Safety First

Safety Guides for Contractors

(For Works on MTR's Railway Premises)

MTR

安全第一！

承辦商

安全工作指引

(適用於港鐵鐵路處所內工作)

MTR
Preface

MTR Corporation Limited (thereafter "the Corporation") is committed to providing an efficient and reliable mass transit railway system to the people of Hong Kong in a safe manner. To achieve this, safety of our customers, the public, our contractors and employees is one of the key success factors.

This guidebook is published by Contractor Safety Management Committee for persons who are employed by contractors or their sub-contractors working on MTR's Railway premises so that they shall understand the safety precautions which they must comply with when working in MTR's railway premises. Contractors and sub-contractors must ensure that these safety precautions are thoroughly implemented.

The safety precautions described in this guidebook are not exhaustive. Complying with this guidebook will not automatically be exempted from legal and contractual responsibilities. Contractors and sub-contractors must always refer to and comply with the safety requirements as specified in the MTR’s "Railway Safety Rules" and "Safety Requirements and Information for Contractors".

序言

港鐵公司（以下簡稱「港鐵」）一向致力為香港市民提供快捷、可靠及安全的鐵路運輸系統。要達至上述的目標，確保乘客、大眾、承辦商及僱員的安全是重要的一環。

「承辦商安全工作指引」（以下簡稱「指引」）是由承辦商安全管理委員會為承辦商或其分包商所聘用的人員而印製，旨在讓他們了解在香港鐵路範圍內工作時必須遵守的基本安全措施。承辦商及其分包商須確保這些安全措施得到切實執行。

本小冊子所述之安全措施並非全部。承辦商及分包商即使完全遵守並不表示可獲免除在法律及合約上所須承擔的責任。承辦商及分包商須參照及遵守香港《鐵路安全規則》和《承辦商安全要求及須知》所訂的安全規則，確保能維持一個安全的工作環境。
Corporate Safety Policy has been adopted as Operations Division Safety Policy since 2013

MTR Corporate Safety Policy

Safety of our customers, the public, contractors and employees is an absolute prerequisite. The MTR Corporation is committed to consistently meeting statutory requirements, maintaining a safety-first culture, employing management systems to achieve MTR Corporation’s safety goals for continuous improvement in safety performance in all aspects of the business.

Safety demands active involvement by all. It is the responsibility and duty of everyone and should be foremost at all times in everything we do. Safety management is the responsibility of each director, manager and supervisor. All employees have a duty to protect our customers, the public, contractors, colleagues and themselves.

2 December 2007

Projects Division Safety and Health Policy

It is our intention to provide safe and healthy working conditions for all staff and contractors to ensure that all reasonably practicable measures are taken to prevent our work adversely affecting the safety and health of the public, contractors and staff.

General managers, line managers and supervisory staff are responsible for implementing the Division’s Safety Management System throughout their areas of responsibility. They are to ensure that safety, occupational health, loss prevention and welfare considerations are always given primary in design, selection of equipment, provision of equipment, planning and day-to-day work practices.

We are committed to providing the best international safety standards and practices, complying with all statutory requirements throughout our work, maintaining a safety-first culture and eliminating of accidents, property damage incidents, fire and dangerous occurrences, wherever possible.

We are also committed to achieving continual improvement in our safety and health performance and safety management system and to the adoption of a risk based approach to ensure that the risks to the public, contractors and staff are as low as reasonably practicable.

Staff shall be provided with sufficient equipment, information and training in respect of the risks to their safety and health and those of others, arising from their work activities or at their workplace.

Staff have a duty of care and a safety responsibility to themselves, the public, colleagues and contractors and shall not carry out a task where they may put themselves, or others, at risk.

Compliance in respect of safety, health and welfare matters shall be monitored through the Projects Safety Management Committee and Safety Champions Committee, so as to ensure efficient and effective passage of information throughout all of the Division.

We will ensure that adequate resources are made available in both personnel and financial terms in order to ensure that the objectives of this Policy can be effectively implemented and achieved.

T C Chew
Projects Director

Date of Issue: 9 February 2012

工程處安全及健康政策

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T C Chew
Projects Director

Date of Issue: 9 February 2012
Safety Values to be shared by All Staff

**Absolute Pre-requisite**
Keeping safety-first in our hearts and minds and in everything we do.

**Learning and Sharing**
Sharing lessons learned and knowledge across our business.

**Excellent Performance**
Always being committed to improving safety performance and not being complacent. Setting high safety standards and, as a minimum, meeting or exceeding statutory requirements.

