken to dilute the wastes and to avoid large particles discharging into the drain. Paints, concentrated acids, alkaline and solvents shall be handled separately and not allowed to be discharged into the drainage system.

8. TEMPORARY ELECTRICAL WORKS

8.1 Registered Electrical Workers

Under the Code of Practice for electrical work, the Contractor shall employ registered electrical workers for all permanent and temporary electrical installations. The Hong Kong Identity Cards and Electrical Licences shall be produced for the Project Manager to vet before the commencement of works.

8.2 Connection of Temporary Power

If the Contractor requires temporary power for his works, he shall inform the Project Manager at least one week in advance of the working location, power consumption and type of electrical equipment to be connected. The Contractor shall then be notified of the power connection source. The temporary power installation work shall be carried out at his cost by the Contractor.

8.3 Temporary Electrical Wiring

All electrical wiring should be properly insulated and protected. Earth leakage circuit breakers should be installed to trip the supply when overloading of the circuit or earth leakage occurs. The design of the circuits shall in every respect comply with the current Code of Practice for the Electricity (Wiring) Regulation. Temporary connection of power cables to the power source by bare wires without plug is not permitted. Extension of cables without proper socket connection is not allowed.

8.4 Protection of Live Electrical Items

If it is due to the working process where the live electrical items are unavoidably exposed, appropriate barrier shall be provided to guard against direct contact with the live parts. In addition, a warning notice shall be posted at the spot to alert the passers-by.

9.0 SAFETY MEASURES FOR SPECIAL PROCESSES

9.1 Grinding and Cutting of Metals

- 9.1.1 INFORM the Project Manager of the location where the grinding and cutting of metals is to be carried out.
- 9.1.2 DO NOT operate the grinders in fire escape routes and staircases.
- 9.1.3 PROVIDE GUARDS to enclose grinding wheel as far as possible.
- 9.1.4 WEAR eye, ear and face protection.
- 9.1.5 DO NOT USE grinders near combustible or flammable materials.
- 9.1.6 DO NOT CLAMP portable grinders in a vice for grinding hand-held work.
- 9.1.7 DO NOT LOCATE grinders in a manner likely to damage the abrasive wheel.
- 9.1.8 MAKE available fire extinguishers for immediate use near the scene of the work.

9.2 Electric Welding

- 9.2.1 FENCE off work area.
- 9.2.2 WEAR protective clothing, including eye and hand protection.
- 9.2.3 CHECK daily all external connections.
- 9.2.4 CHECK welding leads for damage.
- 9.2.5 WELDING equipment and the workpiece should be effectively earthed.
- 9.2.6 THE process should not be carried out on wet floor, in humid condition or outdoor in rainy weather.
- 9.2.7 CLEAR combustible materials from work area. Cover combustible objects with a fire-resistant blanket if you cannot move them.
- 9.2.8 USE welding screens to prevent passers-by from getting "arc eye".
- 9.2.9 MAKE available fire extinguishers for immediate use near the scene of the work.
- 9.2.10 INFORM the Project Manager of the location of the temporary power connection and welding process.
- 9.2.11 DO not proceed with the work without prior permission from Project Manager.

9.3 Gas Welding and Cutting

- 9.3.1 FENCE off work area.
- 9.3.2 WEAR eye and hand protection.
- 9.3.3 DO NOT CONNECT a hose longer than needed. Prevent hoses from becoming kinked or tangled.
- 9.3.4 DO NOT USE tape to repair a leaky hose.
- 9.3.5 KEEP all cylinders and fittings where they cannot be contaminated by oil or grease.
- 9.3.6 TRANSPORT cylinders with a purposely-built trolley.
- 9.3.7 SECURE all cylinders upright.
- 9.3.8 DO NOT DROP cylinders. They could burst or the valves could break off or become damaged.
- 9.3.9 DO NOT WELD near combustibles. USE welding screens or blankets to contain heat and molten metal splash.
- 9.3.10 STORE cylinders away from elevators, stairs, doorways and aisles.
- 9.3.11 DO not store excessive gas cylinders.
- 9.3.12 CLOSE valves of empty cylinders and REMOVE cylinders promptly from CityUHK's premises.

