

Tung Wah College Facilities Management Office (FMO)

Safety Handbook for Contractor

This “Safety Handbook for Contractor” (hereinafter called Handbook) is to minimize risks associated with the activities of contractors who perform the works for Tung Wah College (TWC). This Handbook identifies the safety issues related to the performance requirements of TWC contractors and the criteria that shall be established to effectively evaluate the contractor’s compliance with this Handbook and other regulatory requirements.

1.0 Applicability

- 1.1 This Handbook applies to all TWC’s contractors whenever they carry out repairs, construction, alterations, additions, maintenance, improvements, renovations and extensions within TWC’s Campuses or buildings.
- 1.2 The minimum safety requirements are 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.
- 1.3 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.

2.0 Responsibility

2.1 *General Duties:*

- 2.1.1 TWC requires all contractors employed to take all reasonable measures to ensure the health and safety at work of all its employees/sub-contractors and all contractors will comply with the TWC’s health and safety requirements and all the relevant ordinance and regulations.
- 2.1.2 Contractors must ensure their employees/sub-contractors to follow the health and safety instructions or practices given to them at site or in this Handbook.
- 2.1.3 Ignorance of the safety and health standards, instructions and procedures, and inadvertence and complacency at work will not be accepted as an excuse for negligence of duty.
- 2.1.4 Contractors should indemnify, defend and hold TWC harmless from any liability associated with the contractors’ non-compliance with the TWC’s health and safety requirements and non-compliance with the relevant ordinance and regulations.

- 2.1.5 Contractors should accept sole responsibility for any acts or omissions with respect to any health and safety risks, incidents or liabilities encountered by the contractors.
- 2.1.6 Contractors should accept, without appeal, termination of the contract if TWC determines that the contractors have falsified any required health and safety information, or if TWC determines that the contractors are significantly deficient in their health and safety performance or capabilities.
- 2.1.7 Contractors should provide, upon request from TWC, copies of all health and safety procedures and practices, and health and safety training records for contractor's employees.
- 2.1.8 Contractors must report to TWC any job related fatalities, injuries resulting in permanent disabilities, or regulatory violations.
- 2.1.9 Contractors should ensure all workers must possess valid safety licenses (e.g. Green Card, while Electrical License and Confined Spaces Workers/Competent Persons License to be subject to the need basis, if applicable) issued by the authorized organizations as per legal requirements, otherwise, the workers cannot carry out TWC's contractual works.

2.2 *Site Supervision:*

- 2.2.1 Contractor shall nominate a management staff to act as a "site representative". He/she should maintain day to day communications in respect of the work with the project-in-charge of TWC.
- 2.2.2 Contractor's site representative is also responsible for the duty of coordination with their subcontractors. The site representative should ensure that their subcontractors are fully aware of the safety requirements. The site representative is responsible for ensuring that the subcontractor's works meet these requirements.
- 2.2.3 The Contractor must provide full and adequate site supervision during the progress of the work and keep a site representative available at all times. The site representative should be able to receive and act promptly, on behalf of the contractor, on all safety and health instructions issued by the project-in-charge/Facilities Management Office of TWC or any other authorized personnel, such as occupational safety officers of Labour Department.

2.3 *Control of Egress and Access:*

- 2.3.1 Before starting the works in any parts of the Campus, the contractor's site representative is required to inform the project-in-charge of TWC for obtaining permission.

- 2.3.2 Prior to the start of works every time, the site representative and workers should report to the Security Counter where working permit shall be issued.
- 2.3.3 All contractor workers are required to wear working permits while working in the Campus for easy identification.
- 2.3.4 The site representative is required to report to the Security Counter upon completion of work every time and return all the working permits in clean and good conditions.

3.0 General Requirements

3.1 *Site Layout:*

- 3.1.1 Arrange suitable perimeter fencing or hoarding where appropriate.
- 3.1.2 Ensure good visibility and safe access and egress at site entrance.
- 3.1.3 Provide adequate warning signs at the entrance or other conspicuous locations to alert trespassers.
- 3.1.4 Provide area for loading and unloading, and storage of materials, plant and machinery.
- 3.1.5 Provide emergency procedures and statutory notices at conspicuous locations where necessary.
- 3.1.6 Remove all rubbish, crates, surplus materials etc. from the site as soon as possible and on a regular basis during the progress of the works so as to maintain unhindered access to and escape from the site.
- 3.1.7 Avoid obstruction of the entrance, passageways, lift lobbies, stairways and fire escape routes by the raw materials, tools, appliances and debris during the working process on any occasions.
- 3.1.8 Provide and ensure suitable and adequate first-aid facilities and fire-fighting equipment being available in a clearly identified and accessible site location during the working periods.

