

高雄醫學大學職業安全衛生作業標準

Kaohsiung Medical University

Occupational Safety and Health Operating Standards

110 年 02 月 09 日 109 學年度第 2 次環保暨職業安全衛生委員會會議通過

February 9, 2021 Passed by the 2nd Environmental Protection, Occupational Safety and Health Committee meeting in
Academic Year 2020

一、法源依據：

Article 1 Legal Basis:

本校職業安全衛生管理計畫。

Kaohsiung Medical University (KMU) Occupational Safety and Health Management Plan.

二、目的：

Article 2 Purpose:

本校為提供各單位作業場所經風險評估及對場所實施工作安全分析，製作安全衛生作業標準之依據。俾使各單位就作業場所可能存在之危害，提供正確安全的作業標準供工作者及利害相關者(承攬商等)作業時有所遵循，以消除不安全之行為，並配合設備環境以正確方法從事作業，對於新進校內工作者、作業輪調之工作者施以必要之安全教育，以防止職業災害之發生，特訂定本標準。

Kaohsiung Medical University formulates the KMU Occupational Safety and Health Operating Standards to provide various units and workplaces a basis for creating safety and health operating standards through risk assessment and work safety analysis on workplaces. Hence, all units can provide accurate safety operating standards concerning the hazards that may exist in the workplaces for workers and stakeholders (contractors, etc.) to follow, thereby eliminating unsafe behaviors and adopting correct work methods appropriate for the equipment and environment. Furthermore, necessary safety education shall be provided to new hires and workers rotating into new positions within the organization to prevent occupational accidents.

三、適用對象：

Article 3 Applicability:

本校所有例行性或非例行性之作業，具有危害風險作業，皆應實施工作分析後，擬訂安全作業標準。

For all routine and non-routine operations of KMU that involve hazardous risks, safety operating standards shall be formulated after a job analysis is performed.

四、名詞定義：

Article 4 Definitions:

(一)作業標準：係指規定作業條件、作業方法、管理方法、使用材料、使用設備及其他之

安全衛生應注意事項等相關之基準。

1. Operational standards: Refer to the standards pertaining to the specified operating conditions, operating methods, management methods, use of materials, use of equipment, and other safety and health precautions.

(二)工作者：指本校所聘僱之勞工及受工作場所負責人指揮或監督從事勞動者。

2. Workers: Refer to laborers employed by KMU and those engaged in labor work under the command or supervision of the workplace directors.

五、作業程序：

Article 5 Operating procedures:

(一)安全作業標準製作步驟 (圖一)

1. Steps of developing the safety operating standards (Figure 1)
 - 1.選擇作業，依本標準選擇作業依據決定應擬定作業標準之優先次序。
 - (1) Select the operations - determine the priority for drafting operating standards based on the criteria for selecting operations specified in these Standards.
 - 2.實施作業分解 (分析)，就作業觀察、分析，參考過去之事故或災害紀錄等，做作業之改善。
 - (2) Implement work breakdown (analysis) - make operational improvements based on task observation and analysis, and with reference to the past accident or hazard records.
 - 3.訂定作業標準之草案，需單位內相關人員(教師、技術人員、設備或儀器廠商)共同參與，就「安全性、簡易性、可行性」等方面檢討，並徵詢所有作業人員之意見。
 - (3) Draft the operating standards - require the joint effort of the related personnel (faculty, technicians, equipment or apparatus vendors) in the unit who would review the standards in terms of safety, simplicity, and feasibility and consult all operators for their opinions.
 - 4.決定作業標準，由單位主管或實驗室負責人訂定。
 - (4) Determine the operating standards - to be formulated by the head of unit or laboratory director.
 - 5.指導作業標準，由單位主管或實驗室負責人指示實施作業指導，教育訓練。
 - (5) Guide the operating standards - the head of unit or laboratory director shall implement work guidance, education and training.
 - 6.作業標準之變更與修正，設備或作業方法變更與修正時，需定期檢討並由作業場所主管會同負責本校職業安全衛生管理之單位或人員修正。
 - (6) Modification and amendment of the operating standards - when the equipment or operating method changes or is amended, regular reviews shall be performed and amendments shall be made by the workplace director together with the KMU occupational safety and health management unit or personnel.

