

Safety and Health Work Rules of the National Taipei University of Nursing and Health Sciences

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Table of Contents

Chapter 1 General Provisions.....	1
Chapter 2 Workplace Health and Safety Management and Administrative Responsibilities.....	1
Chapter 3 Maintenance and Inspection of Machines, Equipment, and Tools.....	3
Chapter 4 Health and Safety Standards.....	4
Chapter 5 Education and Training.....	14
Chapter 6 Health Guidance and Management Measures.....	14
Chapter 7 First Aid and Rescue.....	15
Chapter 8 Preparing, Maintaining, and Using Protective Equipment.....	17
Chapter 9 Reporting Accidents and Making Reports.....	17
Chapter 10 Other Relevant Measures.....	18
Chapter 11 Supplementary Provisions.....	18

Chapter 1: General Provisions

Article 1. To prevent workplace accidents and to ensure the occupational safety and health of the faculties and students, the National Taipei University of Nursing and Health Sciences has formulated Workplace Health and Safety Rules (hereinafter referred to as the Rules) in accordance with Article 34 of the Occupational Safety and Health Act (hereinafter referred to as the Act), and all items stipulated in the Rules shall be followed by all faculty, staff, and students at the University.

Article 2. The terms used in the Rules are defined as follows:

1. Employer: Refers to the business owner or the person in charge of business management.
2. Person who oversees the workplace: Refers to the employer or person in the workplace that manages, directs, or supervises workers in the workplace on behalf of the employer.
3. Workers: Refers to the faculty and staff and other personnel who are instructed or supervised by the person in charge of the workplace, referring to the laborers employed by the school and those who are instructed or supervised by the person in charge of the workplace.
4. Labor: Refers to faculty and staff who are employed to perform work and receive wages, and assistants who have job descriptions and labor contracts with the school to provide labor services and obtain remuneration.

Article 3. The term “workplace accident” as defined in these rules: Refers to any disease, injury, disablement, or death that results from a building, machine, facility, material, raw material, chemical, gas, vapor, dust, activity, or operation in the workplace.

Chapter 2: Workplace Health and Safety Management and Administrative Responsibilities

Article 4. Our school has established the following safety and health organizations in accordance with Article 23 of the Occupational Safety and Health Act:

1. Safety and Health Committee (hereinafter referred to as SHC): it is composed according to the established regulations of the school’s occupational safety committee.
2. Office of Safety, Health, and Environment (hereinafter referred to as OSHE): Set up of occupational safety and health business supervisors/executives and occupational safety and health managers (members)
3. Health Center of Office of Student Affairs (hereinafter referred to as HCOSA): Set up of nursing staff and doctors engaged in labor health services by special arrangement according to the provisions of Regulations of the Labor-Health Protection.

Article 5. The professional responsibilities for positions at all administrative levels are as follows:

1. The responsibilities of the President include:
 - (1) To serve as the chairperson of the school’s occupational safety committee.

- (2) To instruct each unit in achieving the implementation of related occupational safety and health affairs.
- (3) To command and deal with emergencies and major occupational disasters.
2. The responsibilities of the Environmental Health and Safety Committee include:
 - (1) To give advice and recommendations on occupational safety and health policies formulated by the employers.
 - (2) To review, coordinate and recommend matters related to occupational safety and health management.
 - (3) To review the occupational disaster investigation report.
3. The responsibilities of the Environmental Health and Safety Center include:
 - (1) To formulate regulations for occupational safety and health management, workplace safety and health rules, and an annual implementation plan of occupational safety and health.
 - (2) To draw up, supervise, and promote the implementation of safety and health management matters of each unit.
 - (3) To supervise occupational disaster investigations and conduct occupational disaster statistics.
 - (4) To provide information and advice on occupational safety to the school.
4. The responsibilities of the Health Center of the Office of Student Affairs include:

To provide faculty and staff health management services, conduct health examinations, health guidance, labor health protection matters such as health promotion and management, occupational disease prevention, and on-site services in accordance with Regulations of the Labor-Health Protection.
5. The responsibilities of the person in charge of the workplace (instructor) include:
 - (1) To command and supervise the implementation of occupational safety and health management matters according to their authority of office, and coordinate and guide the relevant personnel to implement the matters.
 - (2) To analyze and assess potential dangers in the workplace; formulate practical rules for health and safety, and organize training programs and lectures on health and safety for all personnel
 - (3) To manage the emergency response and investigation of occupational disasters in the working area under the jurisdiction and formulate improvement measures.
 - (4) If each unit does not have a specific workplace, the supervisor of the unit shall be the person in charge of the workplace.
6. The responsibilities of the workplace safety and health personnel include:
 - (1) To conduct the workplace occupational safety and health work of the unit.
 - (2) To assist the person in charge of the workplace of the unit in implementing occupational safety and health management matters.
 - (3) To promote and publicize the relevant occupational safety and health regulations of the unit.

Article 6. The school's occupational safety and health rights and responsibilities for the winning tenderers entering the workplace of our school are as follows:

1. The bidding unit shall notify the relevant regulations on occupational safety and health before the winning tenderers enter the site for construction.
2. The bidding unit shall review the qualifications of the manufacturer/vendor and the relevant license documents that are required to be verified during the operation if necessary.

