

THEORETICAL ANALYSIS OF FIRE SAFETY

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Abstract. *This article discusses the legal basis of fire safety. In addition, the provision of fire safety, the economic aspects of the performed tasks, the wages of employees participating in fire prevention or elimination, the depreciation allocation of the main funds and the cost of materials are presented.*

Keywords: *fire safety, fire extinguishing, fire behavior, technical measures, economic efficiency, social life.*

Introduction. It is known that the issue of ensuring fire safety in the Republic of Uzbekistan is considered an urgent task, and a number of reforms were implemented in this regard during the years of independence. Especially in our country, the organization of the legal base of this field based on the needs of the times, development of legal regulations and provision of its legal basis in practice is one of the most important priority tasks. The experience of the world shows that only a country that legally ensures fire safety can make certain progress in this field.

Literature review. In order to ensure fire safety for the first time in Uzbekistan, on September 30, 2009, the Law of the Republic of Uzbekistan "On Fire Safety" No. ORQ-226 was adopted. The goal of ensuring fire safety is understood as a set of legal, organizational, economic, social and scientific-technical measures, as well as forces and tools aimed at preventing fires and extinguishing them [1].

Today, no matter what sphere of social life, whether it is industry, construction, domestic life, production enterprises, etc., it is impossible to achieve the intended goal without ensuring fire safety in them. When a fire occurs in specially created modern production facilities, various objects operating on the basis of modern technology, the issue of its origin and consequences will be decided on the basis of legislation.

In this regard, Article 3 of the Law of the Republic of Uzbekistan "On Fire Safety" states that "fire is damage to people's life and (or) health, property of legal entities and individuals, as well as to the natural environment is defined as an uncontrollable combustion that leads to [1].

The subjects of the fire safety system in Uzbekistan are state and economic management bodies, local government bodies, self-government bodies of citizens, as well as enterprises, institutions, organizations and citizens, they are Fire it is necessary for them to have a perfect knowledge of legal knowledge to ensure their safety [2].

Actions to extinguish the fire are divided into two types:

1. Continuous actions during fire - continuous actions performed at the place of fire, including reaching the place of fire, determining the fire situation, spreading of forces and means, extinguishing the fire and back to section

2. Other fire actions - actions performed at the place of fire that are not included in permanent actions, including rescuing people, driving out smoke, opening building structures, and protecting them from fire and collapse. In all fires, other fire actions are not performed [3]. That is why, according to the order of actions of fire protection service units, actions during a fire are

divided into two types: general and special types of actions during a fire [3,4,5]. Actions in a general type of fire - are strictly carried out in extinguishing a fire, actions in a special type of fire are carried out simultaneously with some general actions [6] and the spread of power tools, fire extinguishing performed at the same time.

Despite the fact that the situations of fires in different enterprises are different, the procedure for using the forces and means involved in fire extinguishing can be divided into certain tactical principles.

The following are the main principles of fire fighting:

- Using concentrated forces and means in a decisive direction;
- Continuous and active fire fighting;
- Cooperation of departments.

All fire actions are divided into three types according to their purpose: preparatory actions, main actions and supporting actions.

1. *Preparatory fire actions* are "fire actions" that create conditions for performing basic actions.
2. *The main actions* in the fire are the actions aimed at ensuring the safety of people and animals and extinguishing the fire.
3. *Actions that ensure preparation and execution* of main actions are called actions to provide fire.

It is known that the choice of the methods of action in the fire during fire extinguishing mainly depends on the projects, structural aspects of the buildings and structures where the fire occurred, water supply, the number of available forces and tools, the possibility of their activation, also depends on weather conditions [7,8].

When extinguishing a fire, the decisive direction of actions in the fire is dangerous for people, there is a danger of explosion, the sides of the fastest spread of fire and at the same time fire protection service. It is said about the possible directions of their lines to achieve success [3,4]. The main goal of putting the forces and means into one place for firefighting in the decisive direction is to attract the forces and means required for the successful execution of rescue operations and to ensure the delivery of the required amount of fire fighting means. The decisive direction in fire extinguishing is determined depending on the dangerous situations that may occur during the fire.

Results. On December 22, 2017, for the first time in the history of Uzbekistan, the Address of the President was presented to the Parliament on the conclusion of the main works carried out in 2017 and the most priority directions of socio-economic development of the Republic of Uzbekistan in 2018. In this appeal, priority directions for further development of all existing sectors in the republic were reported.

On February 7, 2017, Decree No. PF-4947 of the President of the Republic of Uzbekistan on five priority areas of development of the Republic of Uzbekistan in 2017-2021 was adopted [2]. "Priority directions of economic development and liberalization" are also defined in the priorities defined in this Decree. Implementation of the following tasks is defined in this direction:

- conducting an active investment policy aimed at modernization of production, technical and technological upgrading, implementation of production, transport-communication and social infrastructure projects;

- further modernization and diversification of the industry by moving high-tech processing industries to a qualitatively new stage aimed at rapid development of production of finished products with high added value based on deep processing of local raw materials;
- formation of an effective competitive environment for economic sectors and gradual reduction of monopoly in the market of products and services;
- assimilation of new types of products and technologies in principle, ensuring the competitiveness of national goods in domestic and foreign markets on this basis;
- to continue the policy of encouraging the localization of production and, first of all, to replace the import of consumer goods and components, to expand intersectoral industrial cooperation;
- reduction of energy and resource consumption in the economy, widespread introduction of energy-saving technologies in production, expansion of the use of renewable energy sources, increase of labor productivity in economic sectors;
- increasing the efficiency of operating free economic zones, technological parks and small industrial zones, establishing new ones;
- liberalization and simplification of export activities, diversification of export composition and geography, expansion and mobilization of export potential of economic sectors and regions;
- further development of road transport infrastructure, introduction of information and communication technologies into the economy, social sphere, management system.

