

高雄醫學大學

實驗室安全衛生工作守則

*Kaohsiung Medical University
Laboratory Safety and Health Work Rules*



環境保護暨職業安全衛生室編訂

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高雄醫學大學實驗室安全衛生工作守則

Kaohsiung Medical University

Laboratory Safety and Health Work Rules

第一章 事業之安全衛生管理及各級之權責

Chapter 1 Safety and health management of the business and the authority of each level of administration

第 1 條:為防止高雄醫學大學(以下簡稱為本校)所屬實驗室之職業災害，保障從事於實驗工作之教職員工生之安全與健康，依「職業安全衛生法」第 34 條、職業安全衛生法施行細則第 41 及第 42 條規定，訂定本守則。

Article 1 Kaohsiung Medical University (KMU) formulates the KMU Laboratory Safety and Health Work Rules in accordance with Article 34 of the Occupational Safety and Health Act, Articles 41 and 42 of the Enforcement Rules of the Occupational Safety and Health Act to prevent occupational accidents in the laboratories of KMU and protect the safety and health of the faculty and staff engaged in laboratory work.

第 2 條:本守則之適用範圍包括本校各學系及處室單位、中心、所、科之實驗室、教學實驗室、(以下簡稱適用場所)。本校附屬單位之實驗室另定之。

Article 2 These Rules are applicable to the laboratories and teaching laboratories of all KMU academic departments, as well as offices and units, centers, institutes, and divisions (“the applicable sites”). Rules for laboratories of KMU’s affiliated units shall be formulated separately.

第 3 條:本守則所稱適用場所內之工作者，指教職員工及其他受工作場所負責人指揮或監督從事勞動之人員。

Article 3 Workers in the applicable sites mentioned in these Rules refer to faculty, staff, and other individuals who work under the command or supervision of the workplace directors.

第 4 條:本守則所稱之職業災害，係指適用場所之建築物、機械、設備、原料、材料、化學品、氣體、蒸氣、粉塵等或作業活動及其他職業上原因引起之之疾病、傷害、失能或死亡。

Article 4 Occupational accidents mentioned in these Rules refer to diseases, injuries, disabilities, or deaths caused by the buildings, machinery, equipment, raw materials, substances, chemicals, gases, steam, dust, etc. in the applicable sites, or by operational activities carried out therein and other occupational reasons.

第 5 條:本守則之內容依職業安全衛生法施行細則第 41 條規定，須訂定下列事項：

Article 5 Content of these Rules shall specify the following items pursuant to Article 41 of the Enforcement Rules of the Occupational Safety and Health Act:

一、事業之安全衛生管理及各級之權責。

1. Safety and health management of the business and the authority of each level of administration;

二、機械、設備或器具之維護及檢查。

2. Maintenance and inspection of machinery, equipment, or tools;

三、工作安全及衛生標準。

3. Standards for work safety and health;

四、教育及訓練。

4. Education and training;

五、健康指導及管理措施。

5. Health guidance and management measures;

六、急救與搶救。

6. First aid and rescue;

七、防護設備之準備、維持與使用。

7. Preparation, maintenance, and usage of protective equipment;

八、事故通報與報告。

8. Notification and report of accidents;

九、其他有關安全衛生事項。

9. Other matters related to safety and health.

第6條:本校之安全衛生組織:

Article 6 Safety and health organization of KMU:

一、環境保護暨職業安全衛生委員會(以下簡稱環安衛委員會):依其設置辦法組成。

1. Environmental Protection, Occupational Safety and Health Committee (EOSH Committee): To be set up according to the establishment regulations thereof.

二、環境保護暨職業安全衛生室(以下簡稱環安室):依照本校行政單位組織運作要點第13點設置。

2. Office of Environmental Protection, Occupational Safety and Health (EHS Office): To be instituted according to Article 13 of the KMU Directives for the Organization and Operation of Administrative Units.

第7條:各級組織之職業安全衛生職責:

Article 7 Occupational safety and health responsibilities of each level of administration:

一、環安衛委員會:

1. EOSH Committee:

(一)『環境保護』相關措施規劃與督導事項:

(1) Planning and supervision of “environmental protection” related measures:

1、審議環境保護政策、規章。

i. Review the environmental protection policies and regulations.

2、審議環境保護教育訓練與宣導事項。

ii. Review matters related to environmental protection education, training, and promotion.

3、審議空氣污染與噪音防治事項。

iii. Review matters related to the prevention of noise and air pollution.

4、審議實驗室廢水排放與實驗廢液貯留管理事項。

iv. Review matters related to the discharge of laboratory wastewater and the management of laboratory waste liquid storage.

5、其他有關環境保護事項。

v. Other environmental protection-related matters.

(二)、『安全衛生』相關措施規劃與督導事項:

(2) Planning and supervision of “safety and health” related measures:

1、審議安全衛生政策。

i. Review the safety and health policies.

2、協調、建議安全衛生自我管理計畫。

ii. Coordinate and recommend the safety and health self-management plans.

3、審議安全、衛生教育訓練實施計畫。

iii. Review the implementation plan for safety and health education and training.

4、審議作業環境測定結果應採取之對策。

iv. Review the strategies to be adopted based on the workplace environmental monitoring result.

5、審議健康管理及健康促進事項。

v. Review matters related to health management and health promotion.

6、審議各項安全衛生提案。

vi. Review all safety and health proposals.

7、審議事業單位自動檢查及安全衛生稽核事項。

vii. Review matters related to the autonomous inspections, safety and health audits of the business units.

8、審議機械、設備或原料、材料危害之預防措施。

viii. Review the preventive measures against hazards related to machinery, equipment, or raw materials and substances.

9、審議輻射防護及生物性污染之管理與安全事項。

ix. Review the management and safety matters related to radiation protection and biological contamination.

10、審議職業災害調查報告。

x. Review the investigation reports for occupational accidents.

11、考核現場安全衛生管理績效。

xi. Appraise the on-site safety and health management performance.

12、審議承攬業務安全衛生管理事項。

xii. Review matters related to contractors' safety and health management.

13、其他有關實驗室安全衛生管理事項。

xiii. Other matters related to laboratory safety and health management.

二、環安室：

2. EHS Office:

(一)釐定職業災害防止計畫，並督導相關單位實施。

(1) Devise the occupational accident prevention plan and supervise the implementation by relevant units.

(二)規劃、督導各單位之環境保護暨職業安全衛生(以下簡稱為環安衛)業務。

(2) Plan and supervise the environmental protection and occupational safety and health (EHS) business of all units.

(三)規劃、督導環安衛設施之檢點與檢查。

(3) Plan and supervise the routine checks and inspections of the EHS facilities.

(四)督導各單位業務並實施巡視、定期檢查、重點檢查及作業環境監測。

(4) Supervise the relevant business of all units and implement site patrols, regular inspections, major inspections, and workplace environmental monitoring.

(五)規劃、實施學校環安衛教育訓練。

(5) Plan and implement the university-wide EHS education and training.

(六)規劃健康檢查、實施健康管理事項。

(6) Plan for health examinations and implement health management.

(七)規劃、督導各單位毒性化學物質運作與管理，申請運作核可、核備及紀錄申報。

(7) Plan and supervise the operation and management of toxic chemicals in all units, application for operational approval, registration, and record declaration.

(八)實驗廢棄物(含廢液)分類、貯存及委外清運與處理。

(8) Classification, storage, and outsourcing of the disposal and treatment of experimental waste (including waste liquids).

(九)擬訂適用場所之職業安全衛生管理規章、本校實驗室安全衛生工作守則、緊急應變計畫及年度工作計畫等。

(9) Draft the occupational safety and health management regulations for the applicable sites, the KMU Laboratory Safety and Health Work Rules, the emergency response plans, and annual work plans, etc.

(十)適用場所發生職業災害之調查、分析及統計。

(10) Investigate, analyze, and compile statistics on occupational accidents occurring in the applicable sites.