**Responsible Citizen**
Being a responsible corporate citizen caring for the safety of stakeholders. Listening and responding to the safety needs of communities and stakeholders.

**Total Commitment and Ownership**
Safety is everyone’s responsibility and must be ingrained in our DNA. Safety management is the responsibility of each director, manager and supervisor.

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Operations Division
Safety Aspirations, Strategic Approaches & Priorities

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活出共同的安全信念，實踐處處安全策略

**Absolute Pre-requisite** 安全至上
無論做甚麼事情，都要全心全意護安全至上。

**Learning and Sharing** 學習與分享
分享從公司不同業務汲取的經驗、教訓及知識，向其他地方的鐵路及行業學習，以著手持續改善。

**Excellent Performance** 追求卓越表現
承諾提升安全表現，不計自滿，設定安全標準，並符合或高於法規要求。

**Responsible Citizen** 負責任的企業公民
作為負責任的企業公民，要關心利益相關者的安全，聆聽和回應社區及利益相關者的安全需要。

**Total Commitment and Ownership** 完全承諾及承擔
安全是每位員工的責任，須包含於我們的基因裏。安全管理是每位總監、經理層責任。

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安全策略性方針及重點

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**Your Safety Responsibilities**

- Safety must always be your first concern.
- Understand and comply with the relevant safety regulations and safety precautions described in this guidebook.
- Do not use or operate tools, machinery or equipment unless you have been trained and are authorised to do so.
- Wear / put on appropriate personal protective equipment.
- Aware of proper posture in manual handling.
- Do not smoke in worksite.
- Know your fire escape routes. If fire alarm sounds, notify the people around and proceed to the fire assembly point.
- Report any abnormalities or incidents to the Project Owner, Engineer’s Representative, Station Controller, Duty Depot Engineer or Fire and Security Supervisor.
- Beware of personal hygiene and comply with the guidelines provided by the Government and the MTR.

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**你在鐵路範圍內工作的安全措施**

- 任何時候，安全至上。
- 理解並遵守有關的安全規則及本指引所述的守則。
- 不得使用或操作任何工具、機械或設備，除非先已經接受相應訓練及獲權限進行。
- 穿著及佩戴適當的個人保護衣物或裝備。
- 注意及使用正確的工作姿勢於人力提舉與搬運工作。
- 不得在工地內吸煙。
- 熟悉火警逃生路線和程序。遇有火警，立即警告他人及前往指定的集合地點。
- 遇有不尋常之情況或意外事故，必須立即通知項目工程負責人，包括港鐵工程師代表、值日站長、當值車廠工程師或消防保安長員。
- 注意個人衛生及遵守政府及港鐵發出的公共健康及衛生指引。

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Part 1: Safety Precautions for Working in Operating Railway

A Personal Safety
- Take responsibility for your own safety at all times.
- Be vigilant to safety at all times.
- Wear appropriate clothing (not too loosen) and put on hi-visibility vest when working on tracks.
- Use suitable personal protective equipment (PPE) with respect to the hazards that you are likely to be exposed to.

B Safety on Railway Tracks
- Do not leave tools or materials on or near tracks and platform.
- Do not go between vehicles or between a buffer stop and the nearest vehicle when they are less than 20 metres apart without ensuring that the vehicles are not about to be moved and that no shunting is taking place.
- When hearing train horn sounds, move clear of all tracks and acknowledge the warning by raising one arm above head.
- Do not walk on the rails.

C Overhead Wires
- Assume that overhead wires are live at all times, unless earthing rods have been erected, section isolators have been isolated and padlocked, and your supervisor has taken necessary safety precautions. Do not touch or close to the overhead wires except it is safe to do so.
D Electrical Cables
- Assume that electrical cables are live at all times.
- Switch off and isolate electrical cables before moving them.
- Apply protective covers on electrical cables before any work, e.g., drilling, which may cause physical damage to the cable, is undertaken in their vicinity.

E Illumination
- Provide adequate illumination in areas with insufficient lighting.

F Fire
- Know your fire escape routes which should be properly directed.
- When fire alarm sounds, stop work immediately, switch off equipment, proceed to the assembly point and report to the Fire Warden or Station Controller.

G Authority to Work
- Your supervisor is responsible for the arrangement of work at the worksite. He/She must obtain authority to work from the appropriate Station Controller or MTR person-in-charge.
- Consult your supervisor before using ladder, long rodding tools, etc.