3.2 *Site Traffic:*

- 3.2.1 Site traffic routes should be clearly indicated and maintained on site and should be carefully planned taking into account of any potential hazards as well as the movement of workers to and from different working positions. Where possible, an one-way system should be implemented.
- 3.2.2 Erect notice boards/signage clearly in the conspicuous locations in order to draw the workers' attention on areas of potential hazards.
- 3.2.3 Provide suitable access route during the course of construction for passage of persons and materials.
- 3.2.4 Properly maintain all floors, passageways, doorways, steps and stairs to ensure that they are free from any obstructions, protruding tripping and slipping hazards.
- 3.2.5 Provide and maintain a rigid hand-rail or other suitable handhold with intermediate barriers on every staircase to prevent people falling through the open side.

3.3 *Ventilation, Temperature and Lighting:*

- 3.3.1 Provide and maintain an efficient ventilation system at the point of origin of the dust or fume or other impurities to prevent it from polluting the air in the workplace.
- 3.3.2 Maintain a reasonable temperature in every workplace.
- 3.3.3 Provide and maintain suitable and sufficient lighting, either natural or artificial, in every part of the premises in which persons work or pass.
- 3.3.4 Provide suitable and sufficient lighting on hoarding or external fencing for public safety.
- 3.3.5 Ensure that windows and skylight used for lighting are kept clean and free from obstruction.
- 3.3.6 Emergency lighting shall be provided to escape route and workplaces where needed.
- 3.3.7 Low voltage should be used for temporary lighting, particularly in confined and damp conditions.

3.4 *Dust and Noise Generation:*

- 3.4.1 Provide plastic sheets to cover floors, existing furniture and equipment for working process generates dust.
- 3.4.2 Provide dust proofed hoarding/screening to restrict dust from spreading to other functional and occupied areas.
- 3.4.3 Maintain the noise generate during the construction to a minimum.
- 3.4.4 The Contractor shall inform the project-in-charge prior to any noisy working processes.
- 3.4.5 All noise or dust generated works affecting adjacent areas should be carefully planned and scheduled to minimize interruption.

3.5 *Construction Waste Management:*

- 3.5.1 The contractor shall maintain a proper waste management system in order to minimize waste production including proper controlling of raw materials, reusing of waste and recycling of materials.
- 3.5.2 The contractor shall be responsible for disposing all construction waste to the designated government waste disposal facilities.
- 3.5.3 The contractor shall be liable for opening billing account prior to the disposal according to the requirements as outlined in Construction Waste Disposal Charging Scheme, if applicable.
- 3.5.4 Waste transaction records shall be provided to the project-in-charge after each disposal of construction waste at the government waste disposal facilities, if applicable.

3.6 *Housekeeping:*

- 3.6.1 Keep all passageways, staircases, landings, and the means of escape clear and unobstructed at all times.
- 3.6.2 Stack raw materials and finished products safely, clear of passageways and means of escape.

- 3.6.3 Do not leave tools on the floor, or in any location where they can be easily dislodged. Provide proper storage, such as tool boxes or containers for tools and equipment.
- 3.6.4 Do not obstruct lighting and ventilation, any electrical power point and fire fighting equipment.
- 3.6.5 The floors of workplaces should be kept clean, tidy and in a non-slippery condition.
- 3.6.6 Provide and maintain proper drainage system to prevent water ponding.
- 3.6.7 Protruding nails in timbers or walls should be removed or bent over so that they do not constitute a hazard to people.

3.7 *Typhoon and Rainstorm Actions:*

- 3.7.1 When the Typhoon Signal no. 8 or above / Rainstorm "Black" Warning Signal is issued, the Contractor shall inform his workers to suspend work in outdoor areas.
- 3.7.2 The Contractor shall report to the project-in-charge of TWC on the appropriate protection measures taken before leaving the working site in order to protect his work and the public in such adverse weather.
- 3.7.3 Secure and fasten the works, scaffolding and loose materials.
- 3.7.4 Isolate all gaseous supplies and electrical circuits or tools immediately.
- 3.7.5 Inspect the secure site and protect against possible of water flooding.
- 3.7.6 Inspect and remove any blockages to permanent or temporary drainage outlets and channels.
- 3.7.7 Inspect the site and report to the project-in-charge of TWC any damages after the typhoon or rainstorm for insurance purpose.
- 3.7.8 The stoppage of work due to Typhoon or Rainstorm shall not vitiate the Contractor's right, duties and liabilities in the Conditions of Contract.