(二)選擇作業依據

2. Criteria for selecting operations
 - 1.失能傷害頻率高的作業。
 - (1) Operations with a high frequency of disabling injuries.
 - 2.傷害嚴重率高的作業。
 - (2) Operations with a high level of injury severity.
 - 3.曾發生事故的作業。
 - (3) Operations with an accident history.
 - 4.有潛在危險的作業。
 - (4) Operations with potential dangers.

5.非經常性或臨時性的作業。

(5) Non-routine or temporary operations.

6.新的設備、程序改變後或新增加的作業。

(6) Operations after new equipment or procedural changes, or newly added operations.

7.經常性的維護保養作業。

(7) Routine maintenance operations.

(三)實施作業分析與注意事項

3. Implementation of work analysis and precautions

1.確認作業名稱，作業之始終。

(1) Confirm the name of operation and the start and end of operation.

2.二人以上共同作業，應決定個別基本動作之擔任人員。

(2) When there are two or more persons working together, the person responsible for each individual basic move shall be determined.

3.確認使用之原物料及工具。

(3) Confirm the materials and tools to be used.

4.確認必備防護具及設備防護裝置等。

(4) Confirm the necessary protective equipment and safety devices on equipment, etc.

5.若為危險性機械或設備、電氣修復、放射性物質操作、特殊儀器操作等法規另訂有規範，應從其規範。其他設備、儀器、實驗操作資格由設備保管單位/人員或實驗室負責人規範之。

(5) If there are specific regulations for hazardous machinery or equipment, electrical repairs, radioactive material operations, or the operation of special instruments, these regulations shall prevail. For other equipment, instruments, and qualifications for experimental operations, the relevant regulations shall be set down by the equipment management unit/personnel or the laboratory director.

6.實施作業分解，將單位作業細分為準備、主體、整理等三大作業要素。時序細分為作業前、作業中及作業後。

(6) Implement a work breakdown and divide the unit operations into three main operating elements: preparation, main task, and sorting. The task sequence can be pre-operation, during operation, and post-operation.

7.有關基本動作的順序及方法，避免不合理、不經濟、不均勻、不順暢的動作。

(7) Regarding the sequence and methods of the basic moves, unreasonable, uneconomical, uneven, and unsmooth moves shall be avoided.

8.找出不安全因素並與安全措施對應。

(8) Identify the unsafe factors and the corresponding safety measures.

如何發現潛在危險及可能之危害等不安全因素：

How to discover the unsafe factors such as potential dangers and possible hazards:

(1)是否高溫燙傷或低溫凍傷或產生蒸氣？

i. Are there risks of burns from high temperatures or frostbite from low temperatures, or does it generate steam?

(2)是否紫外線/紅外線危害？

ii. Are there hazards of ultraviolet (UV) or infrared (IR) radiation?

(3)是否震動而不穩固？

iii. Is there vibration causing instability?

(4)是否產生噪音？

iv. Does it generate noise?

(5)是否噴濺或產生氣膠？

v. Does it splash or generate aerosols?

(6)是否強酸或強鹼之化學品？

vi. Are they strongly acidic or strongly alkaline chemicals?

(7)是否高揮發易燃原料？

vii. Are they highly volatile and flammable materials?

(8)混合過程，是否產生有害的暴露，如：釋放高熱、有毒氣體、蒸氣、煙霧等？

viii. Is there harmful exposure during the mixing process, e.g., release of high heat, toxic gases, vapors, smoke, etc.?

(9)是否會撞及物體或被物體撞及或觸及物體而遭致傷害？

ix. Are there risks of injuries due to collision with objects, being struck by objects, or contact with objects?

(10)是否會陷入、絆住、捲入或夾住於物件中？

x. Are there risks of being trapped, caught, entangled, or clamped by objects?

(11)是否會滑跤或絆倒？是否會跌在同一平面上或墜落至另一平面？

xi. Are there risks of slipping or tripping? Are there risks of falling on the same level or falling to a different level?

(12)是否在推、拉或舉物時過度用力而受傷？

xii. Are there risks of injuries from excessive force when pushing, pulling, or lifting objects?

(13)是否使同事受到傷害？

xiii. Are there risks of causing injuries to colleagues?

9.分析危害點並做好防護措施，過程中發生意外，應寫明對應之事故處理方法。

(9) Analyze the hazard points and implement appropriate protective measures. In case of an accident during the process, the corresponding accident handling methods shall be clearly indicated.