- 9.3.13 INFORM the Project Manager of the location of welding process and obtain his permission prior to conduct the work.
- 9.3.14 CHECK equipment before use. Damaged parts should be repaired and replaced.
- 9.3.15 MAKE available fire extinguishers for immediate use near the scene of the work.
- 9.4 Dangerous Goods / Harmful Substances
 - 9.4.1 ENSURE the workers are trained and competent to handle dangerous goods/and harmful substances and MAKE material safety data sheets readily available for workers.
 - 9.4.2 HANDLE and STORE all gases, fuels and other dangerous goods in a safe manner and in accordance with statutory requirements.
 - 9.4.3 AVOID inhaling constituents of such substance. USE respiratory protection.
 - 9.4.4 PROHIBIT smoking and naked lights (including electric arcs and oxyacetylene or other flames used in welding or cutting metals) while using flammable liquids.
 - 9.4.5 KEEP flammable liquids in approved containers with proper labels, clearly and boldly marked "flammable substances" in both English and Chinese.
 - 9.4.6 KEEP amount of flammable liquids in actual use to one (1) day's working requirements and within exempted quantity.
 - 9.4.7 DO NOT STORE such substance in corridors, points of egress or near a source of ignition.
 - 9.4.8 INFORM the Project Manager of the location where dangerous goods and harmful substances are kept.
- 9.5 Woodworking
 - 9.5.1 USE bench circular saws equipped with crown guards and riving knifes.
 - 9.5.2 MAKE emergency stop and ON/OFF switch of bench circular saws readily accessible.
 - 9.5.3 PROVIDE push-stick for bench circular saw.
 - 9.5.4 MAINTAIN a clean and unobstructed working space with non-slippery floor.
 - 9.5.5 WEAR eye and ear protection.
 - 9.5.6 PROPERLY maintain woodworking machinery and keep saw blades sharp at all times.
 - 9.5.7 CLEAR wood dust / chips regularly to prevent fire hazard.
- 9.6 Use of Compressed Air Tools
 - 9.6.1 INSTRUCT workers in the safe use of compressed air tools.
 - 9.6.2 WEAR eye and ear protection when using compressed air tools.

- 9.7 Use of Mobile Aluminum Tower / Working Platform
 - 9.7.1 WORKERS should be adequately trained in erection of mobile tower / working platform.
 - 9.7.2 ERECTION of mobile tower / working platform should be under immediate supervision of a competent person.
 - 9.7.3 SUPERVISE closely on tower / working platform use.
 - 9.7.4 LOCK all castors.
 - 9.7.5 APPLY outriggers / stabilizers and adhere to the rule <u>3 : 1 (height to base ratio with outriggers)</u>.
 - 9.7.6 NO over-reaching while working on mobile tower / working platform.
 - 9.7.7 NO carrying of persons on mobile tower / working platform while moving it to other locations.
 - 9.7.8 BEWARE of uneven ground or proximity to dropped levels.
 - 9.7.9 BEWARE of overhead hazards, such as roof fixings, beams, suspended units, electric cables, etc.
 - 9.7.10 STOP working on mobile tower / working platform at outdoor areas in adverse weather condition.
 - 9.7.11 TIE mobile tower / working platform to a rigid structure if wind speed reaches 40 km per hr. At 65 km per hr, the mobile tower / working platform should be dismantled.
- 9.8 Erecting Truss-out Bamboo Scaffold
 - 9.8.1 DRAW up the design of the scaffold and the relevant working procedures by a competent person specifying on the structure of the scaffold, type of the anchorage system and the method of erection.
 - 9.8.2 Examine the construction materials of the external walls prior to erection of scaffold so as to ensure that they can support the designed loading of the scaffold.
 - 9.8.3 FIX firmly each bracket with three or more anchor bolts. The number of brackets used should meet the design and loading requirements of the scaffold.
 - 9.8.4 PROVIDE safe means of access to facilitate the movement of workers between scaffold and building.
 - 9.8.5 CERTIFY the scaffold, upon completion, by a competent person before the scaffold is taken into use.