3. If the school is the original business unit, the person in charge of the workplace at all levels of the school should assume the responsibility of supervising its safety and health and require the relevant personnel of the manufacturer/vendor to abide by the relevant safety and health regulations; suspend or terminate their work as occasion demands and urge them to ensure their safety before proceeding with the operation.

Article 7. Before a worker enters the working area of our school for the first time, the employer should remind the worker of the signing of these Rules and request the worker to abide by the Rules and implement occupational safety and health lectures and training regarding the working area.

Chapter 3: Maintenance and Inspection of Machines, Equipment, and Tools

Article 8. The person in charge of each working area shall set up equipment and facilities that meet the safety and hygiene standards for the following matters:

1. Prevent hazards caused by machinery, appliances, equipment, etc.
2. Prevent hazards caused by explosive and flammable substances.
3. Prevent electrical hazards, heat exhaustion, and other hazards that can be caused.
4. Prevent hazards caused by operations such as quarrying, mining, loading, unloading, handling, accumulation, and felling.
5. Prevent hazards caused by workplaces where there is a risk of falling or collapsing.
6. Prevent hazards caused by high-pressure gas.
7. Prevent hazards caused by raw materials, materials, gases, vapors, dust, solvents, chemicals, toxic substances, oxygen-deficient air/atmospheres, biological pathogens, etc.
8. Prevent hazards caused by radiation, high temperature, low temperature, ultrasonic waves, noise, vibration, abnormal air pressure, etc.
9. Prevent hazards caused by monitoring instruments and precision work/operations.
10. Prevent hazards caused by waste gas, waste effluent, residue, and other waste disposals.
11. Prevent hazards caused by flooding or fire, etc.
12. Prevent hazards caused by animals, plants, or microorganisms.
13. Prevent hazards caused by passages, floors, or stairways.
14. Prevent hazards caused by insufficient ventilation, lighting, illumination, heat preservation, or moisture protection.

Article 9. Maintenance and automatic inspection:

1. For the equipment and facilities in the working areas of our school, it is required that the purchasing unit make sure that the specifications, safety operation procedures, or standards provided by the manufacturer/vendor comply with the Occupational Safety and Health Act and related regulations and conduct inspections and maintenance from time to time. The person in charge of each working area shall immediately turn off the power supply or other control switches and suspend the use of the equipment and facilities in the working area under their jurisdiction on discovering any situation that can be dangerous or harmful.
2. Inspections, including routine inspection, major inspection, and task focus, should be formulated by the person in charge of each working area and implemented in accordance with the plan.

3. The routine inspections and major inspections carried out by the person in charge of the workplace shall record the following matters that should be kept for three years:
 - (1) inspection date
 - (2) inspection items and methods
 - (3) inspection results
 - (4) content of improving measures adopted according to inspecting results
 - (5) signatures by the inspector and the unit's supervisor.
4. When the person in charge of the workplace conducts inspections and finds that there are any unusual conditions or possible hazards that could be harmful to workers, the person in charge should immediately prohibit the use, implement safety control, and immediately hire the manufacturer/vendor for the repair. Unless it is ensured that the maintenance is normal or tested to be safe, it should not be put into operation.
5. Before using the equipment and facilities in the school's workplace, the objects to which the Rules apply shall conduct automatic safety and hygiene inspections. If any danger or hazard should be found, it is necessary that the inspector immediately turn off the power supply or other control switches, suspend the use, and notify the person in charge of the workplace.

Chapter 4: Health and Safety Standards

Article 10. General Work Safety Rules:

1. The safety and hygiene precautions stipulated in each workplace must be observed.
2. The personnel are required to receive safety and health education and training related to the work itself.
3. Smoking, drinking alcohol, chewing betel nut, chewing gum and other behaviors that hinder the safety of work are strictly prohibited.
4. Keep safety doors, hallways, emergency exits, stairways, entrances, and exits of the workplace clear and easily accessible.
5. Be familiar with the method of application and location of fire extinguishers and firefighting equipment.
6. It is strictly forbidden to use any electrical appliances that are not specified by the school.
7. It is necessary to know the escape and evacuation routes of each workplace.
8. In case of fire or other accident, do not use an elevator.
9. Avoid stacking items/objects in the working environment to avoid collapse and personnel injuries.
10. When leaving the workplace, be sure to turn off the switches for electricity, and gas, and close the gas cylinder and water taps that are not in use.
11. If people, things, substances, etc. that endanger safety and health are found, immediately report to the person in charge of the site for emergency treatment.

Article 11. Special Work Safety and Health Rules:

1. Rules for Personal Health and Safety
 - (1) Follow the Workplace Health and Safety Rules and related regulations and guidelines.

- (2) Report unsafe situations and request that they be remediated. Provide suggestions to improve health and safety.
- (3) Report any false alarms, injuries, or accidents.
- (4) Conduct work in accordance with safe operating procedures.
- (5) Inform new arrivals of safe operating procedures.
- (6) Support the safety programs formulated by the University and implement all measures related to health and safety.
- (7) Maintain a clean workplace. Use appropriate safety equipment for machines and personal protective equipment.

