

Section 1. Architecture

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FIRE PREVENTION AND FIGHTING FOR HIGHER EDUCATION INSTITUTIONS IN VIETNAM

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Abstract

Fire prevention and fighting work for higher education institutions in Vietnam is of great significance in realizing the educational and training goals in the digital age. The article focuses on analyzing the results achieved in fire prevention and fighting work, pointing out the limitations, shortcomings and causes, on that basis, orienting the issues that need further research.

Keywords: *Higher education institutions; fire prevention and fighting; Vietnam*

1. Problem

According to statistics by the end of 2024, there are 247 higher education institutions in Vietnam, including those at the ministerial, provincial and private levels. Due to the professional characteristics of teaching, learning and scientific research, higher education institutions are a type of facility consisting of many different construction items, and during operation, many flammable substances are used. In addition, higher education institutions are always crowded, often with high density of people, with a system of laboratories and service facilities that pose many risks of fire. When a fire occurs, it can cause serious damage to people, property and affect social order and safety. Therefore, ensuring fire safety at higher education institutions is very necessary. However, according

to statistics from the Fire and Rescue Police Department of the Ministry of Public Security of Vietnam, from 2014 to the end of 2024, there were 116 fires in higher education institutions in Vietnam. One of the effective solutions and measures is to do a good job of fire prevention and fighting, contributing to ensuring security and safety for sustainable development in education and training, and international integration.

2. Research results

2.1. Research results and achievements

The Vietnam Fire and Rescue Police Force has closely followed the direction of the Government and the Ministry of Public Security; at the same time, it has proactively advised Party committees and local authorities, and

sectors to deploy many measures and solutions to help effectively implement state management of fire and rescue for higher education institutions, thereby promptly resolving emerging problems in state management of fire and rescue. In localities, the Fire and Rescue Police Force has proactively advised provincial authorities to issue many directive documents, develop plans to implement fire and rescue for higher education institutions; coordinate with ministries and sectors to effectively implement state management of fire and rescue for higher education institutions in construction investment and during operation, contributing to limiting the number of incidents and damage caused by fires at higher education institutions. In particular, there have been initial strategic directives and plans on fire prevention and fighting for higher education institutions in the area. The work of promulgating, guiding and organizing the implementation of documents on state management of fire prevention and fighting in higher education institutions has had many positive changes, achieving positive results.

The Fire and Rescue Police Force from the central to local levels have focused on strengthening and implementing well the work of disseminating knowledge of fire prevention and fighting laws for higher education institutions, providing guidance on basic knowledge of fire prevention and fighting with many forms of propaganda that are relatively rich, diverse and staged, thus attracting the attention of all levels, sectors and a large number of people to participate in response, specifically: organizing training courses, seminars, conferences, competitions, integrating the program through the political activities at the beginning of the course of students, signing commitments to implement regulations on ensuring fire prevention and fighting safety for higher education institutions. Design review work from 2014 to present has continued to be strengthened and promoted, strictly implementing regulations on administrative procedure reform according to the “one-stop-shop” mechanism in construction investment work, publicly posting regulations on content, components of design documents, response time; organizing the reception and quick processing of review documents, creating convenience for

agencies, businesses and people in reviewing and accepting fire prevention and fighting.

Fire and Rescue Police forces of units and localities have proactively guided the construction and practice of Fire fighting plan for higher education institutions, bringing about many positive results in this work. At the same time, the Fire and Rescue Police force has consulted with local authorities, coordinated with heads of higher education institutions to organize Fire fighting plan practice to ensure combat plans for each hypothetical fire and explosion situation, avoiding the practice of Fire fighting plan practice in a formal manner.

The Fire and Rescue Police force has actively and proactively carried out fire prevention and rescue safety inspections for higher education institutions, and at the same time conducted inspections for higher education institutions under construction. The issuance of decisions on administrative sanctions for violations in the field of fire and rescue for higher education institutions by the Fire and Rescue Police force basically follows the correct order, procedures and authority. At the Ministry of Public Security, the Fire and Rescue Police Department has actively coordinated with ministries and departments to issue legal documents, standards and technical regulations on fire prevention and fighting for higher education institutions. At the same time, the Fire and Rescue Police force in many localities has proactively coordinated with other forces inside and outside the People's Public Security to effectively carry out state management of fire prevention and fighting for higher education institutions. On the other hand, it has also coordinated in advising leaders at all levels to issue documents and coordination regulations to facilitate coordination with forces inside and outside the People's Public Security.