H Accident / Defect Reporting
- Report all accidents to your supervisor who must report them to either the Station Controller or the Corporation's Person-in-Charge.
- Report any damage, irregularity or defect of equipment, machine or structure.

All persons employed by contractors and sub-contractors shall comply with the relevant safety ordinances and regulations, in particular:
- Occupational Safety and Health Ordinance
- Factories and Industrial Undertakings Ordinance
- Dangerous Goods Ordinance
- Boilers and Pressure Vessels Ordinance
- Relevant Code of Practice published by the Government, and
- MTR's rules and procedures.

If there is any violation of the above, contractors and sub-contractors may:
- be required to stop work immediately, and
- not be allowed to resume work until adequate remedial work is carried out to the Corporation's satisfaction.

所有受聘於承辦商及分包商的人士必須遵守有關的法例，特別是以下條例及其附屬法例：
- 《職業安全及健康條例》
- 《工廠及工業營業條例》
- 《危險品條例》
- 《鍋爐及壓力容器條例》
- 有關政府部門發出的工作守則及
- 港鐵的規則及程序。

承辦商及其分包商若違反上述任何規定，將會被勒令停止工作；及
- 纠正不符合安全的地方，直至港鐵表示情況滿意後方可復工。
All persons employed by the contractors and subcontractors shall use the authorized routes for access to and egress from the worksite. Before and after work, they shall inform the Landlord, Project Owner, Engineer's representative, Duty Engineer-in-Charge or Station Controller.

No one is allowed to work on or gain access to running or reception tracks on the operating railway at any time unless all relevant safety requirements in the Railway Safety Rules are met.

All persons employed by the contractors and subcontractors shall not enter or stay in the railway premises unless they are getting to and from the worksite through the agreed path and in the agreed working areas.

Hazardous tools and dangerous equipment are prohibited in the Railway Premises, in particular:
- cartridge operated fixing tools,
- open type welding transformers,
- spray painting equipment, or
- products containing asbestos.

MTR 進出港鐵範圍

承辦商及分包商的所有僱員必須使用指定的道路進出工地。在每天開工前和收工時，應通知地方主管，港鐵工程師代表，當值主管工程師或值日站長。

任何人員於任何時間都不得進入營運鐵路中的行車軌道或接駁軌道或在該範圍施工，除非已符合《鐵路安全規則》內所有相關的安全要求。

承辦商或分包商的所有僱員都不得進入港鐵的鐵路範圍或在內逗留，除非他們正處於往返工地的指定通路或協定的工地範圍內。

MTR 不得帶進鐵路範圍的物品

不得攜帶危險工具及設備進入鐵路範圍，特別是：
- 彈簧推動打釘工具（即石炭槍）;
- 開放式焊接變壓器;
- 噴漆設備; 或
- 石棉產品。
The worksite must be properly managed, which shall include:
- keeping it neat and tidy at all times,
- providing adequate illumination,
- storing flammable substances properly,
- removing all flammable waste and source of fire,
- isolating all power sources, and
- ensuring the MTR services and equipment is properly protected.

Prior consent from the Corporation must be obtained for special made tools and equipment before use.

All electrical cables and/or equipment shall be treated as live at all times. Do not work on these electrical cables or equipment unless they are completely isolated and earthed.

5  Housekeeping

6  Electrical Cables and Equipment

必须時刻妥善管理工地，包括：
- 經常保持工地整齊清潔；
- 提供充足的照明；
- 妥善儲存物料及易燃物品；
- 清除所有易燃的廢物及火源；
- 隔離所有電源；及
- 確保港鐵的服務及設備有足夠的保護。

如有特別製造之工具或設備，必須在使用前取得港鐵同意。

裝設在工地的所有電纜或電力裝置必須視為經常帶電。
不得在這些電纜或裝置上工作，除非該等電纜及電力裝置已完全隔離及接地，並已發出有關安全文件。
You must not walk on or near tracks, or cross tracks, unless you are qualified to do so and then only in the course of an approved work. Follow the instructions given by the Competent Person or Person-in-Charge when working on track, and:

- wear an approved high visibility vest,
- beware of points,
- do not walk on rail,
- do not work between trains and buffer stops unless authorized, and
- make sure a "place of safety" is available

Clear all tools and debris from track after work.