3.8 *Fire Prevention:*

- 3.8.1 Only minimum quantity of combustible and flammable substance(s) which is required for the work should be used during the work process.
- 3.8.2 Articles should not be left at workplaces which would cause obstructions to the fire service installations (e.g. fire extinguisher, hose reels).
- 3.8.3 Means of escape and fire exits should be kept clear and unobstructed at all times.
- 3.8.4 Fire doors leading to the protected corridor/staircase should be kept closed.
- 3.8.5 Smoking is not allowed in the working sites.
- 3.8.6 Water should not be used on electrical equipment fires. When possible electrical equipment/appliance should be de-energized before extinguishing the fire.
- 3.8.7 All workers shall well understand escape route and assemble point in case of fire.

4.0 Personal Protection Equipment

- 4.1 Ensure that sufficient personal protective equipment are provided by the contractors and the equipment are readily available for every worker who may need to use them.

- 4.2 The personal protective equipment shall provide adequate protection and shall conform to the international safety standards.
- 4.3 The contractors shall ensure that all workers make full, proper use and storage of the personal protective equipment provided.
- 4.4 No workers are allowed to willfully remove the personal protective equipment when necessary.
- 4.5 All workers who have been issued personal protective equipment shall ensure their good condition and report immediately any damage to the contractor's site representative for replacement.

5.0 Safe Use of Plant and Equipment

5.1 *Electric Arc Welding:*

- 5.1.1 Contractor's site representative shall inform the project-in-charge of TWC the location of the temporary power connection and welding process and apply for a hot work permit.
- 5.1.2 Workers shall wear suitable personal protective equipment during electric arc welding, including eye and hand protection.
- 5.1.3 Ensure that welding machines are properly connected to the power supply in sufficient electrical loading supply.
- 5.1.4 Keep the workplace dry, secure, free from combustible materials and obstructions.
- 5.1.5 Ensure proper and adequate ventilation of workplace to remove poisonous fumes and gases that are given off during welding.
- 5.1.6 Take precautions against flying sparks and hot slag where welding is being done near flammable materials and check the area before leaving. Make available fire extinguishers near the welding area.
- 5.1.7 The workplace should be effectively earthed and all equipment should be earthed and insulated.
- 5.1.8 Check and ensure all equipment and external connections being in good conditions prior to work.
- 5.1.9 Do not carry out welding outdoor during rainy days.

5.2 *Gas Welding and Gas Cylinders:*

- 5.2.1 Contractor shall make sure that all workers have completed an approved training course and possess valid license, otherwise, they cannot carry out any gas welding work.
- 5.2.2 Contractor's site representative shall inform the project-in-charge of TWC of the location of the gas welding and flame cutting processes and apply for a hot work permit.
- 5.2.3 Workers shall wear suitable personal protective equipment during gas welding, including eye and hand protection.
- 5.2.4 Keep the workplace dry, secure, free from combustible materials and obstructions.

- 5.2.5 Ensure proper and adequate ventilation of workplace to remove poisonous fumes and gases that are given off during welding.
- 5.2.6 Take precautions against flying sparks and hot slag where welding is being done near flammable materials and check the area before leaving. Make available fire extinguishers near the welding area.
- 5.2.7 Keep gas cylinders at upright position both in storage and when in use.
- 5.2.8 Do not store gas cylinders in excess of the “exempted quantities” as stipulated in the Dangerous Goods Ordinance. Store at any time one cylinder of acetylene and one cylinder of oxygen per job-site.
- 5.2.9 Keep the gas cylinders from source of heat, flammable materials, corrosive chemicals and fumes.
- 5.2.10 Ensure that appropriate type of pressure regulators and flash back arrestors are installed and maintained in sound condition.
- 5.2.11 Ensure that hose lines are in sound condition and secure to avoid damage.
- 5.2.12 Always lift gas cylinders by suitable means. Do not slide them along the ground or drop them from trucks.
- 5.2.13 Do not connect a hose longer than needed. Prevent hoses from becoming kinked or tangled.
- 5.2.14 Post out “No Smoking” sign in the welding area to alert site personnel.