2. General Safety and Health Rules:

- (1) Do not stay or linger in the working area of others unless it is for work needs.
- (2) It is strictly forbidden to disturb others' work or distract others from their work.
- (3) The workplace should always be kept clean, and one should immediately take a rest or seek medical attention if being ill or in poor mental health.
- (4) Do not use machines, equipment, and instruments that are not managed by oneself.
- (5) During an experiment, one should wear a lab coat, use appropriate tools and equipment and wear personal protective equipment. Sandals are prohibited.
- (6) Comply with safety rules and safe work laws.
- (7) Protective equipment such as casings, nets, and fences are prohibited from being arbitrarily dismantled or rendered ineffective.
- (8) Pay attention to various danger signs and safety signs.
- (9) In the event of an accident, one should report the person in charge of each working area and supervisors at all levels regardless of whether there is any injury or not.
- (10) Immediately give the necessary first aid if someone is injured.
- (11) The hallways, safety doors, safety ladders, etc. of the working area should be kept unblocked, and tools, materials, mechanical parts, and other sundries should not be stacked.
- (12) Do not use compressed air for the cleaning of the body or clothes.
- (13) Do not place tools and materials where they may fall and cause personnel injuries.
- (14) Turn off or top the machine before cleaning, oiling, adjusting, and overhauling the machine.
- (15) Flammable substances such as oils and solvents used for work should not be stored in large quantities in the workplace, except for the amount used on the day.
- (16) Those who are the last to leave the workplace must pay attention to the management of water, power, and gas.
- (17) It is strictly forbidden to litter cigarette butts and sundries in the workplace.

3. Experiment (practice) Site Safety and Health Rules:

- (1) The workplace should be kept neat and clean at all times.
- (2) The lighting, ventilation, and air change in the workplace shall comply with national standards.
- (3) If there are any abnormal conditions in the temperature and humidity, ventilation, lighting, noise, etc. that should occur in each working area, the problem must be dealt with immediately.
- (4) The placement of sharp-angled items shall not affect personnel safety or obstruct the passage.

- (5) Pay attention to the following when using the extension cords:
 - 1) The extension cord should not be placed on the passageway arbitrarily to avoid short circuits due to insulation damage. If necessary, a protective tube should be added and fixed to the ground.
 - 2) When the socket is insufficient, the extension cord cannot be connected in series or tapped continuously to avoid overload or poor contact.
 - 3) The power supply of the installation equipment and instruments should be notified to the designated personnel for the installation and should not be handled without authorization.
 - (6) The terminal must be equipped with anti-reflection, anti-radiation, and anti-static goggles.
 - (7) Heavy objects must not be placed aloft or hung on walls.
 - (8) The last person to leave should check whether the doors, windows, air conditioners, and power are turned off.
 - (9) Remember the location of safety gates, fire extinguishers, and escape routes in case of emergency.
 - (10) The workplace should not be noisy and should be kept quiet.
 - (11) Flammable items should not be placed near the power supply and gas switch to prevent danger.
4. Laboratory Safety and Health Rules for Handling Chemicals:
- (1) Identify and remember the location of the nearest fire extinguisher, first aid kit, emergency shower, and eyewash, and be familiar with the method of application.
 - (2) Hazardous industrial waste shall be stored separately from general industrial waste and shall not be discarded arbitrarily unless it has been treated.
 - (3) The waste effluent should be treated or classified for storage and should not be dumped in the sink.
 - (4) Smoking and eating are prohibited in the laboratory.
 - (5) Hazardous and toxic chemicals should be marked and stored in accordance with the Regulation of Labelling and Hazard Communication of Hazardous Chemicals or the relevant regulations of environmental protection laws and regulations.
 - (6) Flammable and explosive chemicals are prohibited near heating equipment such as ovens and distillatory.
 - (7) Food and beverages shall not be placed in refrigerators and freezers for refrigerated chemicals.
 - (8) Operations that generate toxic and corrosive vapors or gases should be carried out in a fume hood.
 - (9) Chemicals should be effectively managed. Hazardous articles, flammables, and toxic chemicals should be placed in designated locations. Hazardous wastes and expired chemicals should be declared in accordance with the regulations and should not be arbitrarily discarded.
 - (10) For experiments with the risk of explosion, a safety baffle should be placed in front of the body or other effective explosion-proof measures should be taken.
 - (11) The chemicals used should be placed with material safety data sheets and emergency leakage management equipment on the site.
 - (12) All conveyer pipes should be marked with the composition of the contents.
 - (13) All chemicals should be labeled with the scientific name of their main ingredient.
 - (14) Before engaging in any experiment, it is essential that the personnel engaged conduct the safety assessment, and fully understand the safety status of the

equipment used, the toxicity, physical properties, chemical properties, and correct usage methods of the drugs being used, propose prevention methods for possible hazards in the experiment, and adopt appropriate protective measures.

- (15) Any experiment should specify the operating procedures, operating conditions, and safety and health precautions.
- (16) Necessary personal protective equipment such as safety glasses, safety shoes, protective gloves, and gas masks should be worn when entering the laboratory.
- (17) When the alarm rings, immediately turn off the gas cylinder and all kinds of gases and leave the laboratory as soon as possible.
- (18) Someone should be entrusted with monitoring the experiment during non-working hours, and it is strictly forbidden to conduct dangerous experiments alone.
- (19) If splashed by chemicals, immediately rinse with water for more than 15 minutes and seek appropriate medical advice.
- (20) The door of each laboratory should be marked with the telephone number of the person in charge of the site and the emergency contact person.