(十一)向校方提供有關環安衛資料與建議。

(11) Provide EHS-related data and recommendations for the University.

(十二)其他有關環安衛管理事項。

(12) Other EHS management-related matters.

三、適用場所單位主管之職業安全衛生職責：

3. Occupational safety and health responsibilities of the heads of units at the applicable sites:

(一)指揮、監督該單位實驗場所環安衛管理業務。

(1) Direct and supervise the unit's laboratory EHS management work.

(二)責成該單位適用場所負責人辦理環安衛管理事項。

(2) Charge the applicable sites' directors in the unit with the responsibility of handling the EHS management tasks.

(三)執行巡視、考核該單位環安衛有關事項。

(3) Execute the site patrols and evaluate the unit's EHS-related matters.

四、適用場所負責人（指各實驗單位負責人）之環安衛職責：

4. EHS responsibilities of the applicable sites' directors (referring to all laboratory directors):

(一)負責辦理管轄範圍內一切環安衛事項之實施。

(1) Take charge of the implementation of all EHS matters within one's scope of authority.

(二)督導該場所內之人員遵守本守則及相關職業安全衛生法令規章之規定。

(2) Supervise the personnel in the site and make sure they comply with these Rules and the relevant occupational safety and health law and regulations.

(三)辦理該單位主管交付之環安衛管理事項。

(3) Undertake the EHS management tasks assigned by the head of unit.

(四)定期檢查、檢點該場所內之環境、機械、儀器、設備之安全衛生狀況並作成紀錄，發現有潛在安全衛生問題立即向上呈報。

(4) Regularly inspect and check the safety and health status of the environment, machinery, apparatus, and equipment in the site, and make records. Immediately report any potential safety and health issues to the superiors.

(五)督導所屬人員經常整理、整頓工作環境，保持清潔衛生。

(5) Supervise the subordinate staff to organize and tidy up the work environment regularly and keep it clean and hygienic.

(六)負責消除管轄範圍內之危險因素或提供安全衛生之建議。

(6) Be responsible for eliminating the hazards in the scope of their authority or giving safety and health recommendations.

(七)實施工作安全分析，安全講解與工作安全教導。

(7) Implement work safety analysis, give safety briefings and work safety instructions.

(八)視工作需要購置適當之安全衛生防護具，並督導所屬人員確實配戴。

(8) Purchase appropriate safety and health protective equipment as needed for work and supervise the subordinate staff to use it properly.

(九)該場所內有立即發生危險之虞時，應即要求該場所內人員停止作業，並退避至安全處所，並管制人員進出該場所。

(9) If there is an immediate danger in the site, the personnel inside the site shall be required to stop work and move to a safe location at once. Also, entry and exit to and from the site shall be controlled.

(十)事故發生時迅速向上呈報處理，並採取必要之急救與搶救措施。

(10) When an accident occurs, promptly report it to the superior for handling, and take necessary first aid and rescue measures.

(十一)經常注意所屬人員之操作情形並糾正其不安全動作。

(11) Always keep an eye on the subordinate staff's operations and correct their unsafe practices.

(十二)經常注意所屬人員健康。

(12) Always pay attention to the subordinates' health.

(十三)執行其他有關職業安全衛生事項。

(13) Execute other occupational safety and health-related tasks.

五、適用場所內工作者之作業守則：

5. Work rules for workers in the applicable sites:

(一)作業前確實檢點作業環境與設備，發生異常應立即調整或通知該場所負責人。

(1) Thoroughly check the work environment and equipment before work. In case of any abnormality, immediately make adjustments or notify the site director.

(二)作業中應遵守安全作業標準及本守則之規定，並隨時注意維護作業環境整潔。

(2) Observe the safety work standards and these Rules during operation, and always maintain the

tidiness and cleanliness of the work environment.

(三)依規定穿著或配戴必要之安全衛生防護器具。

(3) Wear or use necessary safety and health protective equipment as required by the regulations.

(四)依規定接受必要之環安衛教育訓練。

(4) Receive necessary EHS education and training as required by the regulations.

(五)積極參加環安衛活動，並提出建議。

(5) Actively participate in EHS activities and offer suggestions.

(六)接受定期健康檢查，並遵守檢查結果建議事項。

(6) Get regular health examinations and abide by the recommendations based on the examination results.

(七)遵守職業安全衛生有關法令規章及本校所頒訂之各種環安衛規定。

(7) Comply with the occupational safety and health-related law and regulations as well as all the EHS regulations ordained by KMU.

(八)實驗中不得有嬉戲或妨礙秩序之行為。

(8) Avoid frolicking or disorderly behaviors during experiments.

(九)嚴禁用手觸摸機器轉動部份。

(9) Touching the moving parts of machinery with your hands is strictly prohibited.

(十)嚴禁從各種機具、設備上移除防護設備、標籤或標示。

(10) Removing protective devices, labels, or markings from any machinery or equipment is strictly prohibited.

(十一)機器未完全停止前，不得裝卸零件或材料。

(11) Do not load or unload parts or materials until the machine has come to a complete stop.

(十二)勿使用不安全的工具及機械等設備。

(12) Do not use unsafe tools, machinery, or equipment.

(十三)熟悉意外傷害之急救方法與程序。

(13) Familiarize oneself with the first aid methods and procedures for handling accidents and injuries.

(十四)有任何環安衛之相關問題，隨時請教適用場所負責人或本校職業安全衛生管理人員。

(14) For any EHS-related questions, please consult the applicable site director or KMU's occupational safety and health management personnel at any time.

第二章 機械、設備或器具之維護與檢查

Chapter 2 Maintenance and inspection of machinery, equipment, or tools

第 8 條:各單位所屬設備應依「職業安全衛生管理辦法」第 14、30、31、32、33、34、35、36、40、41 條之規定，對其所有之儀器、設備、機械及車輛實施定期檢查；第 45、47 條之規定實施重點檢查；第 69、79、80 條之規定對所屬教職員工生於作業前實施自動檢查，並做紀錄。

Article 8 All units shall implement regular inspections on all of their apparatus, equipment, machinery, and automobiles in accordance with Articles 14, 30, 31, 32, 33, 34, 35, 36, 40, and 41 of the Regulations Governing Occupational Safety and Health; major inspections shall be carried out in accordance with Articles 45 and 47; the units' faculty, staff, and students shall implement autonomous inspections before operation and keep records thereof in accordance with Articles 69, 79, and 80.

一、儀器設備之維護由各設備保管人為之。

1. Custodians of the equipment shall be responsible for the maintenance of the apparatus and equipment.

二、危險性設備應經檢查機構檢查合格始得使用，超過規定期間須再檢查始得繼續使用。

2. Dangerous equipment shall be inspected and approved by a certified inspection agency before use. Re-inspection is required beyond the specified period before continued use.

三、自動檢查應以系、科、所、中心為單位。

3. Autonomous inspections shall be carried out by departments, divisions, institutes, and centers as the

execution units.

四、各適用場所負責人應依「職業安全衛生管理辦法」之規定，針對該實驗室可能發生危害之工作環境及機械設備實施每月檢查及作業檢點。

4. Directors of all applicable sites shall perform monthly inspections and operational checks of the work environment, machinery and equipment that may pose hazards in the laboratories in accordance with the Regulations Governing Occupational Safety and Health.

五、檢查方式區分為定期檢查、重點檢查及作業檢點，由使用單位研擬，依計畫實施；

5. Inspection methods include regular inspections, major inspections, and operational checks, to be implemented by the user units according to their plans.

自動檢查紀錄應包括：

Autonomous inspection records shall contain:

(一) 檢查年月日。

(1) Inspection date (YYYY/MM/DD).

(二) 檢查方法。

(2) Inspection method.

(三) 檢查部分。

(3) The part(s) inspected.

(四) 檢查結果。

(4) Inspection results.

(五) 實施檢查者之姓名

(5) Name of the inspector.

