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ACCOUNTING OF FIRES AND THEIR CONSEQUENCES IN THE RUSSIAN FEDERATION IN 2019

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The article considers an actual problem of accounting of fires and their consequences. Based on the analysis of international experience and normative documents, it shows that the existing norms do not meet the modern requirements of legislative acts and require significant updating. The article provides the main ways and directions of normative documents updating for their efficiency and compliance with the legislation.

Keywords: fire safety, fire, regulatory requirements adjustment, supervisory activities, fire accounting.

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УЧЕТ ПОЖАРОВ И ИХ ПОСЛЕДСТВИЙ В РОССИЙСКОЙ ФЕДЕРАЦИИ В 2019 ГОДУ

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В статье рассмотрена актуальная проблема учета пожаров и их последствий. На основе анализа международного опыта и содержания нормативных документов показано, что существующие нормы не отвечают современным требованиям законодательных актов и требуют существенного усовершенствования. Приведены основные пути и направления совершенствования нормативных документов с целью их эффективности и соответствия законодательству.

Ключевые слова: пожарная безопасность, загорание, корректировка нормативных требований, надзорная деятельность, учет пожаров.

Introduction. The Russian Federation has a unified state system of statistical recording of fires and their consequences. The State Fire-Fighting Service maintains official statistical records and state statistical reports on fires and their consequences. The EMERCOM of Russia [1] determines the recording of fires and their consequences.

Since January 1, 2019, the amended recording of fires and their consequences has been working on the territory of the Russian Federation. The previous procedure was valid for ten years [2].

Significant changes are the abandonment of the term "catching fire" and the change in the order of accounting for injured and dead people in the fire.

Let us consider in depth the change in the order of recording of fires.

The definition of the term "catching fire" is given in GOST 12.1.033–81 "Occupational Safety Standards (SSBT). Fire Safety. Terms and Definitions". Catching fire — an uncontrolled burning outside a special furnace, without damage [3, 4].

The problem of updating the regulatory requirements for safety has been the subject of research for many years [5]. Largely practice of supervision was based on normative materials of the USSR; it was not a scientifically sound analysis. As a result, the existing methods do not contain special calculations of risk assessment and factors determining the probability of fires and heat flux intensity.

The analysis of the existing calculation methods for determining the time of safe evacuation of people was carried out in [6]. The author corrects the method of calculating the evacuation time taking into account the minimum distance to the fire load and convincingly shows that this allows you to increase the level of safety of people in case of fire and ensure their timely evacuation.

An important step is fire analysis and the reconstruction of its initial stage. In [7] there was developed the algorithm for reconstruction of the fire initial stage to determine the time of the fire, the place of

the fire and the type of the fire load. The algorithm is based on numerical simulation of fire processes and application of the software complex "Fo-gard-NV (field model)". The results of the work allowed the authors to properly assess violations of fire safety requirements aimed at preventing fire occurrence.

The analysis of fires occurrence factors taking into account their probabilistic nature is carried out in [8]. Stochastic model of reaching the critical temperature under the influence of heat is based on the deterministic model taking into account the probabilistic nature of the heat flow. The approach proposed by the authors, based on the theory of random processes, allows analyzing basic regularities according to the mathematical expectations of the parameters characterizing the flame bush, as well as to build the confidence boundaries of the main trend.

Problem statement.

The problem of occurrence and recording of fires, analysis and prediction of their consequences is a global problem [9]. International organizations at various levels set the task of adequate assessment of the current parameters of fire danger in the world as a whole. At the same time, the normative documents regulating the fires recording are far from perfect.

Up to 01.01.2019 the cases of burning were recorded as catching fires (regardless of the causes of its occurrence), which did not spread to other objects of protection: abandoned buildings and vehicles; dry grass; poplar fluff; peat on lawns and home gardens; crop residue; stubble; garbage in landfills, vacant lots, on the territory of households, on roadsides, on container sites for its collection, in containers (boxes) for its collection, in elevator shafts (elevators) of residential buildings, in garbage bins of residential buildings, on stairwells of residential buildings, in basements and attics of residential buildings [2]. In other words, the conditions for the definition of "catching fire" were fulfilled [3].

The term "fire" is defined by Federal Law of 21.12.1994 No. 69-FZ (ed. of 30.10.2018) "On Fire Safety" (hereinafter - Federal Law No. 69-FZ). Fire — the uncontrollable burning causing material damage, harm to life and health of citizens, interests of society and the state [1].

Since January 2019, the difference between "catching fire" and "fire" has ceased to exist, and all cases are called "fire".

In the spring of each year in all of Russia a popular "fun" of the population begins— the burning of dry grassy vegetation. The quantity, size and effects of this phenomenon are directly related to weather conditions: the height of the snow cover in winter, the number and frequency of precipitation in the form of rain after snow cover melting, the number of dry and windy days, night air temperatures, etc.

Unfortunately, the spring of 2019 was no exception. The number of the registered fires of dry grassy vegetation in March - April this year in the territory of many subjects of the Russian Federation amounted to several thousand cases. In accordance with the requirements of the Order of EMERCOM of Russia of 21.11.2008 No. 714 (ed. of 08.10.2018) "On approval of the recording of fires and their consequences" (hereinafter –Order No. 714) all fires are included in the statistical record as fires. There is an increase in the number of fires in the tens and hundreds of times.

The introduction of changes in the recording procedure for fires from January 1, 2019 is a controversial and unjustified decision.

First, the provisions of Federal Law No. 69-FZ regarding the presence of material damage, harm to the life and health of citizens, the interests of society and the state in case of fire are not fulfilled. It does not take into account material damage and harm to the interests of society and state, for example, burning of dried grass or reed grass on the area of a few hectares outside the settlements, poplar fluff along the sidewalk in the settlements.

Second, to assess the situation with fires in a single area at the present time it is necessary to enter in the analysis more rows (data) and divide fires on objects of economy and fires associated with the burning of dry grass, garbage, etc.

Third, the application of the current fire recording procedure increases the burden on the employees of the Federal State Fire Supervision due to the need to fill in the full fire record card. The time you spend filling in the dry grass fire record card (burning of garbage, etc.), has increased at least in three times [1, 2].

Fourthly, many management decisions made on the basis of the "old" and "new" fire statistics will be radically different from each other.

These are only a few of the negative phenomena associated with the changes in the order of fires and their consequences recording. The adjustment of these documents is a further important task to improve the regulatory framework for fire recording.

Conclusion. Based on the analysis of modern normative documents, international experience and literature, it is shown that the new normative documents of fire registration and their consequences do not meet modern requirements of the legislative framework and need to be adjusted. The paper shows the main directions of improving the regulatory framework, such as accounting for material damage and risks to life and health of citizens, taking into account the increase in the load on Supervisory bodies staff, taking into account the differences in the "old" and "new" statistics of fires and their impact on management decisions.

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