5. Work Rules for Organic Solvents:

- (1) Containers containing organic solvents should be covered with lids to prevent vapors from escaping.
- (2) The ventilation and air change facilities in the working area shall not be stopped during working hours.
- (3) When the concentration of organic solvents in the working area may exceed the allowable concentration, it is required that one wear an airline respirator or a respirator for organic gases.
- (4) Wear protective gloves to prevent direct skin contact with the solvent when handling organic solvents.
- (5) Organic solvents should be stored in designated places, with the name of the type of solvent being marked and minimize the reserve as much as possible.
- (6) The waste effluent of organic solvent should not be dumped arbitrarily but should be poured into the designated storage container.
- (7) The local evacuating equipment or the overall ventilation device installed shall not be stopped during the operation time. The operating condition of the ventilation equipment in the workplace, the working conditions of the personnel, the air circulation effect, and the use of organic solvents shall all be checked and recorded once a week.
- (8) The local evacuating equipment installed in the working area shall be automatically inspected more than once per year, on a regular basis, according to regulations, and major inspections shall also be conducted and recorded during the commission, dismantling, refit or repair.
- (9) The person in charge of the working area should inform the employees at the workplace of the toxicity of organic solvents, precautions for operation, emergency response measures, and the relevant announcements.
- (10) If personnel become unconscious owing to acute poisoning, they should be moved to a ventilated place immediately, first aid should be given, and an emergency notification should be sent immediately.
- (11) It is required that the operating personnel of organic solvent undergo health examinations according to regulations.

6. Safety Rules for Use of Special Chemical Substances:

- (1) Non-authorized personnel are strictly prohibited from entering the working area for the disposal or manufacturing of specific chemical substances.
- (2) The valve or cock shall be rotated according to the direction as indicated and shall not be dismantled arbitrarily without the permission of the responsible person.
- (3) The cooling device should be operated in accordance with the regulations, and its reaction time and cooling temperature should not be arbitrarily shortened and changed.
- (4) When the stirring apparatus is in operation, the cover should be properly fitted and sealed before starting the operation. The power supply of the machine should not be stopped arbitrarily during the operation, and the cover should not be opened.
- (5) Compressors should discharge cooling water before starting every day, and the operation of compressors should be carried out in accordance with the operating instructions.
- (6) The regular calibration of thermometers, pressure gauges, and various monitoring instruments shall be carried out by the responsible personnel, and other personnel shall not arbitrarily move or change the scales that have been set.
- (7) The adjustment of the safety valve and all kinds of safety devices shall be carried out by the responsible personnel, and the adjustment shall be carried out in accordance with the operating instructions while others are strictly prohibited from tampering.
- (8) The joint parts such as the cover plate, flange valve, and cock should be checked daily by the specific chemical substance management personnel to see if there is a risk of omission.
- (9) When the operating personnel finds an abnormal reaction, he/she should immediately isolate or seal both the working area and equipment, notify other personnel to evacuate, and carry out a rescue operation by shutting down the equipment and notifying the maintenance personnel to deal with the issue according to the method of operational training.
- (10) The installed alarms should be kept in a functional state at all times, and the management personnel should conduct regular inspections to prevent any leakage.
- (11) The operating personnel should wear the prescribed protective equipment when operating.
- (12) Try to replace highly toxic substances with low toxicity substances.

7. Work Rules for High-Pressure Gas:

- (1) High-pressure vessels (both full and empty) must be used in accordance with the following items:
 - 1) Only use a vessel after verifying its contents.
 - 2) High-pressure gas vessels shall be labeled in accordance with the Regulation of Labelling and Hazard Communication of Hazardous Chemicals and the gas contained shall not be arbitrarily filled or transferred.
 - 3) Do not remove or alter the color of a vessel.
 - 4) Place the vessel in a secure position before use.
 - 5) Do not transport a vessel in a haphazard manner or in a way that could cause a collision.
 - 6) Do not try welding on the container.
 - 7) The vessel status tag should be effectively managed and used.