(六) 依檢查結果應採取改善措施之內容。

(6) Content of improvement measures to be adopted based on the inspection results.

六、各項檢查紀錄單位自存一份，送環安室一份備查並保存三年。

6. A copy of all inspection records shall be kept by the user unit itself, and a copy shall be sent to the EHS Office for future reference and to be preserved for 3 years.

七、各單位人員實施檢查檢點發現異常或對教職員工生有危害之虞，應立即檢修並報請單位主管。

7. When abnormalities or potential hazards to faculty, staff, or students are found during inspections or operational checks, repairs shall be done immediately and the situation shall be reported to the head of unit.

第三章 工作安全及衛生標準

Chapter 3 Standards for work safety and health

第9條:一般安全衛生工作守則：

Article 9 General safety and health work rules:

1、進入實驗場所要先瞭解環境，切記場所負責人提示事項。

1. Before entering a laboratory, make sure you understand the environment and remember the instructions provided by the site director.

二、保持實驗場所整齊清潔，藥品儀器放置定位。

2. Keep the laboratories clean and tidy; medications and equipment shall be put in designated places.

三、工作時要配戴個人必需之安全防護具，並選擇最安全的工作方法。

3. Wear necessary personal protective equipment when working, and choose the safest way to work.

四、遵照規定操作各項機械設施，機器開動後操作人員不得擅自離開，別人操作中機具不可隨意使用。

4. Operate each piece of machinery and equipment according to the specific rules. The operator shall not leave without permission once the machine has started operating. Do not use a machine being operated by another person at discretion.

五、作業前應充分明瞭工作要領、規定及機具操作方法。

5. Be well versed in the work guidelines, rules, and operating methods of machinery before work.

六、非經許可不得自行拆動任何機械安全防護設施。

6. Do not dismantle the safety protection devices on any machinery without permission.

七、工作完畢或下班時，須清點收妥工具並清理現場。

7. Inventory and tidy up the tools and clean the work area at the end of the day or when going off duty.

八、食物飲料不得與化學品同置冰箱內，不可在實驗室飲食。

8. Food and drinks shall not be stored together with chemicals in the same refrigerator; eating and drinking are not allowed in the laboratory.

九、不可用手去試探看不見內部的機具。

9. Do not probe your hands into a machine with unseen internal parts.

十、不可用腳去試探任何東西或阻擋滾動、滑動的物體。

10. Do not probe anything or try to stop rolling or sliding objects with your feet.

十一、實驗場所禁止跑步嬉戲及從事與實驗無關的活動。

11. Running, frolicking, and activities unrelated to the experiments are prohibited in the laboratories.

十二、實驗室之逃生路線須明確標示且不得堆放物品，阻礙逃生動線，第二個門不得阻塞。

12. Evacuation routes in the laboratories shall be clearly indicated and kept clear of any objects that may obstruct the evacuation paths. The secondary exit shall not be blocked.

十三、機具之最大安全負荷標示應保持清晰可見。

13. The maximum safety load markings on machinery shall be clearly visible at all times.

十四、實驗前詳細閱讀有關藥品之安全資料表。

14. Read the Safety Data Sheets (SDSs) for the relevant drugs carefully before an experiment.

十五、設備、儀器使用前，應詳讀操作手冊，並按正常程序操作，不繼續使用之儀器設備應予以關閉。

15. Before using any equipment and apparatus, read the operation manual thoroughly and operate according to the standard procedures. Equipment and apparatus no longer in use shall be turned off.

十六、熟悉實驗場所附近滅火器、急救箱位置及使用方法。

16. Be familiar with the locations and usage methods of the fire extinguishers and first aid kits near the laboratories.

十七、避免單獨一人於實驗場所操作危險性實驗。

17. Avoid working on dangerous experiments alone in a laboratory.

十八、離開實驗場所前要徹底清洗雙手。

18. Wash your hands thoroughly before leaving a laboratory.

十九、實驗完畢應檢查水、電、瓦斯及氣體鋼瓶等是否關閉。

19. Check if water, electricity, gas, and gas cylinders are all turned off at the end of an experiment.

第 10 條:操作安全：

Article 10 Operational safety:

一、操作過程避免發生危險行為：

1. Avoid dangerous behaviors during the operating process:

(一)禁止於操作中嬉戲、打鬧。

(1) Frolicking or messing around is strictly prohibited during operations.

(二)遵照正確的酸鹼稀釋順序。

(2) Adhere to the correct order for diluting acids and bases.

(三)液體之轉移以安全吸球操作，勿用嘴吸。

(3) Use a pipette filler to transfer liquids, instead of sucking with your mouth.

(四)傾注腐蝕性液體時，須藉漏斗轉注，並於水槽上或戴手套進行。

(4) When pouring corrosive liquids, use a funnel for transfer; either wear gloves or do it over a sink.

(五)其他各適用場所自行規範事項。

(5) Other regulations specified by individual applicable sites.

二、高壓氣體鋼瓶之操作與管理：

2. Operation and management of high-pressure gas cylinders:

(一)鋼瓶應標示裝戴氣體之種類，避免誤用。

(1) Cylinders shall be clearly labeled with the type of gas they contain to prevent misuse.

(二)實驗前應先確認鋼瓶內氣體。

(2) Confirm the gas inside a cylinder first before an experiment.

(三)鋼瓶外表顏色不得擅自變更或擦除。

(3) Exterior colors of the cylinders shall not be altered or erased at discretion.

(四)鋼瓶應加固定，儲存場所溫度不得超過攝氏 40 度。

(4) Cylinders shall be secured in place, and temperature of the storage area shall not exceed 40°C.

(五)更換鋼瓶後應檢查容器口及配管銜接處是否漏氣。

(5) Check for gas leakage at the container opening and pipe connections after replacing a gas cylinder.

(六)鋼瓶非使用中開關扳手應取下。

(6) The valve wrench shall be taken off when the gas cylinder is not in use.

(七)鋼瓶應妥善管理，發現變形、漏氣應立即通知場所負責人及維護單位，儘速處理。

(7) Gas cylinders shall be properly managed. In case of deformation or leakage, notify the site director and the maintenance unit immediately to handle it as soon as possible.

三、化學藥品或器材之搬運及儲存：

3. Moving and storage of chemicals or equipment:

(一)以正確的方式搬運，切勿僅以單手提起。

(1) Move them in the correct way; do not lift them up with just one hand.

(二)避免搬運困難或倒塌，化學藥品或器材不可堆放過高。

(2) Chemicals or equipment shall not be stacked too high to prevent moving difficulties or collapse.

(三)用堆疊之化學藥品或器材時，不得由下部抽取。

(3) Do not take items from the bottom when stacked chemicals or equipment is used.

(四)維持通風設備正常運轉。

(4) Maintain normal operation of the ventilation system.

四、電氣災害之防止：

4. Prevention of electrical hazards:

(一)電氣設備及電線電路維護，應嚴格遵守電氣安全規章程序操作。

(1) Electrical equipment and wiring circuits shall be properly maintained in strict compliance with the electrical safety regulations and procedures.

(二)使用延長線不得接裝過多電器用品，以免過載發生火災。

(2) Do not connect too many electrical devices to an extension cord to avoid overload and fire.

(三)隨時檢修電器設備，遇有重大電器故障或電器火災時，應切斷電源並立即通報。

(3) Inspect and repair electrical equipment from time to time. In the event of a major electrical fault or electrical fire, disconnect the power supply and report the incident at once.

(四)不得以濕手或濕操作棒操作開關，電器設備應遠離水源。

(4) Do not operate switches with wet hands or wet tools. Electrical equipment shall be kept away from water.

(五)除特別利用塑膠完全包裹之設備外，實驗室所有電器應接地。

(5) Except for equipment that is completely covered with plastic, all electrical devices in the laboratories shall be grounded.

(六)電器設備或電路著火，立即關閉電源，再以不導電之滅火設備滅火。

(6) In case of a fire on the electrical equipment or wiring, turn off the power supply immediately, and then put out the fire with a non-conductive fire extinguisher.

