

Opinions of the Ministry of Education on Strengthening the Safety of University Laboratories

Dear Education Department (Education Committee) of the provinces, autonomous regions and municipalities, the Education Bureau of the Xinjiang Production and Construction Corps, the Education Department (Bureau) of the relevant departments (units), the higher education institutions affiliated to the ministry and the higher education institutions established by ministry and provinces:

Safety is the basic guarantee for the continuous development of education and the growth of students. In recent years, the education system has established a concept of safe development, and promoted the idea of life first and safety first. The safety of university laboratories has achieved positive results, and the security situation has remained stable overall. However, the safety accidents in university laboratories still occur from time to time, which exposed the weakness in the laboratory safety management. Especially the implementation of laboratory safety responsibility is not in place, the implementation of management system is not strict, the publicity and education is inadequate and the work safety system is unsound etc. In order to thoroughly implement the important instructions and deployments of the Central Committee and the State Council on safety work, profoundly absorb the lessons of accidents, effectively enhance the safety management capabilities and levels of university laboratories, and ensure the safety and stability of campuses and the safety of teachers and students, several opinions were put forward as follows:

- i. Raise the awareness and deeply understand the importance of laboratory safety.
 1. Further improve political stance. The educational administrative departments, colleges and universities across the country must firmly establish the "Four Consciousness" and resolutely achieve the political heights of "Two maintenance", further enhance the sense of urgency, responsibility and mission. The extreme importance of the safety work of university laboratories should be profoundly understood and be resolutely completed as a major political task.
 2. Fully understand the complexity and arduousness. University laboratories are fixed places for conducting scientific research and teaching experiments. They are large in volume, various in variety, and with safety hazards widely distributed, including dangerous chemicals, radiation, biological materials, mechanicals, electricity, special equipment, and materials that can be easy to make explosives. The sources of danger and personnel are relatively concentrated, and the safety risks have an additive effect.
 3. **Strengthen the awareness of safety red lines. All colleges and universities should put safety at the forefront of all relevant work, regard laboratory safety as an**

insurmountable red line, firmly establish the concept of safe development, carry forward the idea of life first and safety first, resolutely overcome numb thinking and fluke mind. The source, key points and the bottlenecks must be grasped and make sure things are clear, responsibilities are clear and management are firm. Effectively solve the weaknesses and contradictions in the laboratory, and grasp the initiative to prevent and resolve the safety risks of the laboratory.

ii. **Strengthen implementation and improve the laboratory safety responsibility system.**

4. **Strengthen the subject responsibility of legal persons.** All colleges and universities must strictly abide by the requirements of "the party and government have the same responsibility, one station has two responsibilities, safety should be managed together, dereliction will be punished" and "the one who manages the industry must manage safety and the one who manages the business must manage safety". According to the principle of "User takes the responsibility; Supervisor takes the responsibility", the responsibility should be taken by the position and personnel. Adhere to the principle of refinement, scientific, standardized and efficient management should be promoted and create a good campus safety atmosphere where everyone should be safe and everyone appreciate safety.
5. **Establish a hierarchical management responsibility system. Establish a laboratory safety management responsibility system with three linked levels: schools, secondary units and laboratories.** The principal responsible person of the school party and government is the first responsible person; the school leader in charge of the laboratory work takes the important leadership responsible, assisting the first responsible person to be responsible for the laboratory safety work; other school leaders are responsible for the laboratory safety work and should provide support supervision and guidance within the scope of the work. The party and government leaders of the secondary unit of the school are the main leaders responsible for the safety work of the laboratory. The responsible persons of each laboratory are the direct responsible persons for the safety work of this laboratory. All colleges and universities should have laboratory safety management agencies and full-time management personnel responsible for the daily safety management of the laboratory.

iii. **Strive for real effects, improve the laboratory safety management system.**

6. **Establish a safety periodic inspection system.** All colleges and universities should carry out regular safety inspections of the whole process, all factors and full coverage of the laboratory, verify the safety system, responsibility system, implementation of safety education and potential safety hazards, and carry out a closed-loop management of problem investigation, registration, reporting and rectification. Rectification measures, responsibilities, funds, time limits and emergency plan should be implemented in place

strictly. For laboratories with major safety hazards, the laboratory should be stopped immediately until the hidden dangers are completely rectified and eliminated.