- (2) High-pressure vessels (both full and empty) must be transported in accordance with the following items:
 - 1) Keep the vessel's temperature below 40 degrees Celsius.
 - 2) Use a pushcart for transportation whenever possible to ensure the vessel remains stable and upright.
 - 3) If transporting a vessel by hand, ensure that the protective cover is fastened tight and then move the vessel in an upright position.
- (3) It is required that the following matters be followed regarding the storage of high-pressure gas:
 - 1) Appropriate warning signs should be set up in the storage area, and open flame is strictly prohibited.
 - 2) No pyrotechnics, flammable, or pyrophoric items/articles should be placed within two meters of the depot/storage area.
 - 3) Containers, including empty containers should be placed separately.
 - 4) Cylinders of flammable gas, toxic gas, and oxygen should be stored separately.
 - 5) Containers should be kept at or below 40°C, securely placed, and fixed with protective covers.
 - 6) The passage area should be more than 20% of the storage area, and no other items should be arbitrarily placed near the storage area so that they can be easily removed in an emergency.
 - 7) When storing gases that are heavier than air, pay attention to the ventilation in low-lying areas.
 - 8) The depot of high-pressure flammable gas and electrical equipment should be explosion-proof type, and no lights other than explosion-proof type portable torches should be used, with appropriate fire extinguishers being provided.
 - 9) In addition to the provisions in the preceding paragraph, attention to the following matters ought to be paid regarding the storage of high-pressure toxic gases:
 - a. Absorbents, neutralizing agents, and applicable respirators and breathing apparatus/ventilator should be prepared in the storage place.
 - b. Corrosive and toxic gases should be fully air changed, well ventilated, and humidity reduced.
 - c. Do not store near corrosive chemicals or smokestacks.
 - d. Prevent the mixing of foreign objects.
- (4) The following regulations should be observed for the use of toxic high-pressure gas:
 - 1) Personnel without on-the-spot knowledge or field expertise of the gas are not allowed to enter.
 - 2) The toxic gas in the air of the working area shall be kept below the allowable concentration.
 - 3) Appropriate protective equipment should always be available in the working area.
 - 4) Places/sites where poisonous gas is used should be well ventilated and dry and effectively managed.
8. Safety Rules for Storing and Transporting Materials
 - (1) Stacked objects may not exceed height restrictions or the safety load of the floor.
 - (2) Stacked objects may not affect lighting.

- (3) Stored objects may not affect the operation of machinery.
 - (4) Stored objects may not block walkways or doorways.
 - (5) The effective function of the fire alarm shall not be reduced.
 - (6) Stacked objects may not interfere with the effectiveness of safety equipment and fire protection equipment
 - (7) Do not store objects against walls or supporting pillars.
 - (8) Keep the warehouse clean and well ventilated.
 - (9) Stacked objects may not block electrical switches and first aid equipment.
 - (10) Use a pushcart or other transportation equipment to move an object that exceeds 40 kg.
 - (11) Use motorized vehicles or machinery to transport an object that exceeds 500 kg.
 - (12) When carrying heavy objects with hands, one should first hold the heavy objects in a half-squat position, and then stand up using the leg muscles. Do not bend over to lift heavy objects to avoid spraining the waist and back.
 - (13) When stacking heavy objects, one should inhale deeply until the heavy objects are placed before exhaling. Deep inhalation can tighten the muscles to avoid sprains.
 - (14) The trolley loaded with materials should be pushed forward instead of being pulled unless it is empty.
 - (15) Two or more people that are moving a long object must face in the same direction, and the one with more experience must take up the rear position in order to steer.
 - (16) Wire ropes and hemp ropes that pass through sharp edges should be padded with protective wooden boards or thick sacks to prevent them from being cut and heavy objects falling and hurting people.
 - (17) Use a wire rope sling when hoisting a heavy or long object so that you can steer it and prevent it from swaying.
 - (18) When using rope to hang a cylindrical object or an object with a smooth surface, wrap the rope around the object at least twice to prevent it from slipping and falling.
 - (19) When transporting long items such as metal pipes, pieces of wood, or ladders, raise the front end slightly so that it does not hit the ground. Keep control and turn corners slowly so that the object does not hit power lines or other people.
 - (20) When handling chemicals such as acid and alkali, wear rubber gloves, rubber skirts, rubber shoes, and a protective face shield.
9. Work Rules for Toxic Gas Operation:
- (1) Non-authorized personnel are not allowed to enter the toxic gas working area without permission.
 - (2) It is strictly forbidden for individuals to work on toxic gases alone, and at least two or more people should work together so that they can support each other at any time.
 - (3) Relevant warning signs and standard operating procedures should be posted in the workplace.
 - (4) The toxic gas working area should be equipped with leakage detectors and alarms, gas cylinder cabinets, gas-supplied masks, fire extinguishers, safety doors, and other safety facilities, and operating personnel should be familiar with all kinds of operating methods.
 - (5) Toxic gas cylinders should be stored in the gas cylinder cabinet, the exhaust gas from the gas cylinder cabinet should be vented to the outside, and the exhaust gas should be properly treated before being discharged.