(七)所有電氣設備外殼接地線，不得任意拆掉。

(7) Grounding wires on the enclosure of all electrical equipment shall not be removed.

第 11 條:化學藥品管理：

Article 11 Management of chemicals:

一、每一化學藥品應標示：

1. Each chemical shall be labeled with:

(一)危害圖式。

(1) Hazard pictogram.

(二)內容。

(2) Content

1.名稱。

i. Name

2.危害成份。

ii. Hazardous ingredients

3.警示語。

iii. Signal words

4.危害警告訊息。

iv. Hazard statements

5.危害防範措施。

v. Precautionary statements

6.製造者、輸入者或供應者之名稱、地址及電話。

vi. Name, address, and telephone number of the manufacturer, importer, or supplier

二、每一危害物質應製作安全資料表(簡稱 SDS)，提供勞工必要之安全衛生注意事項。

2. For each hazardous substance, a Safety Data Sheet (SDS) shall be created, which provides essential safety and health precautions for workers.

三、製作危害物質清單：以控制數量，方便管理。

3. Prepare a Hazardous Material Inventory List: to control the quantity and facilitate management.

四、特殊化學藥品之正確操作方法與順序如下：

4. The correct way and sequence of handling special chemicals are:

(一)鹼金屬與水反應有起火與爆炸之危險。

(1) Alkali metals react with water and will cause fire and explosion hazards.

(二)鹼金屬接觸皮膚會灼傷。

(2) Alkali metals cause burns when in touch with skin.

(三)鹼金屬須貯存於輕質油中，銷毀於酒精中冷卻。

(3) Alkali metals have to be stored in light oil and disposed of by cooling in alcohol.

(四)灑出之水銀可用真空吸取法清除或硫磺粉覆蓋。

(4) Spilled mercury can be cleaned up by the vacuum sucking method or by covering it with sulphur powder.

(五)強酸、強鹼濺出時可用中和劑中和後再予清除。

(5) When strong acids or strong bases spill, neutralize them with a neutralizing agent and then clean them up.

五、可燃性液體之正確儲存與處理方式：

5. The correct way of storing and handling flammable liquids:

(一)標示應明確。

(1) Labels should be clear.

(二)正確的分類與存放。

(2) Proper classification and storage.

(三)注意可燃性液體儲存相容性。

(3) Be aware of the storage compatibility of flammable liquids.

(四)遠離火焰。

(4) Keep away from flames.

六、使用化學藥品，必須了解化學藥品之毒性，依照安全操作方法，以免危害自己與他人。

6. When using chemicals, make sure you understand their toxicity and follow the safety operating procedures to avoid harming yourself and others.

七、每日最後離開實驗室者，須確定關閉所有電源及氣源。

7. The last person to leave a laboratory each day shall make sure all power and gas sources are turned off.

第 12 條:廢棄物管理：

Article 12 Waste management:

1、廢棄物平時暫存於合格之貯存容器中，容器外觀應標示廢棄物種類。

1. Waste shall be temporarily stored in suitable containers, and the containers shall be labeled with the types of waste on the exterior.

2、廢溶液應依「學校實驗室廢棄物暫行分類標準」分類，傾倒廢溶液於瓶內或安全桶內並留下紀錄，必要時使用雙層容器以防洩漏。

2. Waste liquids shall be classified according to the Temporary Classification Standards for School Laboratory Waste. Pour the waste liquids into a bottle or safety container and keep records. Use a double-layer container if necessary to prevent leaks.

3、各單位需自行將實驗廢液運送至廢溶液暫貯室，環安室依「高雄醫學大學實驗廢棄物清理辦法」定期委外清理處理。

3. Each unit shall transport their laboratory waste liquids to the temporary waste liquid storage room. The EHS Office shall designate contractors for regular cleanup and disposal according to the KMU Laboratory Waste Disposal Regulations.

4、不相容之廢棄物，切勿混合貯存；是否具混合危險性，可查閱安全資料表(SDS)。

4. Do not mix and store incompatible wastes together. Check the Safety Data Sheets (SDSs) to determine if there are any mixing hazards.

五、各單位感染性廢棄物收集後，環安室生物安全組定期委外清理。

5. Infectious waste shall be collected by each unit, and then the Biosafety Section of the EHS Office will arrange contractors for regular cleanup.

第 13 條:安全監測：

Article 13 Safety monitoring:

一、排氣櫃之風速應定期檢測，以維持法定值以上；通風需保持良好，隨時有新鮮空氣供應。

1. The airflow velocity of the exhaust hood shall be regularly tested and maintained above the legally required value. Good ventilation shall be maintained, with a continuous supply of fresh air.

二、滅火器應定時檢測或更換藥劑，以維持滅火功能。

2. Fire extinguishers shall be regularly inspected or have their agent replaced to maintain their firefighting capability.

三、鋼瓶更換時應測漏且定期檢測接頭，以防止氣體外洩；連接鋼瓶之管線應定期檢測，並防止腐蝕或破裂。

3. When replacing gas cylinders, leak tests shall be conducted and the connectors be regularly inspected to prevent gas leakage. The pipelines connected to the cylinders shall be regularly tested and protected against corrosion or rupture.

第 14 條:環境清潔維護：

Article 14 Environmental cleanliness and maintenance:

一、實驗場所應隨時保持整齊清潔。

1. The laboratories shall be kept clean and tidy at all times.

二、實驗場所放置實驗有關之儀器、設備及器材外，不可放置雜物。

2. Apart from the apparatus, equipment, and materials related to experiments, no other miscellaneous items shall be placed in the laboratories.

三、地板、通道及水槽不可任意堆放雜物。

3. The floor, passageways, and sinks shall not be cluttered with miscellaneous items.

四、各機械、設備間通道不得小於八十公分，工作場所主要人行道不得小於一公尺，不可濕滑。

4. The passageways between any machine and equipment shall be at least 80 cm wide; the main pathway in the workplace shall be at least 1 meter wide and shall not be slippery.

五、垃圾要分類置放，資源垃圾不可與一般垃圾混裝，垃圾須加蓋。

5. Garbage shall be sorted and placed separately; recyclable waste shall be kept separate from regular

waste. All garbage bins shall be covered.

第 15 條:局部排氣裝置安全管理：

Article 15 Safety management of the local exhaust systems:

一、每日作業前檢查電源開關及保險絲是否正常。

1. Check if the power switches and fuses are working properly before work every day.

二、作業中發現馬達有異響或震動現象時，應立即暫停作業，按停馬達，待馬達修復後才能繼續作業。

2. If the motor is found to be producing unusual noise or vibration during operation, stop the operation immediately, turn off the motor, and resume operation only after the motor has been repaired.

三、定期檢查馬達與排氣機之塵埃聚積情形。

3. Regularly check for dust accumulation on the motor and exhaust fan.

四、每週定時注加排氣機之潤滑油，保持潤滑良好。

4. Add lubricating oil to the exhaust fan every week to ensure it remains well-lubricated.

五、定時檢查導管接觸部分之狀況是否良好。

5. Regularly check if the contact part of the ducts is in good condition.

6、局部排氣裝置及其空氣清淨裝置應每年定期依下列規定實施檢查一次：

6. Local exhaust systems and their air purification devices shall be inspected once a year according to the following regulations:

(一)氣罩、導管及排氣機之磨損、腐蝕、凹凸及其他損害狀況及程度。

(1) Inspect the hood, ducts, and exhaust fan for wear, corrosion, dents, and other damages, and assess the extent of damages.

(二)導管或排氣機塵埃聚集狀況。

(2) Dust accumulation condition on the ducts and exhaust fan.

(三)排氣機注油潤滑狀況。

(3) Lubrication condition of the exhaust fan.

(四)導管接觸部分狀況。

(4) Condition of the contact part of the ducts.