7. Establish a safety risk assessment system. The laboratory should conduct risk assessment on the teaching and research activities, and establishes a laboratory personnel safety access and experimental process management mechanism. The laboratory must conduct a risk assessment before the new experimental project is carried out to clarify the safety hazards and countermeasures. When constructing, rebuilding or expanding laboratories, the safety risk assessment should be taken as a necessary condition for the establishment of the project.
 8. Establish a full-cycle management system for hazard sources. All colleges and universities should establish full-cycle management of the whole process of procurement, transportation, storage, use and disposal of dangerous sources such as hazardous chemicals, pathogenic microorganisms and radiation sources. Only the units and channels with corresponding qualifications can be chosen when purchasing and transportation. A special storage place is necessary for storage and the quantity must be controlled strictly. It must be issued, recycled and detailed records by the special person during the use of hazard sources. The produced waste after the experiment should be unified and stored with scientific treatment according to the law. Universities should conduct risk assessment of hazard sources, establish archives and databases of major hazard source safety risks, and formulate hazard source classification and disposal plans.
 9. Establish a laboratory safety emergency system. All colleges and universities should establish a step-by-step report system and emergency practice system for emergency plans, and carry out regular emergency knowledge training and emergency response training for full-time laboratory management personnel. Emergency personnel, materials, equipment and funds should be prepared adequately to ensure completeness of emergency functions, personnel in place, completeness of equipment and timely response.
- iv. Pay close attention to safety education and publicity training persistently.
10. Carry out safety education continuously. In accordance with the requirements of “all staff, full range and whole progress, all colleges and universities should innovate publicity and education forms, publicize safety common sense, strengthen the safety awareness of teachers and students, improve the safety skills of teachers and students, and achieve the purpose of ‘educating a student, driving a family, and influencing the entire society’. Safety publicity and education should be regarded as the necessary content of daily safety inspections, and responsibility of safety education should be checked for safety accidents.
 11. Strengthen knowledge capacity training. School leader who is in charge of this, relevant functional departments, secondary departments and personnel who is responsible for laboratory safety management must have the corresponding laboratory safety

management expertise and capabilities. Establish a laboratory personnel safety training mechanism. Teachers and students entering the laboratory must first carry out safety skills and operation specification training, and master the maintenance and use of laboratory safety equipment and protective equipment. Those who fail to pass the examination shall not enter the laboratory for experimental operation. For major toxic and hazardous chemicals, animal and pathogenic microorganisms, radioactive sources and radiation devices, hazardous mechanical processing devices, high-pressure containers and other hazards, the safety education related courses will be gradually incorporated into the personnel training program.

- v. Organizational guarantees which can strengthen the construction capacity of safety work.
 - 12. Funding for personnel in institution should be guaranteed. All colleges and universities should clarify the functional departments of laboratory safety management according to the actual situation and needs of laboratory safety work; strengthen the construction of safety teams, equip with sufficient full-time safety personnel, and continuously improve the quality and ability; ensure the funding of safety work, ensure the safety management system can be implemented effectively.
 - 13. Strengthen infrastructure construction. All colleges and universities should strengthen the safety of material protection, equip with necessary safety protection facilities and equipment, and establish a working environment that can guarantee the safety and health of experimental personnel. Improve the informatization level of laboratory safety management, establish and improve laboratory safety informatization management system, monitoring and early warning system. Promote the deep integration of information system and safety work.
- vi. Responsibility investigation - establish a reward and punishment mechanism for safety work
 - 14. Incorporate safety management into work assessment content. All colleges and universities should incorporate laboratory safety work into the school's internal inspection, daily work assessment and year-end assessment content, and reward the units and individuals with outstanding achievements in laboratory safety work; for units and individuals who fail to perform their duties, they will be criticized and punished in the assessment.
 - 15. Establish accountability mechanisms. All colleges and universities should carry out investigations on the occurrence of laboratory safety accidents, seriously investigate the accidents of relevant units and individuals, and deal with them according to the law. For the unit who cannot implement the laboratory safety responsibility system in place, has major problems in the safety management and safety hazard rectification is not timely and incomplete, the superior department of the school will cooperate with the commission for discipline inspection, the HR department of this unit and the safety

production supervision department to provide suggestions about units' accountability based on the authority and duties of each department.

Ministry of Education

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