- (6) The management of toxic gas cylinders shall comply with the provisions of the Codes of Practice for High-Pressure Gas Cylinders.
 - (7) The equipment, power supply equipment, and tools in the workplace shall be provided with the function of being explosion-proof.
 - (8) Operating personnel should thoroughly understand the characteristics of toxic gases, production processes, emergency response measures for accidents, and regularly conduct emergency response drills.
 - (9) Operating personnel should strictly abide by the code of practice and are not allowed to operate or change the operation method without being trained and permitted.
 - (10) When using any power extension cord near the storage site of toxic gas cylinders, it shall not be placed on the passageway arbitrarily.
 - (11) Do not arbitrarily adjust or move the position, pressure, or any switch of the gas cylinder without permission.
 - (12) Smoking, eating, and drinking are strictly prohibited in the working area with toxic gases.
 - (13) Inflammable, explosive, organic solvents, oil products, powdered chemical substances, empty steel cylinders, and other dangerous articles shall not be stored in the toxic gas working area unless required for work.
 - (14) The person in charge of the workplace shall perform various safety and health inspections, record the results every day, and rectify all deficiencies.
 - (15) When overhauling the toxic gas reaction equipment or pipeline, the residual gas inside should be fully removed, and it should be disassembled only after having been confirmed that it is safe.
 - (16) When replacing toxic gas cylinders or performing maintenance operations on gas cylinder cabinets, it is essential that the operating personnel wear an air-supplied face shield or air respirator, and wash their head, hands, or clothes that may be contaminated after work.
10. Health and Safety Rules for Operating with Radiative and Ionizing Radiation:
- (1) Any radioactive substances and equipment that can generate ionizing radiation shall not be used unless they have passed the inspection (examination) of the Atomic Energy Council, Executive Yuan, and have been issued a license for use.
 - (2) Operating personnel of radioactive substances and equipment that can generate ionizing radiation shall be those who have participated in the relevant training on ionizing radiation protection and have obtained radiation safety certificates issued by the Atomic Energy Council, Executive Yuan.
 - (3) It is required that ionizing radiation workers receive on-the-job training in radiation safety protection every year.
 - (4) It is required that one wear a film badge, a dosing pen, and work clothes, gloves, shoe covers, etc. during working hours and immediately change and place the assembly and outfit in the designated place and wash hands thoroughly before leaving the workplace.
 - (5) Smoking, eating, drinking, storing food, and using cosmetics are strictly prohibited in the radioactive material laboratory.
 - (6) One should never suck or pipette any radioactive material by mouth.
 - (7) Those with skin wounds should not handle radioactive substances.
 - (8) Avoid pouring and spilling radioactive materials.

- (9) Radioactive test tubes or utensils should be placed in absorbent paper trays, whereas non-radioactive paper or waste should be placed in radioactive waste bins.
 - (10) Contaminated utensils should be thoroughly cleaned or stored until the radioactivity decays by **itself to close to the background value before use. ???**
 - (11) If there should be any radioactive contamination in the workplace on inspection, it should be isolated immediately, and radiation protection professionals should be notified to visit the site for treatment.
11. Working Standards for Dust Work:
- (1) Wear a dust mask and never remove it arbitrarily during working. Keep the dust mask clean at all times to maintain its performance.
 - (2) Powdered raw materials, semi-finished products, and finished products should be placed in the designated storage area to prevent dust from flying.
 - (3) Keep all working areas clean and tidy at all times to prevent excessive dust accumulation. The work area should be cleaned at least once per day.
 - (4) Supervisors shall notify all employees of the necessary matters to prevent the occurrence of pneumoconiosis.
 - (5) It is essential that supervisors implement educational measures necessary for the prevention and health management of pneumoconiosis on a regular basis.
 - (6) Eating, drinking, and smoking are strictly prohibited in the workplace.
 - (7) If feeling unwell (especially the lungs), receive check-ups and treatment as soon as possible instead of allowing oneself to continue working.
 - (8) Regular health check-ups must be accepted and cannot be avoided. Check-up records will be kept for ten years.
 - (9) The installed local evacuating equipment or overall ventilation device shall not stop running during working hours.
 - (10) Check the operation condition of ventilation equipment, labor operating mode, air circulation effect, and dust conditions at the dust workplace every week and take necessary measures.
 - (11) The installed local evacuating equipment and other dust removal equipment should be automatically inspected more than once per year, and necessary measures should be taken immediately if any abnormality is found.
12. Working standards for Personnel Operating Pressure Vessels:
- (1) A full-time operating personnel system shall be set up, and the operating personnel shall be specialists or experts with operational knowledge and knowledge of technology.
 - (2) Operating personnel are not allowed to concurrently perform work other than the operation of the first type of pressure vessel unless the inspection agency/authority considers that it will not hinder their safety and management duties.
 - (3) Purchase such equipment that has passed the inspection during the manufacturing process and should conduct regular inspections after purchase and use and report to the inspection agency when it is out of use.
 - (4) To prevent the occurrence of disasters, the operating personnel should respond appropriately when any abnormality is found and should always pay attention to the implementation of the following matters:
 - 1) Confirm that the pressure gauge of the safety valve and other equipment is safe to use.

- 2) Try to avoid the intense changes in the load.
 - 3) Keep the pressure under the allowable maximum pressure.
 - 4) Maintain the normal function of the safety valve.
 - 5) For those without automatic control devices, regular inspection and adjustment should be carried out to maintain normal function.
 - 6) If equipped with a water cooling recovery, the normal function should be maintained.
- (5) User of the first type of pressure vessel (such as autoclaves), concerning the management of the safety valve and its accessories, shall be responsible for maintaining the following matters:
- 1) If there are two safety valves, both should be adjusted to limit pressure to pop up, and after inspection, one of which should be fixed, unless the inspector agrees to changes.
 - 2) Try to use gauges against vibration, to avoid freezing, keeping their internal temperature under forty °C.
 - 3) Gauges should be marked with maximum operating pressure at the scale plate to be easily seen
- (6) When the user of the pressure vessel is engaged in its cleaning, repair, and maintenance, etc., or when a worker needs to enter the vessel for cleaning or repair and maintenance, the following measures should be taken:
- 1) Cooling the pressure vessel.
 - 2) Implementing ventilation and safety inspection of the interior (detection of oxygen concentration and concentration of harmful substances).
13. Safe Operation of Centrifuge:
- (1) Verify that the centrifuge lid has a safety design device.
 - (2) Check that the centrifuge trunnion airtight cover or the circular gasket of rotor cover is properly installed.
 - (3) Make sure that the casing installed in the horizontal centrifuge head is consistent.
 - (4) Confirm whether the material of the centrifuge tube to be used meets the required rotational speed or centrifugal force.
 - (5) Generally, the volume of the centrifuge tube of the centrifuge should be adjusted appropriately according to the different centrifugation angles. Remember to avoid excessive amounts, which may overflow during centrifugation.
 - (6) If the infectious biological material needs to be centrifuged in an ultra-high-speed centrifuge, it should be operated in a Class II biological safety cabinet before and after filling. When drawing out the potentially infectious specimens after the centrifuge stops rotating, the centrifuge tube must be moved to a biological safety cabinet to prevent infection from spills or aerosols.
14. The experiment (practice) should be equipped with the following safety and health protection facilities:
- (1) Emergency shower and eyewash equipment.
 - (2) Collection of waste and waste disposal barrel.
 - (3) Organic solvent hazards marks.
 - (4) Fire extinguisher.
 - (5) Personal protective equipment.
 - (6) Chemical exhaust cabinets.
 - (7) Biological safety cabinet.