(五)連接電動機與排氣機之皮帶鬆弛狀況。

(5) Belt tension condition connecting the motor and exhaust fan.

(六)吸氣及排氣能力。

(6) Intake and exhaust capacities.

第 16 條:特定作業人員工作安全管理及標準：

Article 16 Work safety management and standards for specialized operators:

一、使用有機溶劑及特定化學物質人員工作標準：

1. Work standards for personnel using organic solvents and specific chemicals:

(一)有機溶劑使用前應檢視通風設備是否良好。

(1) Before using organic solvents, check if the ventilation equipment is in good condition.

(二)有機溶劑之容器不論是否使用中，都應隨手蓋緊。

(2) Containers of organic solvents should always be properly tightened whether in use or not.

(三)實驗場所只存放當日作業所需使用之有機溶劑量，其餘應儲放於規定位置。

(3) Only the amount of organic solvents required for the day's work shall be stored in the laboratory; the rest shall be stored in the designated place.

(四)盡可能在上風位置工作，以避免吸入有機溶劑蒸氣。

(4) Work in an upwind position as much as possible to avoid inhaling organic solvent vapors.

(五)盡可能避免皮膚直接接觸。

(5) Avoid direct contact with skin as much as possible.

(六)貯存有機溶劑之空容器應加蓋密閉或置於室外；有機溶劑污染之抹布等廢棄物應置於有蓋之密封容器內，不得任意棄置。

(6) Empty containers used for storing organic solvents shall be sealed with a lid or placed outdoors. Waste such as rags contaminated with organic solvents shall be placed in a covered and sealed

container and not discarded arbitrarily.

(七)有機溶劑作業中應穿戴適當之手套、護目鏡等防護器具，以避免皮膚直接接觸。

(7) Wear suitable protective equipment such as gloves and goggles during operations involving organic solvents to prevent direct contact with the skin.

(八)離開有機溶劑作業場所前，應確實將手部清洗乾淨。

(8) Wash your hands thoroughly before leaving the workplace where organic solvents are used.

(九)有機溶劑作業中突感身體不適，應立即停止作業，並報知作業主管。

(9) If you suddenly feel unwell during an operation that deals with organic solvents, stop the work immediately and inform your work supervisor.

(十)作業時應使用局部排氣裝置，並戴用正確之呼吸防護具、防護衣著、防護手套及塗敷劑等。

(10) Local exhaust systems shall be used during operations, and proper respiratory protective equipment, protective clothing, protective gloves, and coating agents, etc. shall be worn or used.

二、壓力容器作業人員工作標準：

2. Work standards for pressure vessel operators:

(1) 第一種壓力容器(如滅菌鍋)使用人，對於安全閥及其附屬配件之管理，應負責維持下列事項：

(1) Users of the Class 1 pressure vessels (such as an autoclave) shall be responsible for maintaining the following for the management of the safety valve and its associated components:

(1) 安全閥有二具時均應調節在限制壓力下跳開，經檢查後其中之一應予固定，非經檢查員同意不得變動。

i. When there are two safety valves, both shall be set to open at the designated pressure limit. One of the valves shall be fixed in place after inspection. Changes shall not be made without the approval of the inspector.

(2) 壓力錶應設法在使用中不致震動，且其內部不致凍結或溫度不致達到攝氏 80 度以上。

ii. The pressure gauge shall be positioned in a way to avoid vibration during use, and its interior shall be protected from freezing or high temperatures exceeding 80°C.

(3) 壓力表應在刻度板上易見處，標示最高使用壓力。

iii. The maximum working pressure shall be marked in a visible position on the dial scale of the pressure gauge.

(4) 壓力容器操作人員應負責擔任有關防止災害發生事項，發現有異狀時，應立即採取適當之措施。

iv. Pressure vessel operators shall undertake the responsibility for preventing accidents, and shall take appropriate measures immediately when any abnormality is found.

(5) 確認安全閥壓力表及其他安全設備無異狀後方予使用。

v. Confirm that there is no abnormality in the safety valves, pressure gauges, and other safety equipment before use.

(6) 盡量避免激烈之負載變動。

vi. Avoid drastic load fluctuations as much as possible.

(7) 保持壓力在最高許用壓力下。

vii. Keep the pressure below the maximum allowable pressure.

(8) 保持安全閥機能之正常。

viii. Maintain the proper functioning of the safety valve.

(9) 注意自動控制裝置之機能是否正常。

ix. Keep watch if the automatic control system is working properly.

(10) 置有冷卻水回收裝置，應保持其機能正常。

x. Equipment with a cooling water recycling system shall be maintained in a proper working condition.

(二) 對第一種壓力容器其使用操作人員應就下列事項每月定期實施檢查：

(2) Class 1 pressure vessel users and operators shall perform regular monthly inspections on the following items:

(1) 本體有無損傷。

- i. Check for any damage to the vessel body.
 - (2) 蓋版螺栓有無損耗。
 - ii. Check for any wear to the cover plate bolts.
 - (3) 管及閥等有無損傷。
 - iii. Check for any damage to the ducts and valves.
 - (4) 管路是否漏氣。
 - iv. Check for any gas leakage in the pipelines.
 - (5) 壓力表是否正常。
 - v. Check if the pressure gauge is working properly.
- (三) 從事第一種壓力容器之清掃、修理或保養時，操作人員如需進入該容器內時，應採取下列措施：
- (3) When cleaning, repairing, or maintaining the Class 1 pressure vessels, the following measures shall be taken if the operators have to enter the vessel:
- (1) 冷卻壓力容器。
 - i. Cool down the pressure vessel.
 - (2) 實施容器內部換氣及安全檢查。
 - ii. Perform internal ventilation and safety inspections inside the vessel.
 - (3) 確實隔斷與其他設備之聯絡管線及電源。
 - iii. Make sure the connecting pipelines and power supply from other equipment are cut off.
 - (4) 進入容器內之人員，須事先申請許可。
 - iv. A permit shall be acquired in advance for any individual entering the vessel.
 - (5) 除了進入容器內之人員外，容器外應另有監視人員保持聯絡。
 - v. In addition to the people entering the vessel, there must be supervising personnel outside the vessel to maintain communication.
- (四) 第二種壓力容器，應每年依下列規定定期實施檢查：
- (4) For Class 2 pressure vessels, regular inspections shall be conducted annually according to the following regulations:
- (1) 內、外面是否有顯著損傷、裂痕、變形及腐蝕。
 - i. Check for any significant damage, cracks, deformation, or corrosion on both the interior and exterior.
 - (2) 蓋、凸緣、閥、旋塞等有否異常。
 - ii. Check for any abnormalities in the cover, flanges, valves, and faucets.
 - (3) 第二種壓力容器之壓力表應設法保持在使用中不震動，且內部不致凍結或溫度不至達到攝氏 80 度以上。
 - iii. The pressure gauge on a Class 2 pressure vessel shall be positioned in a way to avoid vibration during use, and its interior shall be protected from freezing or high temperatures exceeding 80°C.
 - (4) 應將該容器之最高使用壓力標示於壓力表上易見之刻度盤上。
 - iv. The maximum working pressure of the vessel shall be clearly marked on a visible position on the dial scale of the pressure gauge.
 - (5) 管路是否漏氣。
 - v. Check for any gas leakage in the pipelines.
 - (6) 壓力表是否正常。
 - vi. Check if the pressure gauge is working properly.
 - (7) 閥壓力錶與其他安全裝置等有否異常。
 - vii. Check for any abnormalities in the valve pressure gauge and other safety devices.
- 7、離心機械作業人員工作標準：
3. Work standards for centrifuge operators:
 - (1) 離心機械應裝置覆蓋及連鎖反應裝置。
 - (1) Centrifuges shall be equipped with covers and interlock devices.
 - (2) 機械停止運轉後才能取出離心機械內裝物。

- (2) Things shall not be removed from the centrifuge until the machine has stopped operating.
- (3) 使用離心機械不得超越該機械之最高回轉速。
- (3) Centrifuges shall not be operated beyond their maximum rotational speed.
- (4) 非經主管同意，操作過程禁止使用手動方式控制。
- (4) Manual control is prohibited during operations without permission from the supervisor.