10.0 CONTROL PROCEDURE FOR SITE SUPERVISION

- 10.1 All contractors must appoint a Site Representative to liaise with the responsible department of CityUHK which is the Department/Office/Centre that employs the contractor.
- 10.2 Before starting work in any parts of the Campus, the Site Representative is required to fill in a Work Permit application which has to be endorsed by the Project Manager of the responsible department of CityUHK.
- 10.3 On the first day or the day before work, the Site Representative is required to report and present the endorsed Work Permit application at the Lower Security Counter where he will be issued the required number of worker vests and briefed of the CityUHK house rules. Worker vests will bear the name of the Department/Office/Centre for which the worker works.
- 10.4 All contractor workers are required to wear worker vest while working on Campus.
- 10.5 The Site Representative is required to inform the Lower Security Counter upon completion of work and return all worker vests and work permits in clean and good working condition.

11.0 GENERAL HOUSE RULES

- 11.1 Provide full protections to all staff, students and properties during work.
- 11.2 Wear worker vest and work permit issued by CityUHK at all times.
- 11.3 Keep all access and corridors clear of any stored materials.
- 11.4 Do not force open any door locks or wedge the doors open.
- 11.5 Noise has to be minimized during office and school hours except by special arrangement.
- 11.6 There is absolutely no smoking allowed.
- 11.7 Properly dressed in clean and appropriate clothing is required while working in Campus.
- 11.8 Gambling on the Campus is strictly prohibited and offenders will be expelled from the Campus immediately.
- 11.9 Clear all rubbish daily or as directed.
- 11.10 Keep the toilets clean.
- 11.11 Only designated lifts authorized by CityUHK can be used for transporting of construction materials and other activities during specified hours.

12.0 WORK NOTICE

Contractor shall provide and put up work notice of A1 size at prominent location at project boundary and materials storage. Work notice shall display the following information:-

- Project Manager
- Client
- Project Title
- Contractor's Name and Contact Person with his / her name, photograph and mobile telephone number
- Expected Completion Date

13.0 ENVIRONMENTAL GUIDELINES FOR CONTRACTOR

Please refer to Appendix I

TT/LM/sc D:\OFFICE DATA\Year 2016\FMO website (Jan 2017)\Safety Protection Handbook\Safety and Health Envirnomental Protection Handbook (Jan 2017).doc

第1頁,共5頁

顧問公司及承包商的環保工作指南

1. 一般指引(包括在校園外的工作)

所有顧問公司及承包商應盡量遵守以下環保指引:

- 應遵照有關法例進行所有工作;
- 工作人員應配戴適當的安全服裝、器具,施工時亦要小心,防止發生意外;
- 定期維修保養車輛,以控制及減少廢氣及噪音產生;
- 所有顧問公司及承包商在校園停車等候時儘可能關閉車輛引擎;
- 如需於受限制時間內使用重型機動的器械工作,必須持有有效的「建築噪音 許可証」;
- 减少廢物產生(包括一般固體廢物及化學廢物),並適當地處理、儲存及棄置, 以減少污染;
- 應適當地儲存及使用化學物品,並儘量使用儲漏盆或其他儲存設施儲存一般 化學品,以減少由洩漏所產生的污染;
- 减少污水排放,並適當地處理及排放污水;及
- 善用資源(如水、電力、燃油等)。
- 2. 按顧問公司及承包商類別而派發以下相關部份

固體廢物收集商

- 固體廢物收集商必須把廢物送至政府認可的廢物收集/棄置地方;
- 運送時必須小心,以免打翻造成污染;及
- 搬運時打翻的廢物需儘快清理。

化學廢物收集商

- 化學廢物收集商及危險品供應商必須領有政府認可的牌照;
- 裝卸及運送時必須小心,以免打翻造成污染;及
- 運送時發生洩漏或外濺,應儘快通知本處相關負責人及大學保安人員,相關 負責人根據工作指引 WI-001SA 進行處理。