5.3 Woodworking Machine:

- 5.3.1 Install suitable and effective crown guard, riving knife and emergency stop to circular saw. Weatherproof on/off switch shall be used if the machine is located outdoor.
- 5.3.2 Keep the circular saw blades sharp at all times, and properly adjust the riving knife and top guard. Use saw blade of suitable diameter and adjust it properly so that the saw teeth cut vertically downward.
- 5.3.3 Use a push stick to prevent the hand from coming into contact with the blade of a circular saw.
- 5.3.4 Provide fire extinguishers adjacent to the work location. Remove sawdust regularly to minimize fire hazard.
- 5.3.5 Never use a woodworking machine until the worker has been properly trained in its use.
- 5.3.6 Ensure that the working space around a machine is unobstructed and the floor is clean and not slippery.
- 5.3.7 Workers shall wear suitable personal protective equipment during operating woodworking machinery, including ear and face protection.

5.4 Abrasive Wheels:

- 5.4.1 All abrasive wheels shall be mounted by competent persons who have been appointed in writing by the contractor. They should be well trained and have the practical experience for the mounting job.

- 5.4.2 Only trained persons shall be allowed to use abrasive wheels and cutting discs and apply for a hot work permit prior to work.
- 5.4.3 Workers shall wear suitable personal protective equipment while operating abrasive wheels, including eye protection.
- 5.4.4 Abrasive wheels shall be clearly marked in Chinese and English the maximum permissible speed in rounds per minutes (rpm) by the manufacturer. Check that the operating speed of the spindle of a machine does not exceed the maximum permissible speed of the wheel.
- 5.4.5 Run a new or replacement abrasive wheel of at least 1 minute before use.
- 5.4.6 Adjust the work rest as close to the face of the wheel as possible, in any case not exceeding 3.2mm to the wheel.
- 5.4.7 Ensure that the guard is in position and properly adjusted.
- 5.4.8 Never use the side of an abrasive wheel for grinding.
- 5.4.9 Never use undue pressure on the abrasive wheel.
- 5.4.10 Ensure that the floor in the vicinity of a grinding machine is in a good condition, free from obstruction and not slippery.

5.5 *Electric Tools:*

- 5.5.1 All electrical work shall be performed by qualified electrician.
- 5.5.2 Use approved type weatherproof socket/adaptor for extension of power cable.
- 5.5.3 Check for and avoid to use defective or damaged cables, plugs, sockets and damaged or worn tools.
- 5.5.4 Keep loose cables of the floor out of the way of other people as much as possible.
- 5.5.5 Never permit equipment or circuit to become overloaded. Use the correct fuse rating and cable size at all times.
- 5.5.6 Ensure that electrical tools are effectively earthed.
- 5.5.7 Do not withdraw a plug from a socket by pulling the cable.
- 5.5.8 Avoid standing on wet or dam ground when using electric tools.

5.6 *Handheld Tools:*

- 5.6.1 Select the correct weight, size and tool for the job.
- 5.6.2 Keep handheld tools clean, in good condition and store in a safe place when not in use.
- 5.6.3 Handle all sharp hand tools with care. Protect all sharp edges properly if not in use.
- 5.6.4 Keep cutting edges sharp for accurate working and to avoid the need for unnecessary pressure.
- 5.6.5 Use only properly insulated tools for work on or near electrical apparatus/source.
- 5.6.7 Check for and avoid to use defective or damaged handheld tools.
- 5.6.8 Keep tools off ladders or overhead locations.
- 5.6.9 Avoid awkward wrist angles while using tools such as pliers.

5.7 *Lifting Appliances and Lifting Gears:*

- 5.7.1 All lifting appliances and lifting gears shall be of good construction, made of strong and sound materials, free from defects and properly maintained.
- 5.7.2 Every lifting appliance shall be thoroughly inspected/examined by a Competent Person periodically as per the legal requirements.
- 5.7.3 The safe working load shall be clearly and legibly marked on a lifting appliance / lifting gear in English and Chinese. No lifting appliance / lifting gear shall be used for any load exceeding its safe working load.
- 5.7.4 Every part of a load to be raised or lowered by a lifting appliance / lifting gear shall be securely fixed, suspended or supported.

6.0 Use of Dangerous Goods/Harmful/Flammable Substances

- 6.1 All dangerous goods, harmful or flammable substances (such as paint, solvent or adhesive) shall be handled and stored in a safe manner and in accordance with statutory requirements.
- 6.2 Smoking and naked lights (including electric arcs and oxyacetylene or other flame used in welding or cutting metals) shall be strictly prohibited when handling dangerous/flammable substances.
- 6.3 All containers should be clearly labelled to indicate contents. Never use a wrongly labelled container for chemicals.
- 6.4 Adequate ventilation shall be provided and ensured for the operators and the removal of the sources of ignition.
- 6.5 Workers shall wear suitable personal protective equipment during using dangerous/harmful/flammable substance, including eye, respiratory and hand protection.
- 6.6 Fire extinguisher shall be installed and maintained properly nearby the working site.
- 6.7 Suitable warning signs shall be posted in the prominent location to alert workers and public about the work in progress.
- 6.8 Exercise great care in the storage and use of chemicals at all times because they may be explosive, poisonous, corrosive or combustible.
- 6.9 Chemicals shall not be stored in corridors, points of egress or near a source of ignition.