四、儀器維修人員工作標準：

4. Work standards for instrument repair staff:

- (一)維修必須由專人負責，並依據各式儀器保養及操作手冊步驟執行。
 - (1) Repairs shall be carried out by the designated personnel and follow the steps specified in the maintenance and operation manuals for each type of instrument.
- (二)接有管路、高壓氣體、液體、蒸汽及電路等之電器維修時，不可任意觸動或更改線路，必須會同相關單位，共同進行維修工作。
 - (2) When performing electrical repairs that involve pipelines, high-pressure gases, liquids, steam, or electrical circuits, do not tamper with or alter the wiring at discretion. Repair work must be conducted in conjunction with relevant departments or units.
- (三)維修固定放射線儀器設備，必須知會該儀器之操作者，確認無輻射或雷射暴露之危險性再進行維修。
 - (3) When repairing fixed radiation or laser equipment, the instrument operator must be informed, and it must be confirmed that there is no risk of radiation or laser exposure before proceeding with the repairs.
- (四)未接受原廠維修訓練及資格認證者，禁止對放射或雷射設備儀器進行維修。
 - (4) Individuals who have not received training and certification from the original manufacturer are prohibited from performing repairs on radiation or laser equipment.

第 17 條:安全衛生設備：

Article 17 Safety and health equipment:

- 一、緊急沖淋及洗眼設備。
 - 1. Emergency eyewash and shower equipment.
- 二、收集廢液及廢棄物之廢棄桶。
 - 2. Garbage bins that collect waste and waste liquids.
- 三、有機溶劑危害標示。
 - 3. Hazard labels for organic solvents.
- 四、滅火器。
 - 4. Fire extinguishers.
- 五、個人防護設備。
 - 5. Personal protective equipment.
- 六、排氣櫃及換氣裝置。
 - 6. Exhaust hood and ventilation systems.
- 七、急救箱。
 - 7. First aid kits.

第四章 教育與訓練

Chapter 4 Education and training

第 18 條:依職業安全衛生法第 32 條及職業安全衛生教育訓練規則之規定，本守則適用人員有接受一般環安衛教育訓練課程之義務。

Article 18 According to Article 32 of the Occupational Safety and Health Act and provisions of the Occupational Safety and Health Education and Training Rules, personnel covered by these Rules are obliged to complete the general occupational safety and health education and training courses.

- 1、依職業安全衛生教育訓練規則第二條規定，下列人員應分別施以從事工作及預防災變所必要之安全衛生教育訓練：
 - 1. According to Article 2 of the Occupational Safety and Health Education and Training Rules, the

following personnel shall receive safety and health education and training necessary for their work and for prevention of accidents:

- (一)職業安全衛生管理人員。
 - (1) Occupational safety and health management personnel.
- (二)職業安全衛生相關作業主管。
 - (2) Work supervisors related to occupational safety and health.
- (三)危險性機械設備操作人員。
 - (3) Operators of dangerous machinery and equipment.
- (四)特殊作業人員。
 - (4) Specialized operators.
- (五)一般作業人員。
 - (5) General operators.

前款人員，應依其作業性質施以安全衛生再教育或訓練。

The aforementioned personnel shall receive additional safety and health re-education or training according to the nature of their work.

二、訓練種類：

2. Training types:

- (一)新僱勞工或在職勞工於變更工作前，應使其接受適於各該工作必要之環安衛教育訓練三小時。
 - (1) New hires or serving laborers who are about to change jobs shall receive 3 hours of necessary and appropriate EHS education and training relevant to their jobs before the job change.
- (二)使用危險物、有害物除接受一般安全衛生教育訓練外，須再接受至少三個小時專業環安衛教育訓練。
 - (2) In addition to the general safety and health education and training, individuals handling hazardous or harmful substances shall also receive at least 3 hours of EHS education and training.
- (三)危險性機械設備(如第一種壓力容器)操作人員必須經過政府認可機構受訓並測驗合格，始能擔任。
 - (3) Operators of hazardous machinery and equipment (e.g., Class 1 pressure vessels) must receive training and pass the examinations conducted by government-recognized institutions before taking up the job.
- (四)有機溶劑作業、特定化學物質作業、粉塵作業、鉛作業、四烷基鉛作業、高壓氣體作業之適用場所作業主管應接受有害作業主管安全衛生教育訓練。
 - (4) Work supervisors at the applicable sites that deal with organic solvents, specific chemical substances, dust, lead, tetraalkyl lead, and high-pressure gases shall receive safety and health education and training specific to hazardous operations.
- (五)急救人員訓練，並取得執照。
 - (5) First aiders shall be trained and shall acquire a license.

第五章 健康指導及管理措施

Chapter 5 Health guidance and management measures

第 19 條:適用場所教職員工生對於體格檢查、一般健康檢查、從事特別危害健康作業之特殊健康檢查及經中央主管機關指定為特定對象及特定項目之健康檢查有接受的義務。

Article 19 Faculty, staff, and students in the applicable sites are obliged to accept physical examinations, general health examinations, special health examinations for those engaged in work that poses special health hazards, as well as health examinations specified by the central competent authority for specific individuals and specific items.

1、新進人員：應於就職前施行體格檢查。

- 1. New hires: physical examinations shall be conducted before going onboard.

二、在職人員：

- 2. Serving employees:

(一)年滿 65 歲者，每年檢查一次。

(1) Once a year for those over 65 years old.

(二)40 歲以上未滿 65 歲者，每三年檢查一次。

(2) Once in 3 years for those between 40 and 65 years old.

(三)未滿 40 歲者，每五年檢查一次。

(3) Once in 5 years for those below 40 years old.

三、特殊危害作業人員：每年健康檢查一次。

3. Operators engaged in work with special health hazards: One health examination per year.

前項檢查紀錄應至少保存十年。

The records of the aforementioned examinations shall be preserved for at least 10 years.

第 20 條:妊娠女性工作者之危害健康預防：

Article 20 Health hazard prevention for pregnant female workers:

1、不得使妊娠中之女性勞工從事下列危險性或有害性工作：

1. Pregnant female workers must not be assigned to perform the following hazardous or harmful tasks:

1.處理或暴露於二硫化碳、三氯乙烯、環氧乙烷、丙烯醯胺、次乙亞胺、砷及其化合物、汞及其無機化合物等經中央主管機關規定之危害性化學品之工作。

(1) Work that involves the handling of or exposure to hazardous chemicals as specified by the central competent authority, including carbon disulfide, trichloroethylene, ethylene oxide, acrylamide, ethyleneimine, arsenic and its compounds, mercury and its inorganic compounds, etc.

2.有害輻射散布場所之工作。

(2) Work in a place with harmful radiation.

3.處理或暴露於經中央主管機關規定具有致病或致死之微生物感染風險之工作。

(3) Work that involves the handling of or exposure to the risk of infection by pathogenic or lethal microorganisms as specified by the central competent authority.

4.其他經中央主管機關規定之危險性或有害性之工作。

(4) Other hazardous or harmful tasks as specified by the central competent authority.

2、不得使分娩後未滿一年之女性勞工從事下列危險性或有害性工作：

2. Female workers who have just given birth in less than 1 year must not be assigned to perform the following hazardous or dangerous tasks:

1.一定重量以上之重物處理工作。

(1) Work that involves the handling of heavy objects exceeding a certain weight.

2.其他經中央主管機關規定之危險性或有害性之工作。

(2) Other hazardous or harmful tasks as specified by the central competent authority.