醫療廢物收集商

- 醫療廢物收集商必須領有政府認可的許可證;
- 裝卸及運送時必須小心,以免打翻造成污染;及
- 運送時發生洩漏或外濺,應儘快通知本處相關負責人及大學保安人員,相關 負責人根據工作指引 WI-018SA 進行處理。

第2頁,共5頁

顧問公司及承包商的環保工作指南(續)

檢查、維修或安裝消防設備/空調設備的承包商、裝修工程承包商

- 必須領有政府認可的有關牌照;
- 必須根據有關法例及工作指引進行檢查及維修工作;
- 進行維修工作時,應使用相關設備或措施,以防止破壞臭氧層物質洩漏;
- 進行工作時應保持場地清潔;
- 檢查、維修或加改後產生的固體廢物,不可棄置於校園,而須搬離校園自行 處理。處理化學廢物(如廢潤滑油、溶劑),則須按相關法例要求處理;
- 如發生化學品或化學廢物洩漏或外濺,應儘快通知本處相關負責人及大學保 安人員,相關負責人根據有關工作指引WI-001SA進行處理;
- 如需進行堆存、裝卸、運送易生塵埃物料,以氣動或電力推動鑽孔、切割、 磨光、處理碎屑、清理工地、拆卸等易生塵埃工作時,應實施相關的防塵措 施,包括:
 - 以水或塵埃抑制化學劑噴灑,從而維持物料或作業表面濕潤;或
 - 以不滲透的隔塵布完全覆蓋;及
 - 儲存於在頂部及三面均有遮蔽的範圍內。
- 所有工程器械必須妥善維修。任何會發出過量噪音的工程,必須採取適當措施減低噪音,有關措施包括但不限於將機械隔離、加設隔音屏障;
- 如需進行產生氣味的工作或使用揮發性高的物料時,應實施相關的減低氣味的措施,包括:
 - 工作時要加設屏障,打開窗戶及加裝臨時抽氣系統,以減少氣味散發,以
 及提供足夠新鮮空氣;
 - 應儘量使用水溶性漆油及儘量減少用有機溶劑及黏合劑;
 - 必要時須關掉冷氣及封密各抽風;及
 - 物料用後,馬上將蓋蓋上。

檢查、維修或安裝機電/儀器設備(包括電腦及影音設備)的承包商

- 進行工作時應保持場地清潔;
- 檢查或維修後產生的固體廢物可放置於校園指定的垃圾斗內,但是化學廢物 (如廢潤滑油、溶劑)不能棄置於校園而須自行處理;及
- 如發生化學品或化學廢物洩漏或濺漏,應儘快通知本處相關負責人及大學保 安人員,相關負責人根據工作指引 WI-001SA 進行處理。

第3頁,共5頁

顧問公司及承包商的環保工作指南(續)

清潔公司

- 所有存放清潔用具之房間或地點,如沒有工作人員在內時需經常保持上鎖狀態;
- 進行工作時必須保持場地清潔;
- 應儘量使用對環境影響較低的清潔劑;
- 清潔後產生的污水應排入指定的水渠;
- 需使用大量清水之清潔工作,必須遵照下列原則:
 - 只可使用非食用清水;
 - 工作期間,不得做成任何浪費;及
 - 所有清潔工人需清楚清潔用水源之地點及依從節省用水之守則。
- 應儘量使用濕布清潔沾塵器具/地方,以避免塵埃飛揚。如必須進行產生塵埃 的清潔工作,應儘量加設屏障或其他適當措施,以避免產生滋擾;及
- 如發生化學品或化學廢物洩漏,應儘快通知本處相關負責人及大學保安人員,相關負責人根據有關工作指引 WI-003SA 處理。