2.2. Research results on limitations and shortcomings

The quality of consulting and proposing work is not really high, especially in proposing the development of documents to implement policies, laws on state management of fire prevention and fighting for higher education institutions, which is not timely, and has not concretized the policies and guidelines of the Party and the State in state management

of fire prevention and fighting for higher education institutions, especially in conjunction with sustainable development of the education and training sector. Consulting on the promulgation of a system of legal documents, standards and regulations is not timely, suitable for the actual conditions of construction and development for higher education institutions, some legal documents issued are not really suitable, leading to difficulties in application; a separate system of standards and regulations on fire prevention and fighting for higher education institutions has not been developed. The work of propagating and disseminating knowledge and laws on fire prevention and fighting for higher education institutions has not been carried out regularly, not extensively, and not linked to educational and training activities at higher education institutions, leading to limited awareness of fire prevention and fighting work among staff, teachers and students at higher education institutions; greatly affecting the work of ensuring fire prevention and fighting safety for people at higher education institutions. The content of the propaganda work is still general for all types of facilities under management, and has not highlighted the characteristics of higher education institutions, including the role and responsibility of the head of the higher education institution and of each staff, teacher and student in fire prevention and fighting work for higher education institutions, especially the issue of escape at higher education institutions and the issue of ensuring safety during the learning and experimental process; The forms of propaganda are not rich and diverse, and there is not much application of information technology in propaganda activities for higher education institutions.

The system of legal documents, standards, and technical regulations as a legal basis for appraisal and acceptance is not yet complete and suitable for the conditions and construction situation of projects, designs, and acceptance of university education facilities; the process of receiving and handling administrative procedures in the appraisal and acceptance of university education facilities is not yet unified and synchronized, leading to many difficulties for investors and enterprises in complying with regulations on

appraisal and acceptance; the capacity of officers in charge of appraisal and acceptance is still limited, leading to many limitations in the guidance, inspection, and comparison of appraisal and design work; the means serving the appraisal work are not really guaranteed, especially the means serving the appraisal work through online public services. In the process of fire prevention and fighting acceptance for works in higher education institutions, there are still many limitations and shortcomings, such as: lack of equipment for testing fire prevention and fighting systems that have been equipped at higher education institutions such as ventilation systems, pressure boosting systems, water pressure from fire hydrants, etc., so reliability and accuracy are not yet guaranteed according to regulations. Fire prevention and fighting inspection for higher education institutions is still a formality, inspection for the sake of completion, and a specific and complete inspection plan has not been developed for fire prevention and fighting inspection of higher education institutions; inspectors still manage too many facilities, leading to a situation of chasing targets without fully inspecting according to the process, leading to the omission of violations; there is still a mindset of deference in deciding to punish violations of fire prevention and fighting safety regulations. The professional qualifications of inspectors are still limited. The number of fire safety inspectors with intermediate qualifications and training from outside the fire safety industry accounts for a high proportion. Therefore, during the inspection process, inspectors cannot detect all violations of fire safety regulations at the facility, especially the implementation of fire safety standards and technical regulations... On the other hand, the means and equipment serving the fire safety inspection work of the Fire Police and Rescue Force have not received due attention.

Compliance with fire safety conditions for higher education institutions is still limited, specifically as follows: Renovation and change of use of items of the construction without a certificate of fire safety design approval; escape solutions do not comply with regulations; no periodic inspection and maintenance of fire safety equipment systems; no organization of fire safety training and operations; no

practice of situations in Fire fighting plan; no smoke protection solutions for corridors, stairwells, etc. In the construction of Fire fighting plan of the institution, the content and requirements are still sketchy and do not reflect the nature and characteristics of fire and explosion hazards at higher education institutions; have not anticipated fire and explosion situations that may occur in accordance with the actual situation of the higher education institution; have not calculated the forces and means needed to participate in fire fighting; the assignment of specific tasks to the grassroots fire safety force is not clear. The implementation of the plan practice is still formal and perfunctory, the forces participating in the plan practice are still superficial, there is still a lack of attention and care during the practice of the plan at the university, even in some places the fire prevention forces at these universities are still confused when asked about the fire prevention systems, traffic, water sources serving fire prevention work during the practice of the plan, as well as the use of fire prevention equipment, some people do not know how to use it. The Fire fighting plan practice is only theoretical, without studying and training in real hypothetical situations according to the approved plans.

The coordination of the issuance of legal documents, the system of standards, regulations and the implementation of directive documents of competent authorities in general state management and state management of fire prevention and fighting for higher education institutions has not been maintained regularly and promptly, mainly the issuance of documents chaired by the Ministry of Public Security has not been coordinated continuously. The coordination between the Fire and Rescue Police force for administrative management of social order, and the Department of Education and Training has been given attention but has not been regular and has not achieved high results as expected.

2.3. Research results on the causes of limitations and shortcomings

(1) Regarding objective causes

Along with the economic development of the country is the rapid increase in construction works in higher education institutions while the state management of fire prevention and fighting for higher education institutions has not changed to keep up with

this development. On the other hand, some higher education institutions built before 2001 (before the Law on Fire Prevention and Fighting) have not had their fire prevention and fighting designs approved, so they do not ensure fire prevention and fighting safety. There is no definitive solution to solve this problem for these higher education institutions; at the same time, the arrangement and installation of fire prevention and fighting equipment for these higher education institutions are still limited, not ensuring effective fire fighting when a fire occurs. The planning area, construction architecture and design of higher education institutions have not met the needs of education and training, so there is a situation of changing functions, adding, using a building with many different functions, such as: classrooms, laboratories, libraries... leading to failure to ensure fire prevention and fighting safety for higher education institutions.