7.0 Safe Use of Electricity

- 7.1 Under the Code of Practice for electric work, the Contractor shall employ registered electrical workers for all permanent and temporary electrical installations.
- 7.2 If the Contractor requires temporary power for his works, the site representative shall inform the project-in-charge of TWC for arrangement at least one week in advance of the working location, power consumption and type of electrical equipment to be connected.
- 7.3 All outgoing electric wiring shall be properly protected and supported. Never leave them lying on ground unprotected to avoid damage and tripping over.

- 7.4 Ensure that all connections including cables, plugs, connectors are of proper sizes/ratings, firmly wired up and the protective conductors are earthed.
- 7.5 Earth leakage circuit breakers should be installed to trip the supply when overloading of the circuit or earth leakage occurs.
- 7.6 The design of the circuits shall in every respect comply with the current Code of Practice for the Electricity (Wiring) Regulation.
- 7.7 Lockout-tagout system shall be used for isolation of electrical supply if applicable.
- 7.8 Check for and avoid to use defective or damaged cables, plugs, sockets and damaged or worn appliances.
- 7.9 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 sign shall be posted in the prominent location to alert the workers and public.

8.0 Work at Height

8.1 *Scaffolds and Working Platform:*

- 8.1.1 The contractor shall take adequate steps to prevent any person on the site from falling from a height of 2 meters or more. Adequate steps shall include the provision, use and maintenance of one or more of the following: (a) working platforms; (b) guard-rails, barriers, toe-boards and fences; (c) coverings for openings; and (d) gangways and runs.
- 8.1.2 All scaffolds shall be inspected by a competent person prior to being put into use for the first time, after erection or alternation, at bi-weekly interval and after exposure to adverse weather conditions.
- 8.1.3 The competent person shall report on the prescribed form according to the requirement of Labour Department to the contractor that the scaffold, including its associated working platforms, is safe for use.
- 8.1.4 Working platform shall be checked to ensure that the platform is of an appropriate structure and closely boarded with planks of adequate thickness and no patent defects.
- 8.1.5 In all the circumstances of the case, it is impracticable to provide such scaffolds and working platforms and the contractor shall provide suitable and adequate safety belts to the workers.
- 8.1.6 Safety belts shall be attached continuously to a suitable and secure anchorage and have suitable fittings.
- 8.1.7 All loose materials and handheld tools shall be stored at safe place to prevent any falling hazard.
- 8.1.8 The contractor shall comply with the requirements stipulated under the latest Code of Practice for Metal Scaffolding Safety which can be download from the Labour Department's website (www.labour.gov.hk/eng/public/content2_8b.htm).

8.2 Ladders:

- 8.2.1 Don't allow to use wooden ladder for carrying work any high level works.
- 8.2.2 Use ladders only for simple work of short duration. They should be use primarily as a means of access and not as a working platform.
- 8.2.3 Ladders shall be of good construction with no missing or defective rungs, of sound material and adequate strength for the purpose for which it is used and is properly maintained.
- 8.2.4 Always spare one hand to hold the ladder firmly. Never lean over or stretch out to reach the work.
- 8.2.5 Do not carry tools or materials in hand when climbing up or down the ladder.
- 8.2.6 Use non-metallic ladders for electrical work or when working near electrical conductors.
- 8.2.7 Wear safety harness with lanyard anchored properly when working on the ladder at height of 2m or more if the provision of working platform is not reasonably practicable.
- 8.2.8 Inspect the ladder for any defects before each use or regularly. Display warning label to the defective ladder.
- 8.2.9 Do not erect straight ladder at a base angle exceeding 75 degrees.
- 8.2.10 Secure a straight ladder at the top. When it is impracticable to do so, firmly secure the ladder at the base by some effective means or by any person.