(8) First aid kit.

Chapter 5: Education and Training

Article 12. The person in charge of each working area shall provide the personnel of the area with the necessary safety and health education and training for work engagement and disaster prevention.

Article 13. Workers have the obligation to receive occupational safety and health education and disaster prevention training.

Article 14. Safety and health education and training offered by our school:

1. For new employees or workers that have transferred positions, each employer shall provide workers with at least 3 hours of general occupational safety and health education and training according to actual needs:
 - (1) A summary of laws and regulations related to workplace safety and health.
 - (2) Labor safety and health concept and work rules for safety and health.
 - (3) Automatic inspections before, during, and after work.
 - (4) Standard operating procedures.
 - (5) Emergency response and handling.
 - (6) Firefighting and first aid knowledge and drills.
 - (7) Other work-related safety and hygiene knowledge/expertise.
2. Education and training on other occupational safety and health matters.

Article 15. In accordance with the relevant regulations on occupational safety and health education and training, workers shall receive appropriate hours of on-the-job education and training.

Article 16. Other jobs that require a certificate as stipulated by Occupational Safety and Health Act should be handled in accordance with the Occupational Safety and Health Education and Training Rules.

Article 17. Persons who have not been trained by the central competent authority or who have passed the skill test of dangerous machinery or equipment designated by law may not act as operators

Chapter 6: Health Guidance and Management Measures

Article 18. Handle health protection matters as instructed by the designated occupational medical specialists and nursing staff (hereinafter referred to as medical staff):

1. Health management: measures such as general and special health examination level to level management, occupational injury and disease statistical analysis, and health risk assessment.

2. Health promotion: such as staff health, health education and guidance, work stress relief, and other physical and mental health promotion programs.
3. Assist in the prevention of occupational diseases by inspecting the worksite, detecting possible potential health hazards, identifying and assessing the hazards of the workplace environment and operations, putting forward suggestions on improvement plans for workplace safety and health facilities, and providing on-site occupational health care consultations, etc.

Article 19. Newly recruited workers are obligated to undergo a physical examination, and staff on active duty should also undergo various medical examinations as required by law.

Article 20. Workers must receive routine medical examinations in accordance with the following regulations:

1. Those over the age of sixty-five must receive an examination once per year.
2. Those over the age of forty but below the age of sixty-five must receive an examination every 3 years.
3. Those under the age of forty must receive an examination every 5 years.

Article 21. Those who work on campus and have undergone general physical examination, special physical examination, general health examination, special health examination or health follow-up examination should adopt the following measures:

1. Follow the doctor's advice, inform the on-campus workers, and appropriately allocate on-campus workers to work in the workplace.
2. For on-campus workers with abnormal examination results, medical staff should provide their health guidance; if they are unable to adapt to the original workers according to the results of the doctor's health evaluation, they should follow the doctor's advice to alter their workplace, change jobs or shorten working hours, and adopt health management measures.
3. Send inspection results to the school workers who have received the examination.
4. The health check records of the school workers who have received the examination are compiled into a health check handbook.

Article 22. If workers feel uncomfortable or detect a physical abnormality, they should immediately report to the person in charge of the working area or medical staff at all levels.

Chapter 7: First Aid and Rescue

Article 23. The workplace should be equipped with sufficient first aid kits, medicines, and equipment as needed.

Article 24. Basic first aid principles:

1. Consider your safety before performing first aid or giving any emergency treatment.
2. Any injury or accident (regardless of severity) shall be reported to the supervisor immediately and shall not be concealed or omitted.
3. In the event of electrical hazards, try to cut off the power first and ensure that there is no risk of shock hazard before performing first aid.

4. For the disposal of hazardous substance disasters, the nature and compatibility of the hazardous substances shall be considered, and appropriate methods shall be used for first aid and rescue.
5. The purpose of performing first aid is only to maintain the life of the injured or avoid the expansion of the injury. For major and severe injuries, the patient should be urgently sent to the hospital for further treatment.