Investment funds for fire prevention and fighting work at higher education institutions have not met the requirements for equipment, installation of on-site fire prevention and fighting equipment and tools, construction and practice of Fire fighting plan; The policy for grassroots fire prevention and fighting forces is not suitable, leading to the situation where grassroots fire prevention and fighting forces do not work effectively, enthusiastically, and actively, and still work in a perfunctory, perfunctory manner, with a low sense of responsibility.

(2) Regarding subjective causes

The system of legal documents on fire prevention and fighting issued is not synchronous, not complete and not strict. The system of regulations and standards on fire prevention and fighting techniques for houses and constructions issued is not timely or is lacking and not suitable for the actual situation and has been for too long and is not suitable for the current actual conditions.

The Fire and Rescue Police force in the state management of fire prevention and fighting for higher education institutions in many localities has not been proactive in basic investigation, survey, grasping the situation, advising and proposing to levels, sectors and local authorities to issue guiding documents, leading and directing the

resolution of difficulties and problems in the process of implementing state management of fire prevention and fighting for higher education institutions, the concretization of legal regulations on fire prevention and fighting for higher education institutions is still slow.

Propaganda, dissemination and education of fire prevention and fighting laws for higher education institutions: The staff performing the duties of the Fire and Rescue Police Force is still lacking in number, especially the number of staff specializing in fire prevention and fighting propaganda, the assignment of local staff and facility management exceeds the regulations, so it is impossible to perform well the task of organizing propaganda, dissemination and education of fire prevention and fighting laws and knowledge to each individual related to the higher education institution.

The work of reviewing and approving designs and accepting fire prevention and fighting laws for higher education institutions: The order and procedures for reviewing and approving designs and accepting fire prevention and fighting laws are not really smooth and quick, creating conditions for businesses in the implementation process; the qualifications of staff reviewing and approving designs and accepting fire prevention and fighting laws for higher education institutions are still limited; Coordination in the process of design approval and acceptance of fire prevention and fighting for higher education institutions is not really effective in many cases...

Inspection and handling of violations of fire prevention and fighting regulations for higher education institutions: Fire safety inspectors for higher education institutions have not been regularly trained, leading to limited inspection qualifications and capacity...

Work on developing fire fighting plans and organizing fire fighting practice for higher education institutions: Special plans for higher education institutions have not been developed; The construction of the plan's content is often sketchy and does not fully reflect the nature and characteristics of fire and explosion hazards in higher education institutions. The study and assignment of practice tasks for the plan are not specific, etc. The awareness of a significant num-

ber of investors and management units of higher education institutions regarding fire prevention and fighting in higher education institutions is still incorrect. They do not see the importance of fire prevention and fighting in higher education institutions, leading to a situation where some higher education institutions have been invested in and put into operation for many years, while the fire prevention and fighting equipment system has not met the requirements of current regulations and standards on fire prevention and fighting. Some investors deliberately do not comply with the requirements for review and acceptance (putting some projects that have not been reviewed and accepted into operation; converting and changing functions but not conducting review and acceptance). The awareness of cadres, lecturers, employees and students in fire prevention and fighting work for higher education institutions is still limited, with the idea that fire prevention and fighting work belongs to the authorities, to the Fire and Rescue Police Force, leading to a situation where they do not grasp the provisions of the law on fire prevention and fighting, and do not fully perform their responsibilities in fire prevention and fighting work for higher education institutions. People's Committees at all levels, together with units of the People's Committee, have not really paid attention to the state management of fire prevention and fighting for higher education institutions, leading to the infrequent issuance of documents and instructions on state management of fire prevention and fighting for higher education institutions, and the situation of assigning the state management of fire prevention and fighting for higher education institutions to the Fire and Rescue Police Force.

2.4. Some directions that need to be further studied to contribute to ensuring fire prevention and fighting for higher education institutions

(1) Continue to study ways to organize propaganda, dissemination, education of knowledge and laws on fire prevention, fighting, rescue and salvage; guide the development of a mass movement to participate in fire prevention, fighting, rescue and salvage;

(2) Study the work of design appraisal and inspection of fire prevention and fighting acceptance for works in higher education institutions;

(3) Strengthen the inspection and strict and thorough handling of violations of regulations on fire prevention and fighting for higher education institutions;

(4) Continue to study the process of organizing the establishment, consolidation, maintenance of the operation of the grassroots fire prevention and fighting force and improve the quality of professional training for the grassroots fire prevention and fighting force for higher education institutions;

(5) Research on the development and practice of fire prevention and fighting plans and fire fighting organization as well as research on the coordination relation-

ship in state management of fire prevention and fighting for higher education institutions...

3. Conclusion

The article presented the research results, including pointing out the achieved results, limitations, shortcomings and causes of limitations and shortcomings in fire prevention and fighting work for higher education institutions in Vietnam; identified issues that need further research to improve the effectiveness of fire prevention and fighting work for higher education institutions in Vietnam, contributing to ensuring security, safety, and ensuring sustainable development of the education and training sector in Vietnam today.

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