Follow the instructions given by the Competent Person or Person-in-Charge when working near overhead line equipment, and:

- wear an approved high visibility vest,
- assume that the overhead lines are live at all times,
- do not perform any work or apply any tools or materials within 2.75 meters from the overhead line equipment on EAL, MOL & WRL and within 2 meters on other railway lines,
- do not use cranes within 7 meters from the overhead line equipment unless authorized,
- before erecting scaffolds, make sure that the traction current has been switched off and the overhead line equipment has been isolated, earthed and padlocked, and
- when working on lines where the overhead line is fed with D.C. traction current, take appropriate precautions to avoid short-circuiting of rail potential to the earth or earthed overhead line equipment or structure.

任何人不得在路軌上或附近範圍行走或跨過軌道，除非有關人員已獲取認可資格並只限於工作需要。在路軌上工作時，必須聽從合格人員或工作主管的指示，並:

1. 穿著認可的熒光服;
2. 留心路軌波口;
3. 禁止在路軌上行走;
4. 禁止在列車之間或列車與車端之間工作; 及
5. 確保隨時前往「安全地點」。

完工後，必須清理路軌上的工具和雜物。

在架空電線設備附近工作時，必須聽從合格人員或工作主管的指示，並:

- 必須穿著認可的熒光服;
- 必須假設架空電線經常帶電;
- 於東鐵線、西鐵線和港鐵架空電線設備 2.75 米範圍內，或於其他路線的架空電線設備 2 米範圍內，不得進行任何工作及使用任何工具或物料;
- 未經許可，不得在架空電線設備 7 米範圍內使用起重機;
- 搭建工作台前，必須證實牽引電流已經關閉，架空電纜已經隔離、絕緣及上鎖；及
- 若施工的路線是印有直流電引電流信號架空電纜，就必須採取適當的預防措施，以防止測試電壓與接地或與已接地的架空電纜設備或結構物接合時出現短路。
No flammable substances shall be kept at the worksite, unless written approval has been obtained from the Corporation.

Flammable substances shall be contained in metal containers specially designed and stored away from all sources of heat for such purpose and the quantity shall not exceed 35 litres.

除非獲港鐵公司書面授權批准，否則不得在工地內存放易燃物品。

易燃物品必須盛載於貼有適當標籤的密蓋式金屬容器內，總容量不得超過 35 公升。存放處須遠離熱源。
Dangerous substances shall not be used or stored at the worksite, unless written approval has been obtained from the Corporation.

All dangerous substances shall be:
- properly labelled to indicate the classification, particular risks and safety precautions according to statutory requirements,
- kept in suitable containers and its MSDS is readily available, and
- handled and stored with extreme care in accordance with the safety precautions prescribed.

At least one 4.5kg dry chemical powder type portable fire extinguisher, or its equivalent, in good working condition with valid maintenance label, shall be provided at each worksite to guard against fires.

Additional fire extinguishers shall be made available upon request of the Corporation.

危險物品

除非獲港鐵公司書面授權批准，否則不得在工地內使用或儲存危險物品。

所有危險物品必須
- 按法例規定，貼上適當的標籤說明其種類、危險性及所需的安全措施
- 存放在適當的容器內，及儲存安全物料資料表以便查閱
- 按指定的安全措施，極度小心地處理和使用

滅火筒

每個工地必須具備最少一支重4.5公斤的化學粉末或同類型的手提滅火筒作為滅火之用；滅火筒必須操作正常，並貼有有效的保養標籤。

必要時，承建商須按港鐵要求提供額外滅火筒。
Contractors shall provide a proper distribution panel for temporary power supply to the worksite. The distribution panel shall be:
- in good condition,
- properly installed in place for easy accessibility, and
- equipped with:
  - a main cut-off switch,
  - an effective over-current protection device, and
  - an effective earth leakage circuit breaker.

The contractors shall be permitted to make connection to the power source only when the Corporation is satisfied with the temporary electrical distribution panel, and installation of associated electrical wiring.

All dangerous parts of machinery in use shall be properly guarded to prevent bodily injury and the guarding shall not be misused or removed.
Safety Guidelines

All ladders in use at the worksite shall be:
- made of non-conductive materials,
- in good working condition with no deficiencies,
- inspected every 6 months with the inspection date and next due date for inspection marked on the ladder, and
- stored and locked at designated locations when not in use.