滅蟲公司

- 所有使用之滅蟲劑或藥物均需已在漁農處登記及認可在港使用的;
- 於室內使用滅蟲劑時必須先關閉該處的空調,以免影響他人,噴葯時間也需 於合適時間進行;
- 用剩的滅蟲或藥物及其器皿,不可棄置於校園,而須搬離校園自行處理。如 屬化學廢物,則須按相關法例要求處理;及
- 儲存滅蟲劑或藥物之器皿必須耐用及防漏之物料造成,如發現洩漏及打翻, 應儘快根據工作指引 WI-001SA 進行處理。

顧問公司 (有關工程項目)

- 進行設計和規劃工作時應符合有關連的環保法例要求及守則,以及盡量考慮
 較環保的設計及物料,並在招標合約及有關圖則上列明;
- 監察承包商工程的施工是否符合環保守則要求;及
- 如有不符合之處,應在例行工程協商會議中提交改善要求,限令承包商定期 改善。

第4頁,共5頁

顧問公司及承包商的環保工作指南(續)

建造工程承包商

- 必須領有政府認可的有關牌照;
- 遵照有關法例進行所有建造工作。工作時,應使用相關設備及措施,以防止 破壞臭氧層物質洩漏,及保持場地清潔;
- 工程中產生的固體廢物,須向環保署註冊棄置廢物,不可棄置於校園,而須 搬離校園自行處理。處理化學廢物(如廢潤滑油、溶劑),則須按相關法例要 求處理;
- 如發生化學品或化學廢物洩漏或外濺,應盡快通知本處相關負責人,相關負責人根據有關工作指引 WI-001SA 進行處理;
- 進行堆存、裝卸、運送易生塵埃物料,鑽探、切割、磨光、處理碎屑、拆卸
 等易生塵埃工作時,應實施相關的防塵措施,包括:
 - 灑水維持物料或作業表面濕潤;或
 - 控制機器所出黑煙;或
 - 安設圍板圍封工地範圍;及
 - 儲存於在頂部及三面均等有遮蔽的範圍內。
- 所有工程器械必須妥善維修。任何會發出過量噪音的工程,必須採取適當措施減低噪音,有關措施包括但不限於將機械隔離、加設隔音屏障;
- 如需進行產生氣味的工作或使用揮發性高的物料時,應實施相關的減低氣味的措施,包括:
 - 工作時要加設屏障,加裝臨時抽氣系統,以減少氣味散發,以提供足夠 新鮮空氣;
 - 應盡量使用水溶性漆油及盡量減少用有機溶劑及黏合劑;及
 - 物料用後,馬上將蓋蓋上。
- 地盤內污水應加以沉澱,所有沙井應被覆蓋及密封。水應盡可能被循環再用 於壓制塵埃;
- 惰性及非惰性廢料要分開卸槽;
- 控制工地蚊蟲。

飯堂污水隔油池承包商

- 承包商須遵照合將及法例進行施工;及
- 應備有相關設施處理洩漏並立即通知在場主管。

園藝承包商

- 進行園藝工作時,儘量節約資源(如淋花用水);及
- 進行園藝工作後產生固體廢物(包括枯萎/修剪植物),不可隨意棄置於校園, 而須搬離校園自行處理。

第5頁,共5頁

顧問公司及承包商的環保工作指南(續)

保安承包商

- *進行救火時,如污水受化學品或危險品污染,在可行情況下,盡量利用沙包 或其他物品堵截污水,以防止其直接排進雨水渠內;及*
- 如發現化學品或化學廢物洩漏,應儘快通知本處相關負責人根據工作指引 WI-001SA 進行處理。

洗衣承包商

- 進行洗衣工作時,儘量節約資源(如用水、清潔劑等);
- 應儘量使用對環境影響較低的清潔劑;
- 應適當地儲存及使用清潔劑,並儘量使用儲漏盆或其他儲存設施,以減少由 洩漏所產生的污染;及
- 减少污水排放,並適當地處理及排放污水。