Article 25. Important First Aid Information:

1. General first aid:
 - (1) Before the medical staff arrives at the scene, the injured can be properly treated by the school staff who have received first aid training to avoid more serious consequences.
 - (2) Before the fact of the injury is confirmed, the injured person should be placed on his/her back to prevent fainting and shock.
 - (3) During shock treatment, quilts, clothing, etc. can be used to maintain the body temperature of the injured.
 - (4) Call an ambulance or transport the injured to a medical facility or find a paramedic.
 - (5) The responsibilities of first responders include saving lives, preventing injuries or conditions from getting worse, and keeping the injured patient quiet and comfortable in anticipation of the arrival of medical staff.
 - (6) The first responders present at the scene should assist the injured with describing the cause of the condition, etc., to aid medical staff in the follow-up treatment and diagnosis.
2. First aid for external injury:
 - (1) The types of external traumas are divided into open wounds, abrasions, cuts, lacerations, etc. Before seeking medical advice, blood-stopping treatment should be given to prevent bacteria from entering the wound.
 - (2) The first aid for trauma is to cover the wound with sterile gauze. The personnel performing first aid should have the concept of disinfection and should not directly touch the wound with their fingers. Cleaning and disinfection should be performed by the medical staff.
 - (3) When giving blood-stopping treatment, check the blood color in the first place. The color of bright red indicates aortic hemorrhage, and the area between the heart and the wound should be bound up and tightened with a belt or band. The color of dark red indicates venous blood, and the area between the wound and the outer edge of the body should be bound up and tightened with a belt or band.
3. Electrocution injury emergency rescue principle:
 - (1) Turn off the power or remove the power with a non-conductive object in case of electric shock.
 - (2) Move the patient to a well-ventilated spot, unbutton the shirt, lie on the back, raise the head, and perform artificial respiration, if necessary, until the ambulance arrives.
4. First aid for foreign objects in the eyes:
 - (1) Open and flip the eyelids and rinse gently with water (for those who wear contact lenses, remove the contact lenses first)
 - (2) Rinse for at least 15 minutes and send the patient to the hospital as soon as possible.

Chapter 8: Preparing, Maintaining, and Using Protective Equipment

- Article 26. Persons in charge of workplaces at all levels should adequately provide related personnel with the individual protective equipment and safety and health facilities, and supervise the workers under their jurisdiction to comply with the following regulations:
1. The protective facilities, machinery, equipment, etc. set up in the workplace should be frequently inspected and maintained. If the performance becomes poor, they should be replaced at any time and be properly stored when not in use.
 2. Personal protective equipment should be properly cleaned, maintained, and properly stored after use.

- Article 27. Workers should wear protective equipment when being engaged in the following operations:
1. Appropriate protective equipment such as gloves, aprons, leggings/leg wraps, safety shoes, helmets, protective glasses, respirators, and safety masks should be used when handling, placing, and using thorns, protrusions, corrosive substances, toxic substances, or highly toxic substances.
 2. When operating or approaching a running prime mover, power transmission device, power rolling device, or power running machinery, workers should wear appropriate clothing and hats when their hair or clothing is at the risk of being trapped.
 3. When there may be a risk of objects falling or scattering during operation, appropriate safety helmets, goggles, and other protective gear should be worn.
 4. When working at a height of more than two meters with a risk of falling, one should wear a safety harness, helmets, and other necessary protective equipment.
 5. In a workplace with loud noise, one should wear protective equipment such as earplugs and earmuffs.
 6. Workers engaged in electrical work shall use hard hats, insulating protective gear, and other necessary protective equipment.

Chapter 9: Reporting Accidents and Making Reports

- Article 28. In the event of an occupational injury/accident at each workplace, in addition to immediately responding to it by the authority and responsibility, the employer, the person in charge of the workplace, the supervisor of the unit, the occupational safety, and health personnel, and other relevant personnel shall be immediately notified, and necessary measures shall be taken according to the situation.
- Article 29. If one of the following occupational injuries/accidents occur in the workplace, in addition to giving emergency first aid, emergency treatment, and other measures, the event should be reported to the labor inspection agency (occupational accident hotline of Taipei City Labor Inspection Office: 0910-922-707) within 8 hours:
1. Accident involving death.
 2. Accident that injures three or more people.
 3. At least one person requires a hospital stay as a result of the accident.
 4. Others designated and announced by the central competent authority.

- Article 30. When an occupational injury/accident mentioned in the preceding paragraph occurs in the workplace, except for the necessary first aid and emergency treatment, the site shall not be tampered with without the permission of the judicial authority or labor inspection agency.
- Article 31. When an occupational injury/accident occurs in the workplace, the person in charge of the workplace shall investigate, analyze and make records of the cause of the event, formulate the appropriate countermeasures, fill in the occupational disaster report form, and submit the report following the correct administrative procedures.

Chapter 10: Other Relevant Measures

- Article 32. The staff and related personnel of the school shall strictly abide by the Rules, and those who violate the Rules shall be dealt with in accordance with the provisions of the Occupational Safety and Health Act.

Chapter 11: Supplementary Provisions

- Article 33. Other related regulations that are not stipulated in the Manual are subject to the relevant regulations.
- Article 34. The Manual is reviewed and approved by the SCH and University Administrative Meeting and has been implemented upon the approval of the President and reported for approval to the Labor Standards Inspection Office. The amendment procedure shall be the same.