9.0 Work in Confined Space

- 9.1 No one shall enter a confined space :
 - (a) until a competent person has carried out a risk assessment of the confined space and appropriate safety measures have been taken;
 - (b) unless he is a certified worker;
 - (c) without instruction or permission from the person-in-charge of TWC of the work;
 - (d) unless it has been ventilated and ensure that ventilation continues until the work is finished.
- 9.2 Contractor shall make sure that the certified worker and competent person have completed an approved training course and possess valid confined space licenses, otherwise, they cannot carry out any confined space work.
- 9.3 Prior to entering a confined space, the internal atmosphere must be tested for oxygen content and hazardous/combustible gases by using a multi-gas detector by a competent person. And continuous forced air ventilation should be provided while testing carried out periodically. A copy of the gas testing report shall be submitted to the project-in-charge of TWC.
- 9.4 Contractor shall provide and keep readily available in a satisfactory condition a sufficient supply of approved breathing apparatus, resuscitator, safety harness and lifeline and an audio and visual alarm.
- 9.5 Worker shall wear an approved type of breathing apparatus, harness and lifeline when entering a confined space where toxic gas has been suspected.

- 9.6 Ensure effective means of communication between the workers inside the confined space and the standby person at the entrance.
- 9.7 Do not smoke or use a naked light in a confined space or near opening leading to it.

10.0 Site Risk Self-Inspection

10.1 For CAPEX Works under LOA

- 10.1.1 The site risk self-inspection procedures shall apply to all TWC's contractors whenever they carry out major repairs, construction, alterations, additions, maintenance, improvements, renovations and extensions within TWC's Campuses or buildings for CAPEX project under LOA more than a week.
- 10.1.2 It is the responsibility of the contractor's site representative to carry out the site risk self-inspection by using the prescribed checklist (refer to Appendix 1 for English and Appendix 2 for Chinese), if applicable. But if there is any change in the work nature, the site representative shall perform a new site risk self-inspection for evaluating any potential hazard there.

10.2 For Works under RFQ

- 10.2.1 The risk assessment report shall apply to all TWC's contractors whenever they carry out high-level workplatform, external scaffolding and hot work within TWC's Campuses or buildings for Works under RFQ (refer to Appendix 3).
- 10.2.2 It is the responsibility of the contractor's site representative to carry out the risk assessment by using the prescribed checklist (refer to Appendix 3), if applicable.
- 10.3 This process is aimed to identify any hazardous conditions arising from existing site activities and take subsequent corrective action for preventing serious injury or other loss. And it can monitor the workers/sub-contractors in fulfilling the safety requirement throughout the working period.
- 10.4 For a non-conformance item identified during the site risk self-inspection, the site representative shall record the findings and follow-up actions in the inspection checklist properly, if applicable.
- 10.5 The completed self-inspection checklist shall be reviewed and signed by the contractor's site representative.
- 10.6 An original copy of the self-inspection checklist shall be kept by the contractor while a copy of it shall be kept by the project-in-charge of TWC.
- 10.7 The contractor's site representative shall be responsible to follow-up the corrective actions for any identified potential hazard and report the progress to the project-in-charge of TWC promptly.
- 10.8 The project-in-charge shall verify whether the follow-up actions are completed or taken effectively to rectify the problems and record the results on the previous self-inspection checklist properly.

11.0 Safety Training and Records

- 11.1 All workers involved in TWC's contractual works should possess adequate safety knowledge and awareness.
- 11.2 Contractors are required to provide such information, instruction, training and supervision as is necessary to ensure the safety and health at work of all workers/sub-contractors employed by him on sites.
- 11.3 Contractors are required to ensure that all workers/sub-contractors have attended and successfully completed mandatory general safety induction training course (i.e. Green Card) recognized by Labour Department.
- 11.4 For some specific work nature (e.g. confined space, welding and electrical work, etc), the contractor shall ensure that the worker has received the specific safety training and hold a valid license as per legal safety requirements.
- 11.5 Contractors should keep all safety training records of workers/sub-contractors who will be working at TWC's job site. And contractors shall make those records available for inspection upon the request of the project-in-charge of TWC.
- 11.6 Prior to the commencement of work, contractor's site representative shall record the summary of the training records of all workers/sub-contractors working at TWC's job site in the prescribed form (refer Appendix 4). And a copy of it shall be given to the project-in-charge of TWC.

12.0 Accident and Emergency Case Reporting and Investigation

- 12.1 Contractor must verbally report dangerous occurrences (e.g. fire) and accidents involving death, serious injury or serious damage to the project-in-charge of TWC immediately after the incident/accident.
- 12.2 Contractor shall investigate the incident/accident and must formally submit a written incident report in the prescribed form according to the requirement of Employee's Compensation Ordinance within two working days of the dangerous occurrence or accident.
- 12.3 The contractor must provide the project-in-charge of TWC with a photocopy of any forms or other accident reports he submits to the Labour Department when requested by the project-in-charge of TWC.