10.安全作業標準內容與格式請參照（如附件一）。

(10) For contents and format of the safety operating standards, please refer to (Appendix 1).

(四)訂定安全作業標準

4. Formulate the safety operating standards

由實驗室負責人或操作人發起，召集相關人員共同制定後，公告施行。若為共同儀器或設備，必要時，經系所/學院或其他相關會議討論後實施。

It shall be initiated by the laboratory director or the operator, working together with the relevant personnel to develop the standards, which shall then be implemented upon promulgation. For shared instruments or equipment, the standards shall be implemented after discussion in departmental/college or other relevant meetings, if necessary.

(五)安全作業標準之修正

5. Amendment to the safety operating standards

安全作業標準並非一成不變，需依下列情況隨時修正或定期修正。

The safety operating standards are not immutable, and should be revised as needed or regularly if needed in the following circumstances.

1.發生事故時，安全作業標準應就事故原因予以修改或增刪。

(1) When an accident occurs, the safety operating standards shall be revised or updated based on the causes of the accident.

2.工作程序變更時即修訂。

(2) The standards shall be amended when the work procedures change.

3.工作方法改變時亦應重新分析，以符實際需要。

(3) The standards shall be re-analyzed when the work methods change, so as to meet the actual needs.

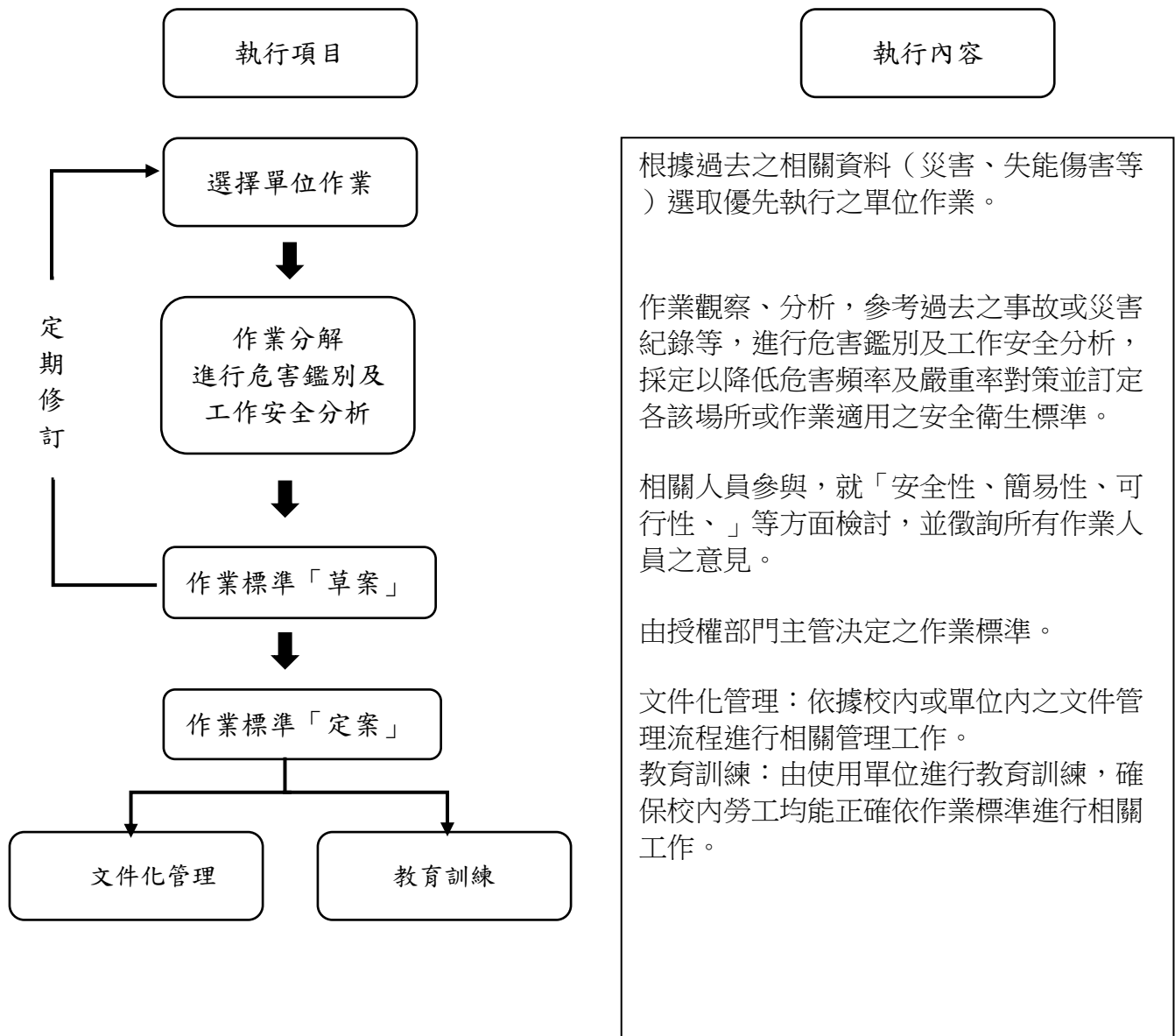
六、本標準經環保暨職業安全衛生委員會審議通過後，自公布日起實施，修正時亦同。

Article 6 These Standards shall be reviewed and passed by the Environmental Protection, Occupational Safety and Health Committee and implemented on the date of promulgation, and shall apply to any subsequent amendments.

圖一 安全作業標準製作步驟

Figure 1

Steps of Developing Safety Operating Standards



執行項目

Project execution

選擇單位作業

Select the unit operations

作業分解

Work breakdown

進行危害鑑別及工作安全分析

Perform hazards identification and work safety analysis

作業標準草案

Draft operating standards

作業標準定案

Finalized operating standards

文件化管理

Documentation management

教育訓練

Education and training

定期修訂

Regular amendments

執行內容

Execution details

根據過去之相關資料（災害、失能傷害等）選取優先執行之單位作業。

Select the unit operations for preferential execution according to the relevant past information (e.g., hazards, disabling injuries, etc.)

作業觀察、分析，參考過去之事故或災害紀錄等，進行危害鑑別及工作安全分析，採定以降低危害頻率及嚴重率對策並訂定各該場所或作業適用之安全衛生標準。