Contractors shall ensure that all electrical tools and temporary wiring in use are:
- in good working conditions with no defect,
- no defective power plugs and sockets,
- suitable for the environmental conditions,
- not frayed,
- free of exposed live conductors,
- free of poorly tape joints,
- suitable for the supply voltage and loading current, (i.e. no mix use of 110V/220V, improper connectors, etc)
- properly protected against mechanical damage,
- properly connected by plugs and sockets, and
- properly protected against electrocution hazard by:
  - earth leakage circuit breakers, or
  - earthing.
All air receivers in use at the worksite shall:
- be tested and inspected by Competent Person,
- be displayed with its latest Certificate of Fitness or its copy at prominent position as required by the Boilers and Pressure Vessels Ordinance, and
- be operated normally.
To be examined within 26 months after the last examination date.

All lifting appliances and gear in use at the worksite shall:
- be in good condition and correctly used,
- be used by qualified personnel, and
- be satisfied with the weekly inspection requirement and 6/12 monthly examination as required under the Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations.
Contractors must obtain valid certificates of inspection and examination before use.

在工地使用的壓縮氣體容器必須：
- 由合資格人員進行測試及檢驗；
- 按照《鍋爐及壓力容器條例》，在當眼處張貼有效的檢測合格證書或其副本，及
- 操作正常。
自上次測試及檢查後 26 個月內，再次進行測試及檢查。

在工地使用的所有起重設備及裝置必須：
- 狀態正常並使用得當；
- 由認可人員操作，及
- 符合《工廠及工業營業（起重機械及裝置）規例》的要求，每週檢查一次及每 6 或 12 個月檢驗 1 次。承辦商必須持有有效的檢查及檢驗證書，方可使用起重設備及裝置。
Scaffolding and Working Platforms

All scaffolding and working platforms in use shall:
• be erected and dismantled by trained workmen under the supervision of a Competent Person,
• be dismantled, stored and locked at designated locations after each shift,
• not be erected near or within 2 metres from overhead lines unless prior approval has been obtained from the Corporation,
• be guarded suitably against overturning by the use of outriggers,
• have signs warning of the danger of falling objects,
• not obstruct any passageway,
• not be positioned near running tracks,
• have toe boards of at least 200mm high,
• have guard-rails at a suitable height, as described below, above the working platform:
  - between 900mm and 1150mm (for top guide-rails),
  - between 450mm and 600mm (for intermediate guide-rails), and
• be closely planked.

Important: If the last 2 points cannot be complied with due to physical / environmental constraints, all workers shall adopt the following safety precautions when working on scaffolding or a working platform:
- safety nets whenever practicable, and
- safety belts / harness.

No welding, flame-cutting or other hot work is permitted without prior authorisation of the Corporation.

If hot work has to be carried out on the Railway premises:
• JHA / risk assessment shall be conducted on all work processes that involve hot work on the Operating Railway and submit a method statement detailing the safety measures,
• a full time Fire Marshal shall be appointed to attend the hot work throughout the entire period,
• appropriate fire safety precautions shall be taken, and
• a Permit-to-Work (Hot Work) shall be obtained from the Fire Marshal.

In the event of oxy-acetylene gas welding or flame-cutting:
• only one set of oxy-acetylene gas cylinders is allowed and it must be fitted with flashback arrestors,
• the oxy-acetylene set must be in good working condition and free of any cracks or leaks,
• the oxygen and acetylene cylinders must always be:
  - securely fastened in an upright position, and
  - moved in wheeled trolleys or other appropriate vehicles.

Hot Works

工作許可證（熱作）

除非事前已獲港鐵授權，否則不得進行焊接、火焰切割或其他熱作。

若需在鐵路範圍內進行熱作，必須:
• 為營運鐵路上任何涉及熱作的工序進行工作危險分析/風險評估，並提交施工方法說明，詳載安全措施；
• 要派一名防火稽察在整個作業期間在場監察；
• 採取適當的防火/消防安全措施；及
• 向防火稽察領取「工作許可證（熱作）」。

進行氧乙炔焊接或火焰切割工作時:
• 工地內只許存有一套氧乙炔氣樽，氣樽並須配備回火制止器；
• 必須確保氧乙炔焊接裝置操作正常，沒有任何破裂或破損；及
• 氧氣及乙炔氣樽必須時刻:
  - 穩固地固定於直立的位置上；
  - 以有輪手推車或其他適當車輛運送。