Based on the implementation of the above tasks in our republic, competitive activity of industrial enterprises, rapid development of innovation and investment activities, and increase of efficiency and export potential will be achieved [9].

Ensuring fire safety in industrial enterprises prevents the loss of large funds. For example, it is known to everyone that a fire in one building can cost an enterprise billion soums [10,11].

In the economic part of this article, we have calculated the wages of employees participating in fire prevention or elimination, the depreciation allowance of the main funds and the cost of materials, and these calculations are performed in the form of the following tables:

1. Calculation of the annual salary fund of engineers and technicians (Table 1).
2. Calculation of annual depreciation allowance (table 2).
3. Calculation of annual material consumption (table 3).
4. Estimate of all costs (table 4).

In the implementation of this economic part, educational literature, methodological instructions and Internet sites are used in the field and economy.

Table 1

Calculation of the annual salary fund of engineers and technicians and workers

No	Profession *	Discharge according to the Single Tariff Rate *	Discharge coefficient **	Network coefficient	Tariff rate for the minimum wage, thousand soums	Tariff rate according to the Single Tariff Rate, thousand soums	Additional salary (20%), thousand soums	Employee's monthly salary, thousand soums	Annual salary fund, thousand soums
1	Head of the fire safety department	XV	7,292	2,7	172,240	3 391,1	678,2	4 069,4	48 832,3
2	Crew commander	XI	5,733	2,7	172,240	2 666,1	533,2	3 199,3	38 392,1
3	Head of the firefighting and disaster relief team	X	5,362	2,7	172,240	2 493,6	498,7	2 992,3	35 907,7
4	The duty officer	VIII	4,640	2,7	172,240	2 157,8	431,6	2 589,4	31 072,6
5	Firefighter and disaster relief officer	VI	3,941	2,7	172,240	1 832,8	366,6	2 199,3	26 391,7
6	Dispatcher	V	3,612	2,7	172,240	1 679,8	336,0	2 015,7	24 188,4
	Total								204 784,8

* Decision of the Cabinet of Ministers of the Republic of Uzbekistan. DCM No. 164 "On approval of the updated classification of the main positions of employees and occupations of workers". Tashkent city, June 19, 2015. Appendix 1. (Collection of legal documents of the Republic of Uzbekistan, 2015, No. 25, Article 326)

** Resolution of the Cabinet of Ministers of the Republic of Uzbekistan. Resolution No. 206 of July 21, 2009.

Table 2

Calculation of the annual depreciation allowance

No	Name of machinery and equipment	Number	Wholesale price per unit, thousand soums	The amount of expenses spent in the production process until full use (15%), thousand soums	Balance price of one, thousand soums	Total cost of all, thousand soums	Depreciation rate, %	Amount of annual depreciation, thousand soums
1	Fire trucks	15	45 000,0	6 750,0	51 750,0	776 250,0	20	155 250,0
2	Protective equipment	8	2 000,0	300,0	2 300,0	18 400,0	25	4 600,0
	Total		47 000,0	7 050,0	54 050,0	794 650,0		159 850,0

Table 3

Calculation of annual material consumption

No	Material name	Unit of measure	Annual material consumption	The price of a material unit, thousand soums	Annual material consumption, thousand soums
1	Special clothes	piece	15	400	6 000,00
2	Gas mask	piece	15	350	5 250,00
3	Rescue mask	piece	15	120	1 800,00
4	Spare material and parts	We calculate 3.5% of the annual depreciation amount			5 594,75
	Total				18 644,75
5	Unexpected costs	We calculate 5% of the total costs			1 864,48
	Total				20 509,23

Table 4

All cost estimates

№	Name of expenses	Amount of expenses, thousand soums	Share of each cost in total costs, in %
1.	Calculation of the annual wage fund of engineers and technicians and workers	204 784,82	43,88
2.	Annual social insurance contribution (25%)*	51 196,20	10,97
3.	Annual depreciation allowance	159 850,00	34,25
4.	Annual cost of materials	20 509,23	4,39
5.	Annual fuel consumption	14 356,46	3,08
6.	Maintenance and current costs (we calculate 10% of the annual depreciation allowance)	15 985,00	3,43
Total:		466 681,70	100,00

*** Decree of the President of the Republic of Uzbekistan. Presidential Decree No. PF-3454 "On Macroeconomic Indicators and State Budget Parameters of the Republic of Uzbekistan for 2018". Tashkent, December 29, 2017. Appendix 3. (*Collection of legal documents of the Republic of Uzbekistan, 2017, No. 6, Article 70*)

Conclusion

It should be noted that ensuring fire safety is a component of the activities of officials and other employees of organizations, as well as individual entrepreneurs. Requirements for ensuring fire safety should be reflected in career instructions and other instructions, and, if necessary, in relevant contracts. Ensuring fire safety of organizations, unless otherwise stipulated in the relevant contract, is entrusted to the heads of these organizations and the persons authorized by them. Assigning the duties of fire safety to the authorized persons does not relieve the responsibility of the managers. Ensuring fire safety in residences and other buildings of private and state housing funds, if this is specified in the lease agreement, is the responsibility of the owners or lessees. Specially authorized state body in the field of urban development activities, customers, builders, project and construction organizations.

In accordance with Article 12 of the Law of the Republic of Uzbekistan "On Fire Safety", it is established that ensuring fire safety of enterprises and organizations is the responsibility of the heads of these organizations.

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