SITE RISK SELF-INSPECTION CHECKLIST

Appendix I

Date : _____ Time : _____
 Contractor's Name : _____ Work Nature : _____
 P.O. No. : _____ Job Ref. No. : _____

Worker's Name: 1. _____ 2. _____ 3. _____ 4. _____
 Green Card No.: 1. _____ 2. _____ 3. _____ 4. _____

Construction
 Workers
 Registration
 Card No.: 1. _____ 2. _____ 3. _____ 4. _____

Inspected by : _____ Signature : _____
 (Contractor's Site Representative)

(This site risk self-inspection shall be conducted at weekly interval and if there is any change in work nature!)

Please mark " X " against the appropriate column at right hand side of each question.

Item	Yes	No	N/A	Follow-up Actions
1. Site Layout				
a. Sufficient hoarding erected to protect public?	_____	_____	_____	
b. Maintain a safe access and egress at site entrance?	_____	_____	_____	
c. Provide adequate lighting at work area?	_____	_____	_____	
d. Post out suitable warning signs to alert trespassers?	_____	_____	_____	
e. No projecting nail find in timber to endanger workers/public?	_____	_____	_____	
f. Keep site tidy and material stacked safely?	_____	_____	_____	
	_____	_____	_____	
	_____	_____	_____	
2. Personal Protective Equipment				
a. All site personnel wear safety helmets?	_____	_____	_____	
b. Workers wear appropriate goggles whilst involving grinding, chipping, cutting process?	_____	_____	_____	
c. Workers wear ear protectors whilst working in noisy environment?	_____	_____	_____	
d. Workers wear safety belts whilst involving work at height (higher than 2 meters)	_____	_____	_____	
	_____	_____	_____	
	_____	_____	_____	

Item	Yes	No	N/A	Follow-up Actions
3. Use of flammable substance/gas a. Oxy-acetylene cylinders i. Maintain oxy-acetylene cylinders at upright position? ii. Install flash back arrestors, pressure regulators and single-valve hose at oxy- acetylene cylinder setup? iii. Install fire extinguisher nearby? iv. Cylinder hoses are free from defects/leakage? v. Maintain adequate ventilation? vi Workers wear appropriate Personal Protective Equipment? vii. Post out " No smoking " sign to alert site personnel?	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	
b. Paints/ solvent / chemical i. All containers properly labelled? ii. Post out warning signs to alert workers and public? iii. Install fire extinguisher nearby? iv. Wear appropriate Personal Protective Equipment?	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	
4. Electrical Work a. Appointment of competent person to carry out the electrical work? (If yes, electric license no.: _____) b. Use lockout-tagout system if applicable? c. Provide suitable earthing? d. Use waterproofed typed sockets, wires and connectors? e. Refer (b), they are in good condition?	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	
5. Wood-working machine a. Install crown guard to circular saw? b. Install riving knife? c. Install emergency stop? d. Install fire extinguisher? e. Post out "No smoking" sign to alert site personnel? f. Wear suitable Personal Protective Equipment?	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	



Item	Yes	No	N/A	Follow-up Actions
6. Hand Tools a. All hand tools are free from defects? b. All hand tools stored in safe place? c. Suitable hand tool used in particular process? d. Install suitable guarding to dangerous parts? e. Appointment of competent person to mount abrasive wheels?	 _____ _____ _____ _____ _____	 _____ _____ _____ _____ _____	 _____ _____ _____ _____ _____	
7. Work at Height (Above 2 meters high) a. Provide a working platform (constructed with high guard-rails, intermediate guard-rails and high toe board)? b. If (a) is not available, provide safety belts to concerned workers and attaching to anchorage point? c. All loose material, hand tools are stored at safe place to prevent any falling hazard? d. Provide and use wooden ladder	 _____ _____ _____ _____	 _____ _____ _____ _____	 _____ _____ _____ _____	
8. Others _____ _____	 _____ _____	 _____ _____	 _____ _____	

Received and Verified By FMO:

(Signature) _____

(Name) _____

(Position) _____

(Date) _____

Appendix 2

工地風險自我檢查表

日期： _____ 時間： _____

分判商名稱： _____ 工作類別： _____

採購單編號： _____ 工作參考編號： _____

工人姓名： 1. _____ 2. _____ 3. _____ 4. _____

平安咭編號： 1. _____ 2. _____ 3. _____ 4. _____

建造業工人
註冊証編號： 1. _____ 2. _____ 3. _____ 4. _____

檢查者姓名： _____ 簽署： _____

(分判商工地代表)