第 21 條:人因工程危害健康預防注意事項：

Article 21 Precautionary notes on ergonomic health hazards:

1、對於物料之搬運，應儘量利用機械以代替人力，凡四十公斤以上物品，以人力車輛或工具搬運為原則，五百公斤以上物品，以機動車輛或其他機械搬運為宜；運輸路線，應妥善規劃，並作標示。

1. Mechanical means, instead of manual labor, shall be used as much as possible for moving materials. Items weighing over 40 kilograms shall be moved using human-propelled vehicles or tools, while items weighing over 500 kilograms shall be moved using motor vehicles or other machinery. The transportation routes shall be properly planned and clearly marked.

2、操作電腦時，避免久坐於電腦螢幕前，作業人員應有適當休息。

2. When operating a computer, avoid sitting in front of the screen for a long time. Operators should take appropriate breaks.

三、對於連續站立作業之人員，應設立適當之坐具，以供休息時使用。

3. For workers who have to stand continuously for work, appropriate seating shall be provided for use during breaks.

第 22 條:重複性之作業健康預防：

Article 22 Health hazard prevention for repetitive tasks:

為避免勞工因姿勢不良、過度施力及作業頻率過高等原因，促發肌肉骨骼疾病，應採取下列危害預防措施：

To prevent musculoskeletal disorders precipitated by poor posture, excessive exertion, or high work frequency, the following hazard prevention measures shall be taken:

一、分析作業流程、內容及動作。

1. Analyze the operating procedures, contents, and movements.

二、確認人因性危害因子。

2. Identify the ergonomic hazards.

三、評估、選定改善方法及執行。

3. Evaluate and choose the improvement methods, and implement them.

四、執行成效之評估及改善。

4. Evaluate the effectiveness of implementation and make improvements.

五、其他有關安全衛生事項。

5. Other relevant safety and health concerns.

第 23 條:職場暴力危害預防：應預防肢體攻擊、言語侮辱、恐嚇、威脅等霸凌或暴力事件，致發生精神或身體上的傷害，以維護工作者之工作安全及身心健康。

Article 23 Prevention of workplace violence hazards: Physical attacks, verbal insults, intimidation, threats, and other bullying or violent incidents that may cause psychological or physical harm shall be prevented to ensure the work safety and well-being of workers.

第 24 條:異常工作負荷促發疾病之預防：應避免輪班及夜間長時間工作，其工作時間、休息與休假狀況，應符合相關法令規定。

Article 24 Prevention of overwork-induced diseases: shift work and long hours of night work shall be avoided. Work hours, rest time, and vacation shall be in compliance with the relevant law and regulations.

第六章 急救與搶救

Chapter 6 First aid and rescue

第 25 條:環安室人員，監工人員及其他相關單位人員對於承攬商之環安衛負有指導、協調、糾正之權責承攬商不得拒絕。

Article 25 Personnel in the EHS Office, supervising personnel, and staff in other related units have the authority and responsibility to guide, coordinate, and rectify the environmental protection, safety and health practices of contractors. Contractors shall not refuse to comply.

第 26 條:適用場所如發生職業災害時，相關人員應立即採取必要之急救、搶救措施，並實施調查、分析及作成紀錄。

Article 26 If an occupational accident occurs in the applicable sites, the relevant personnel shall take necessary first aid and emergency rescue measures at once, conduct an investigation, analyze the incident, and make records.

第 27 條:各單位應派適當人員接受急救人員訓練，以利辦理傷患救護事宜。

Article 27 Each unit shall assign appropriate personnel to receive first aid training, so as to undertake injury care and first aid duties.

第 28 條:事故發生時，應即時救助傷患，救護人員在適當防護裝備下，須迅速趕至現場執行任務。

Article 28 In the event of an accident, immediate assistance shall be provided to the injured. First aiders, with appropriate protective equipment, shall promptly arrive at the scene to perform their duties.

第 29 條:火災或有毒物質洩漏或有洩漏之虞時，搶救人員須著適當之防護具。

Article 29 In the event of a fire or leakage, or potential leakage, of toxic substances, first aiders shall wear appropriate protective equipment.

第 30 條:救護人員任務編組：

Article 30 Task forces of the ambulance staff:

一、事故單位：事故單位主管負責指揮事故搶救，其他人員分工擔任事故搶救與傷患救護工作。

1. Accident unit: Supervisor of the accident unit is responsible for commanding the rescue operations,

while other unit staff share the emergency rescue and injury care work.

二、通報班：適時通知其他支援救護單位，請求救援。

2. Notification team: Responsible for promptly notifying other support and rescue units to request assistance when needed.

三、救護班：負責事故現場傷患救助與救護指揮工作。

3. Medical service team: Responsible for providing aid to the injured at the accident site and directing the rescue work.

四、避難班：搶救與協助事故現場之人員逃生與疏散。

4. Evacuation team: Responsible for rescuing and assisting in people's escape and evacuation from the accident site.

五、單位安全衛生人員：事故搶救、傷患救護及防護具、救生器具調派供應，並輔導使用。

5. Unit safety and health personnel: Rescue work and injury care in accidents, coordination and supply of protective equipment and life saving apparatus, and guidance on their proper use.

第 31 條：一般急救原則：

Article 31 General first aid principles:

一、一般急救

1. General first aid

(一)在醫護人員抵達前，可由急救人員立刻對傷患作適當處理，避免導致更嚴重的後果。

(1) Before the medical staff arrive, first aiders can provide appropriate care to the injured immediately to prevent the situation from worsening.

(二)在沒有確定受傷之實情前，應將傷患平臥，可防止昏厥與休克。

(2) The injured person should be laid flat before his/her injury condition is confirmed, to prevent fainting and shock.

(三)休克處置時，可用棉被、衣物等保持傷患之體溫。

(3) When treating shock, keep the injured person warm with blankets and clothing, etc.

(四)速召救護車或運送傷患置醫療處所或速請醫護人員。

(4) Promptly call an ambulance or transport the injured person to a medical care facility, or seek medical staff as soon as possible.

(五)急救者的責任在於救命、防止傷勢或病情轉惡、保持傷患安靜及舒適，以靜候醫護人員到來。

(5) It is the responsibility of a first aider to save lives, prevent the injury or condition from worsening, keep the injured person calm and comfortable while waiting for medical staff to arrive.

(六)在場急救者，應協助傷患敘述病情原因等，以幫助醫護人員治療及診斷。

(6) On-site first aiders shall assist the injured person in describing the cause of the injury or condition to help medical staff with treatment and diagnosis.

二、外傷急救

2. First aid for external injuries

(一)常見為割傷、瘀血、穿刺傷。

(1) Common external injuries are cuts, bruises, and puncture wounds.

(二)割傷：傷口若是不大，可用直接施壓的方式止血，將受傷的地方高舉超過心臟，通常會在 1、2 分鐘內止血。若最近 5 年內未曾注射破傷風疫苗，應就醫注射。清潔傷口可以用乾淨的開水或生理食鹽水輕輕洗淨，一天兩次。

(2) Cuts: If the wound is small, apply direct pressure to the cut and elevate the area above the heart. Bleeding usually stops in 1-2 minutes. A tetanus booster is recommended if anyone hasn't had one in the last 5 years. To clean the wound, gently wash it with clean water or saline twice a day.

(三)瘀血受傷後 48 小時內立刻冰敷，可幫助止血，減少腫脹；48 小時後則改為熱敷，有助於瘀血的消散。

(3) For bruises, apply an ice pad within 48 hours of the injury to help stop bleeding and reduce swelling. After 48 hours, change to a hot pad to help the bruise heal and disperse.

(四)穿刺傷：傷口直接加壓止血。若近 5 年內未曾注射破傷風疫苗，應就醫施打疫苗。

(4) Puncture wounds: Apply direct pressure to the wound to stop the bleeding. For individuals who haven't had a tetanus vaccine in the past 5 years, seek medical attention for a booster.

三、觸電急救

3. First aid for electric shock

(一)觸電後，施救者務必切斷電源。

(1) After an electric shock, the rescuer must cut off the power.

(二)用乾的木棒(或其他絕緣體)將觸電者與電源分開，立即急救。

(2) Separate the injured person from the power supply with a dry wooden stick (or other non-conductive substance), and then provide immediate first aid.