18 樓架及工作台

所有使用的樓架及工作台必須:
• 在合格人員監視下，由受訓人員架設及拆除；
• 在每次完工後拆除，然後儲存在指定地點並上鎖；
• 架設距離架空電纜至少2米以外，惟事前已獲港鐵批准則除外；
• 利用支撐物固定位置，防止傾側；
• 展示標示有物件從高處墜下的警告標誌；
• 避免阻塞任何通道；
• 遠離行車軌道；
• 設有最少200毫米高的護板；
• 裝設適當的扶手在工作台以上:
  - 900毫米至1150毫米之間（頂部扶手）；
  - 450毫米至600毫米之間（中間扶手）；及
• 確保夾板之間不留空隙。

注意：若因實際環境限制未能遵從最後2點，所有工人在工作架或工作台上工作時，必須使用:
• 安全網（切合實際情況下）及
• 安全帶/防墜裝備。
20 Painting

- No spray painting of flammable substances is allowed at the worksite.
- Painting and welding or flame-cutting shall not be carried out at the same time at a worksite.

21 Handling and Conveyance of Heavy or Bulky Articles

Before any manual handling of heavy or bulky articles is carried out at the worksite, contractors shall:
- appoint a Competent Person to conduct risk assessment to the manual handling operation,
- provide information and training on safe manual handling operation to workers, and
- provide suitable protective equipment and mechanical aids where appropriate.

No bulky items are allowed to be conveyed into the Railway premises without prior permission from the Corporation.

Use of escalator to convey heavy or bulky article is prohibited.

20 漆漆

- 工地內不得噴塗易燃物料。
- 工地內不得同時進行噴漆及焊接或火焰切割的工作。

21 搬運重物

搬運重型或大型物件前，承辦商必須：
- 委派一名合格人員對體力處理操作進行風險評估；
- 為工人提供有關安全體力處理操作的資訊及訓練；及
- 適當地提供合適的保護設備及機械輔助設施。

除非事前已獲港鐵批准，否則不得運送大型物件進入鐵路範圍。
禁止使用電動扶手電梯運送重型或大型物件。
Power-operated access equipment including any suspended working platform, elevated working platform for high level work shall be:
- in good working condition,
- operated by qualified personnel, and
- stored and locked at designated locations when not in use.

Where there is high level works, the area underneath shall be cordoned off and warning signs of potential falling objects shall be displayed at prominent locations.

Before entering into confined spaces, a risk assessment must be conducted by a Competent Person* and Risk Assessment Report/Certificate for Work (Confined Spaces) must be issued.

Only Certified Worker* is allowed to carry out work in a confined space.

Sufficient approved breathing apparatus and resuscitators shall be provided at the worksite.

* Please refer to F&B (Confined Spaces) Regulation and Railway Safety Rules for OP requirement

進行高空工作時使用的電動設備，包括任何懸吊式工作台及工作高台，必須：
- 操作正常：
- 由認可人員操作：及
- 在完工後儲存在指定地點並上鎖。

進行高空工作時，必須封鎖施工位置下面的範圍，並須在顯眼處展示防有物件從高處墜下的警告標誌。

進入密閉空間前，必須由合資格人士* 進行風險評估及填妥「危險評估報告」／「工作證書（密閉空間）」。

只有獲准工人* 方可在密閉空間工作。

工地必須具備足夠的認可呼吸器具與復甦器。

* 請參考「工廠及工業經營（密閉空間）規例」及《鐵路安全規例》有關「認可人員」的要求。
Excavation Works

- Identify the locations of underground utilities (e.g., gas mains, water mains and electrical cables) prior to excavation.
- Erect shoring to prevent fall or displacement of earth.
- Fence off the excavation areas with suitable barriers and display appropriate warning signs.
- Ensure no materials are stacked closed to the excavation areas.
- Keep / Display the certificates and reports in respect of any test, inspection or examination of any plant, excavation or earthwork at every site as required by Construction Sites (Safety) Regulations.

Personal Protective Equipment

All persons working at the worksite shall wear appropriate personal protective equipment with respect to the hazards they are likely to be exposed to, including but not limited to:

- safety helmets / hard hats,
- eye goggles / face-shields,
- ear protectors,
- respirators,
- protective gloves,
- protective clothing,
- safety shoes, and
- safety belts / harnesses.
Part 3: Site Safety Management for Working in Operating Railway

Contractors shall appoint a Person-in-Charge of the work, who must be present at the worksite at all times to perform his duties, to ensure that:
- work is undertaken safely,
- before leaving the worksite:
  - all sources of ignition are removed,
  - all power supplies are isolated, and
  - the worksite is in a safe condition without undue risk to MTR.