Perform hazards identification and work safety analysis by means of task observation and analysis and with reference to the past accident or hazard records; adopt the strategies that reduce hazard frequency and severity, and formulate the safety and health standards appropriate for various workplaces or operations.

相關人員參與，就安全性、簡易性、可行性等方面檢討，並徵詢所有作業人員之意見。

The related personnel shall participate in the process to review the standards in terms of safety, simplicity, and feasibility, and consult all operators for their opinions.

由授權部門主管決定之作業標準。

The operating standards shall be determined by the head of the authorized department.

文件化管理：依據校內或單位內之文件管理流程進行相關管理工作。

Documentation management: To be managed according to the documentation management procedures of the University or the unit.

教育訓練：由使用單位進行教育訓練，確保校內勞工均能正確依作業標準進行相關工作。

Education and training: The user unit shall implement education and training to make sure all workers in the University can perform their work correctly in accordance with the operating standards.

【附件一】 高雄醫學大學_____安全作業標準
[Appendix 1] Kaohsiung Medical University _____ Safety
Operating Standards

| | |
|--|--|
| 作業種類區分： Classification of operations: | |
| 單位作業名稱： Name of unit operations: | |
| 作業方式： Work methods: | |
| 使用處理材料： Processing materials used: | |
| 使用器具工具： Instruments and tools used: | |
| 防護器具： Protective equipment: | |
| 資格限制： Qualifications required: | |

| 工作步驟 Steps | 工作方法 Work methods | 不安全因素 Unsafe factors | 安全措施 Safety measures | 事故處理 Handling of accidents |
|-----------------------|----------------------|-------------------------|-------------------------|-------------------------------|
| 1. 工作前 Pre-work | 1 1.1 | 1 1.1 | 1 1.1 1.2 | |
| 2. 工作中 During work | 2. 2.1 2.2 | 2. 2.1 | 2. 2.1 2.2 | |

| | | | | |
|------------------------|------------------|------------------|------------------|--|
| 3. 工作後 Post-work | 3. 3.1 3.2 | 3. 3.1 3.2 | 3. 3.1 3.2 | |
| 圖 解 Illustration | | | | |

實驗室負責人：

製表人：

發行日期：

Laboratory Director:

Prepared by:

Publication date

備註：本安全作業標準僅供參考，各系(所)中心或實驗室請依實際需求修改。

Note: These Safety Operating Standards are for reference only, and various departments (institutes), centers, or laboratories should alter the standards according to actual needs.