(此工地風險自我檢查須於每星期或如工作性質有任何改變而進行一次！)

請在每條問題內右邊適當位置填上" X "。

項目	是	否	不適用	跟進事項
1. 工地環境				
a. 矗立圍板以保護公眾？	_____	_____	_____	
b. 工地出入口保持安全及暢通？	_____	_____	_____	
c. 工作地方提供了足夠照明？	_____	_____	_____	
d. 張貼合適的警告標籤以提醒閑人勿進工地內？	_____	_____	_____	
e. 木材沒有凸出可傷害工人或公眾的釘子？	_____	_____	_____	
f. 工地保持整齊及物件擺放妥當？	_____	_____	_____	
2. 個人防護裝備				
a. 所有工地人仕已佩戴安全帽？				
b. 當進行磨、削或切割工序時，工人已佩戴合適的護目鏡？	_____	_____	_____	
c. 當在高噪音環境下工作時，工人已佩戴護耳罩？	_____	_____	_____	
d. 當進行高空工作時(超過兩米高)，工人已佩戴安全帶？	_____	_____	_____	

項目	是	否	不適用	跟進事項
6. 手提工具				
a. 所有手提工具沒有損壞？	_____	_____	_____	
b. 所有手提工具存放在安全地方？	_____	_____	_____	
c. 使用合適的手提工具進行指定工作？	_____	_____	_____	
d. 危險部份已安裝合適的防護罩？	_____	_____	_____	
e. 僱用合資格人仕安裝火石轆？	_____	_____	_____	
7. 高空工作 (超過兩米高)				
a. 提供工作台(最高的護欄、中間的護欄、底護板)？	_____	_____	_____	
b. 如(a)項不適用，須提供安全帶給有關工人，並須保持將安全帶一直繫於穩固的繫穩物？	_____	_____	_____	
c. 所有鬆散的物件及手提工具須存放在安全的地方，以避免高空墮物？	_____	_____	_____	
d. 提供及使用木梯	_____	_____	_____	
8. 其他	_____	_____	_____	
	_____	_____	_____	
	_____	_____	_____	

由校園設施管理處收表及確認:

(簽署) _____

(姓名) _____

(職位) _____

(日期) _____

東華學院
校園設施管理處
施工前危害及因素評估
(由承辦商填寫)

第一部份：工程資料

承辦商名稱：_____

工作地點：東華學院_____校舍

預計工程時期：由_____年_____月_____日至_____年_____月_____日

工程簡介：_____
(工程編號：_____)

工程負責人：_____ 聯絡電話：_____

第二部份：施工前工地風險評估

評估日期：_____年_____月_____日(須於工程開始前兩星期完成並交予校園設施管理處)

風險評估內容：

項目	工作潛在風險	潛在人命損失	有無相關風險？	預防措施(如有相關風險)	跟進內容(如有預防措施)
1	離地高於2米工作	人體高空墜下	有/無		
2	電力系統漏電	人體觸電昏迷	有/無		
3	熱力、生火或使用易燃物品	因火災引致傷亡	有/無		
4	使用機械設備	肢體受傷	有/無		
5	使用完善工具	肢體受傷	有/無		
6	欠缺個人裝備	肢體受傷	有/無		
7	其它		有/無		

本人_____謹代表_____ (承辦商名稱) 確認上述填報之風險評估內容屬實。如有因為是次工程而引起任何人命傷亡及財物損失，本公司同意承擔全部責任。

承辦商代表簽署：_____ 簽署日期：_____

Appendix 4

SUMMARY OF SAFETY TRAINING RECORDS
安全訓練記錄

Contractor's Name 分判商名稱 : _____ P.O. No. 採購單編號 : _____ Prepared By 填寫者姓名 : _____ (Contractor's Site Representative)	Work Nature 工作性質 : _____ Job Ref. No. 工作參考編號 : _____ Date 日期 : _____
---	---

Item 項目	Name 姓名	I.D. No. 身份証 編號	Green Card No. 平安咭編號 (Valid Date 有效日期)	Confined Space License No. 密閉空間証書編號 (Valid Date 有效日期)	Electric Work License No. 電牌編號 (Valid Date 有效日期)	Other License No. 其他証書編號 (Valid Date 有效日期)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						

Record to : original – Contractor; copy – Project-in-charge of TWC
 記錄傳閱及存檔：正本給 – 分判商、副本給 – 東華學院項目負責人