第三部分 在營運鐵路範圍內工作的工地安全管理

承辦商必須委派一名工作主管，在工作進行期間留守現場，履行以下職責：
- 確保安全地進行各項工作；
- 在各人離開工地前，確保：
  - 已清除所有火源；
  - 已關掉所有電源；及
  - 已核實工地安全，以免對港鐵構成不必要的風險。
A Competent Person* shall obtain a written approval from the Engineer to work on the railway or fixed equipment, to arrange protection for and supervise working parties, and to accept safety documents required by the nature of their duties and as defined in the Railway Safety Rules. The Certificate of Proficiency and Qualification must state the class of work the person is competent, CP(N), CP(T) & CP(P), to carry out and the section of the system to which it applies.

A Competent Person must be on site at all times when work is:

- on or near running or reception tracks,
- in a depot and train movements create a risk,
- at or within the minimum electrical safety distance of overhead line or high voltage equipment,
- to involve hot work, except in open spaces,
- to be done in a confined space, and
- considered to risk the safety of any person or equipment.

* Note: Please refer to RSR for CP's role & responsibilities in operating railway.

Contractor Competent Person shall not perform work other than safety supervision if:

- the number of workers at his/her assigned work site exceeds 10, and
- the Safety Classification is 1 or 2.

**Appendix 1**

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</table>

**Part 3**

合格人員 (CP)

合格人員是指工程師由標準的人員，負責在電路或
固定設備上施工，為工作隊安排保護措施和監督工作
隊，以及接受規定所定的職責所需的文件。

在「職能及資格證書」上必須列明該名人員及資格進
行的工作類別 (如下)，以及可在那些系統上工作：

合格人員 (非軌道) - (Non-track)
合格人員 (軌道) - (Track)
合格人員 (工程領域) - (Possession)

在下列情況下，合格人員必須專職留守現場監督工作:

- 在行車或接收軌道上或附近施工;
- 在車庫內有行車危險的地方施工;
- 在架空電線或高壓設備的最低安全距離位置
  或該範圍內施工;
- 軌道裂縫，在露天範圍除外;
- 在密閉空間內施工；及
- 認為工作會威脅任何人或設備的安全。

* 請參考《鐵路安全規則》有關「合格人員」於電路鐵路的角色及職
貴要求。
The Site Safety Cycle is:
- Implement Site Safety Cycle as a monitoring and controlling tools except services contractors.
- Safety documents control:
  - Safety files for keeping controlled copies of method statement and other safety related documents on site, and
  - Display of safety information (publications/posters) by appropriate means to suit the site environment.

The Contractor shall Implement Site Safety Cycle:
- Daily Cycle
  - Pre-Work Exercise and Safety (PES) meeting
  - Hazard Identification and Activity (HIA) meeting
  - Pre-work safety checks
  - Safety inspection by site agent or his/her representatives
  - Guidance and supervision during work
  - Safety co-ordination meeting
  - Daily cleaning and tidying up of the site
  - Checking of the Site after each day’s work

Weekly Cycle
- Weekly safety walk by site agent and Registered Safety Officer in company with Engineer’s Representative
- Weekly co-ordination meeting with site agent and Engineer’s representative
- Weekly overall cleaning and tidying up of the site

Monthly Cycle
- Site safety management committee meeting (including pre-meeting inspection)
- Site safety committee meeting

工地安全程序
工地安全程序是:
- 施工工地安全程序作为监控和控制的工具（不包括服务承建商）。
- 安全文件的控制:
  - 安全文件档案，当中保存了有关施工方案及其他安全相关文件的受控副本；及
  - 按工地环境和合适途径，展示安全信息（出版物/海报）。
承建商也应执行工地安全程序:
- 每日程序
  - 施工前进行热身操及安全简介会议（PES）;
  - 进行安全示范及活动会议（HIA）;
  - 施工前进行安全检查;
  - 安全巡查 - 由工地总管或其代表进行;
  - 施工时给予指导及监督;
  - 进行安全统筹会议;
  - 每日清洁及收拾工地;
  - 收工前进行工地检查。

毎週程序
- 每週安全巡行 - 由工地总管和註冊安全主任在工程师代表的陪同下进行;
- 安排工地負責人员與工程师代表进行毎週统筹會議;
- 毎週全面繕掃及收拾工地。
Hazards identification is a continuing process of identifying undesired events that may lead to the realization of a hazard, the analysis of the mechanisms by which the undesired events could occur and usually the estimation of the extent, magnitude and likelihood of any harmful effects. The following are suitable hazard analysis techniques depending on the subject area:

- Job Hazard Analysis (JHA)
- Preliminary Hazard Analysis (PHA)
- Hazard and Operability Studies (HAZOP)
- Interface Hazard Analysis
- Subsystem Hazard Analysis
- Operating and Support Hazard Analysis

Contractors shall perform hazards identification and undertake all necessary mitigation measures prior to and throughout their works using these methods or other tools as appropriate. Complete hazard mitigation shall be the Contractors’ full responsibility.