四、燒傷、燙傷和化學灼傷

4. Burns, scalds, and chemical burns

(一)設法除去引發燒燙傷的原因(如：熱、冷、電擊、腐蝕物質等)。任何化學藥品，不論是水溶性或非水溶性、強酸、強鹼等，當濺落在皮膚上時應即刻用大量清水沖洗。愈早沖洗傷口，復原會較好。皮膚燒灼傷的程度與深度也會降低。

(1) Try to remove the cause of the burn or scald (e.g., heat, cold, electric shock, corrosive substances). Rinse the skin immediately with large amounts of water when any chemicals, whether water-soluble or non-water-soluble, strong acids, or strong alkalis spill on the skin. The sooner the wound is rinsed, the better the recovery will be, and the extent and depth of the skin burn will also be reduced.

(二)未破皮的燒燙傷口，儘快施以沖、脫、脫、蓋、送等處理。

(2) For burns or scalds with unbroken skin, treat the injury promptly by rinsing, removing (any covering clothes), cooling (with water), covering, and sending off for treatment.

(三)化學物灼傷皮膚時，要將傷側朝下，用大量清水慢慢沖洗處理至少 15 分鐘，強酸與強鹼的灼傷，完成初步沖洗後應立即就醫，評估燒灼傷的嚴重性。

(3) For chemical burns on the skin, make the injured area face downward and rinse with large amounts of water for at least 15 minutes. For burns caused by strong acids or strong alkalis, seek medical attention immediately after the initial rinsing to assess the severity of the burn.

(四)眼睛被灼傷時(含化學藥物)，以清水由眼睛內角向外角沖洗，並避免患者揉眼睛，眼睛化學灼傷是真正眼科急症，應迅速就醫。

(4) For eye burns (including those caused by chemicals), rinse the eye with water from the inner corner to the outer corner. Avoid letting the patient rub their eyes. Eye chemical burns are a true ophthalmic emergency, immediate medical attention is required.

(五)起水泡的燒燙傷口，暫時不可弄破，預防感染。

(5) For burn or scald wounds with blisters, do not burst the blisters immediately as this helps prevent infection.

五、誤食

5. Ingestion of substances

誤食任何藥品時，不要再進食或催吐，應立即就醫。

If any drug is ingested by mistake, do not eat anything or induce vomiting. Seek medical attention immediately.

第七章 防護設備之準備、維持與使用

Chapter 7 Preparation, maintenance, and usage of protective equipment

第 32 條:各適用場所負責人應充分供應所屬人員適當之個人防護具及安全衛生設施，並定期保養、維護及更新安全衛生設施。

Article 32 All applicable site directors shall make sure appropriate personal protective equipment and safety and health facilities are sufficiently provided to their personnel. They shall also regularly maintain, upkeep, and renew these safety and health facilities.

1、個人防護具應正確佩戴使用，保持清潔並自我檢查，保持防護具之性能。

1. Personal protective equipment shall be worn correctly, kept clean, and autonomously checked on a regular basis to maintain its effectiveness.

- 2、從事搬運、處置或使用刺激性、腐蝕性、毒性物質時，要確實使用手套、圍裙、過腳安全鞋、防護眼鏡、防毒口罩及安全面罩等安全護具。
 2. When moving, handling, or using irritative, corrosive, or toxic substances, make sure that safety protective equipment such as gloves, aprons, safety boots, protective glasses, respirators, and face shields are used.
- 3、接觸皮膚致傷害、感染或穿透吸收，而發生中毒之時，應使用不浸透性防護衣、防護手套、防護靴及防護鞋等適當防護具。
 3. If poisoning may occur due to contact with skin causing damage, infection, or permeation, appropriate protective equipment such as impermeable protective clothing, protective gloves, protective boots or shoes shall be used.
- 4、暴露於游離輻射線、生物病原體、有害氣體蒸汽、粉塵或其他危害性物質作業場所，應確實使用安全面罩、防塵口罩、防毒面具、防護眼鏡及防護衣等。
 4. In workplaces with a risk of exposure to ionizing radiation, biological pathogens, harmful gas vapors, dust, or other hazardous substances, appropriate protective equipment such as safety masks, dust masks, gas masks, protective glasses, and protective clothing shall be used.

第八章 事故通報與報告

Chapter 8 Notification and report of accidents

第 33 條:事故通報：

Article 33 Notification of an accident:

一、發生職業災害，依照本校「緊急應變計畫」應對。

1. Respond to an occupational accident in accordance with the KMU Emergency Response Plan.

二、依本校「實驗室災害通報流程」程序，通報各相關單位。

2. Notify all related units in accordance with the Laboratory Incident Reporting Procedures.

三、通報力求簡短、清楚，內容應包括：

3. The notifications shall be brief and clear, and cover the following content:

(一)通報人姓名及電話。

(1) The reporter's name and telephone number

(二)災害發生時間。

(2) Time of the incident

(三)災害發生地點。

(3) Location of the incident

(四)傷害媒介物。

(4) The injuring medium

(五)傷害人數。

(5) Number of injured persons

(六)處置情形。

(6) Treatment status

(七)所需支援。

(7) Support required

第 34 條:事故報告：

Article 34 Accident report:

1、不論火災大小，有無損失，發生場所應於三日內提出火災報告。

1. Regardless of the scale of the fire or any resulting damage, a fire report shall be submitted within 3 days from the occurrence of the incident.

2、發生下列職業災害之一，應即報告單位或所屬學院並轉陳校長，校方應於八小時內通報勞動檢查機構：

2. In case of one of the following occupational accidents, a report shall be made immediately to the unit or affiliated college and forwarded to the President. The University shall then notify the labor inspection agency within 8 hours:

(一)發生死亡災害。

(1) Fatal accidents

(二)發生災害之罹災人數三人以上。

(2) Accidents affecting 3 persons or more.

(三)發生災害之罹災人數一人以上，且需住院治療。

(3) Accidents affecting 1 person or more who require hospitalized treatment.

(四)其他經中央主管機關指定公告之災害。

(4) Other accidents specified by the central competent authority.

三、發生前款之職業災害時，除必要之急救、搶救外，非經司法機關或勞動檢查機構許可，不得移動或破壞現場。

3. In the event of the aforementioned occupational accidents, things at the scene shall not be moved or altered without permission from the judicial authority or labor inspection agency unless absolutely necessary for first aid and rescue purposes.

一、工作場所發生職災事故後，應會同勞工代表依據本校災害事故調查與處理程序實施調查、分析作成紀錄。

4. After an occupational accident occurs in the workplace, the accident shall be investigated, analyzed and recorded in collaboration with labor representatives in accordance with the KMU Accident Investigation and Handling Procedures.

第九章 其他有關安全衛生工作事項

Chapter 9 Other matters related to safety and health

第 35 條:適用場所教職員工生應確實遵守本守則，對於教育訓練與健康檢查有接受之義務，違反者依職業安全衛生法第 46 條規定，處新臺幣三千元以下罰鍰。

Article 35 Staff, faculty, and students at applicable sites shall strictly comply with these Rules and are obliged to receive education and training and accept health examinations. Those who violate these Rules may be fined up to NT\$3,000 in accordance with Article 46 of the Occupational Safety and Health Act.

第十章 附則

Chapter 10 Supplementary provisions

第 36 條:本守則未盡事宜，依相關規定辦理。

Article 36 For matters not covered in these Rules, the relevant regulations shall apply.

第 37 條:本守則經環境保護暨職業安全衛生委員會審議通過後，並通報高雄市政府勞工局勞動檢查處備查，自公布日起實施，修正時亦同。

Article 37 The Regulations shall be passed by the Environmental Protection, Occupational Safety and Health Committee, and is submitted to Labor Affairs Bureau of Kaohsiung City Government for reference and then implemented on the date of promulgation and shall apply to subsequent amendments.