Contractor must ensure that all persons-in-charge are properly briefed on all safety requirements prior to the commencement of work. Accordingly, the Competent Person in collaboration with the landlord, shall brief the working party before work starts in particular:

- hazards involved in or caused by the work,
- safety precautions that must be taken, and
- the designated evacuation route and assembly point.

The attached sample checklist may be used as a guideline and record of such briefing.

識別和消減隱患

識別和消減隱患是一個持續不斷的程序，以找出可導致真正危險的不如意事件；程序中亦會對不如意事件的產生模式進行分析，並對其造成的一切有害影響的程度、規模和可能性作出估計。因應不同的工作要求，合適的隱患分析包括：

- 工作危險分析 (JHA)；
- 隱患初步分析 (PHA)；
- 隱患與可操作性研究 (HAZOP)；
- 介面隱患分析；
- 子系統隱患分析；
- 操作及支援隱患分析。

承辦商必須確保開始工作前，已向所有工作主管正確地講解所有安全要求。開始工作前，合格人員須與地方主管一起向工作隊講解以下各項事宜：

- 工作環境或構成的隱患；
- 必須採取的安全措施；及
- 指定的疏散路線和集合地點。

附頁的檢查表樣本可以用作安全簡介會的指引和記錄表。
A Sample checklist for preparing and conducting pre-work safety briefings is:

### B1. Persons-in-Charge

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<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Have method statements/work instructions related to the activity been prepared and are they understood?</td>
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<tr>
<td>Have relevant drawings/sketches related to the activity been provided?</td>
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<tr>
<td>Have hazards related to the work been identified?</td>
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<td>Have working environment and conditions been verified as safe and without risk?</td>
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<td>Have plant, equipment and personal protective equipment been verified to be in good condition?</td>
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<td>Has a Format,To-Work or Limitation-of-Access been obtained?</td>
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<td>Have safety precautions and safety critical issues been checked for appropriateness and adequacy?</td>
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</table>

### B1.4.3

- Are all parties concerned present at the safety briefing?
- Are all personnel clearly understood the scope of work, hazards involved and safety arrangements?
- Have all personnel been instructed as to authorized access of emergency areas?
- Are all personnel aware of the evacuation route and assembly points?
- Have all personnel been given the opportunity to share their experience of similar works?
- Have all personnel been visually checked to ensure that they are fit for the work?
- Have critical issues been mentioned by questioning individuals and asking them to report the relevant safety precautions?
- Have all personnel been reminded that smoking is not permitted except in designated areas?
# Appendix: Contact Telephone Numbers

<table>
<thead>
<tr>
<th>Depot Control Centre</th>
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| Tsing Yi Operational Control Centre | CityLine | 22122111 |
| Light Rail Communication Controller |          | 22122682 |
| Infrastructure Engineering Control Centre |          | 29932345 |

**附錄：聯絡電話**

| 車廠控制中心 | 內線 | 1682890 | 1483030 | 1582866 | 1782391 | 1492225 | 1982936 | 1867805 | 1897619 | 1882565 |
|              | 街線 | 28968290 | 2993030 | 26117886 | 2698469 | 34734225 | 26942936 | 26937804 | 24687619 | 22082565 |

| 車廠車場主管 | 內線 | 1682890 | 1483030 | 1582866 | 1782391 | 1492225 | 1982013 | 1867802 | 1897640 | -- |
|              | 街線 | 28968290 | 29932390 | 26117890 | 2698464 | 34734228 | 26942013 | 26937802 | 24687640 | 22082105 |

| 保安控制中心 (車廠) | 內線 | 1682322 | 82322 | 1582322 | 1782322 | 492322 | 1982057 | 7998 | 1897799 | 2215 |
|                     | 街線 | 28968222 | 29932322 | 26117822 | 26984652 | 34734322 | 26942057 | 26937998 | 24687799 | 22082215 |

| 青衣車務控制中心 |          | 22122111 |
| 綜合聯絡控制中心 |          | 22122682 |
| 基建工程控制中心 |          | 29932345 |