

FIRE AND EXPLOSION RISK PREVENTION

Shermatova Yoqutxon Sabirovna
Kokand State Pedagogical institute

ANNOTATION

This article provides information on the Prevention of the risk of fire and explosion, as well as the presence of a large number of fire and explosion-prone objects in our Republic, which are sources of danger to the population and regions.

Keywords: fire, explosion, diffuse combustion, kinetic combustion, small volume, medium volume, large volume.

In our republic, there are a huge number of fire and explosion-prone objects, which are a source of danger to the population and territories, and under certain conditions can turn into FV.

Based on its decision on the "classification of emergency situations of a man-made, natural and environmental nature", it is recommended to deal with accidents at fire-explosion-prone objects: in objects that explode in the technological process, burn easily and use or store other Fire-Hazardous Substances and materials, to mechanical and thermal injuries, poisoning and death of people, the destruction of, accidents, fires and explosions that lead to disruption of the production cycle and human life activities in emergency areas; accidents, fires and rock bursts in coal mines and in the mining-ore industry that have led to human damage, poisoning and death and require search and rescue operations, the application of special equipment and means of protection of respiratory organs.

The process in which a combustible substance is oxidized by air oxygen and ends up emitting heat and light under the influence of a source is called combustion.

The combustion process will be 2 different: diffuse combustion. Kinetic combustion.

What causes diffuse combustion include: wood, coal, candles.

Products that cause kinetic combustion include: gas, oil, alcohol.

Fire is an uncontrollable phenomenon, a disaster that destroys priceless material and cultural assets every minute, especially since it is an emergency that brings a calamity to the lives of citizens. For the origin of the fire, it is enough for 3 factors to be in one place at a time. I.e.:

- combustible substance (oil, acetone, paper, etc.);
- air temperature (heat);
- spark-flame (match, spark, short circuit of electrical wire).

Factors of the origin of fire.

Fire=combustible substance+oxidizer+energy pulse

The main causes and types of fires and explosions:

- failure to comply with fire safety regulations;
- citizen loyalty, neglect;
- electrical wiring failure;
- means heated with gas, coal, wood;
- children's play with grass;
- intentional arson;

- other reasons.

The main thing is that our citizens themselves remain the cause of the fire.

Causes of a fire to quickly become wide:

Factors of fire occurrence:

Where there was a fire, side-to-side overheating;

Smoke and toxic substances emanating from burning bodies in a fire;

Changes in air temperature in places of fire and in the surroundings.

While these are the primary broadening factors of fire, the secondary consists of:

Collapse of the building wall in the event of a fire.

The occurrence of an explosion.

The spread of various chemicals and toxic substances to the environment in places of fire.

When the fire is extinguished with water, explosions occur as a result of a mixture of various chemicals.

According to data, 60-80% of those killed in the fire would be killed by respiratory poisoning or lack of fresh air.

Fire is divided into 3 types in terms of width:

- small size;
- medium size;
- large size;

The main reasons for the widespread spread of the fire and its boundaries:

- errors and shortcomings allowed in the development of the project of structures;
- non-compliance with building standards and regulations and state standards in the construction of structures;
- failure of fire prevention measures indicated by fire control, gas use control personnel;
- the fact that citizens do not know their duties in the event of a fire and panic;
- neglect of children's fire-causing games;
- rescue tools used in the fight against fire in scarcity;

Fireplaces are divided into two types.

Government organizations;

Places of residence of citizens.

Fires cause great material damage to the national economy. The fire burns a huge amount of folk wealth in a few minutes or hours, turning it into ash. Smoke, carbon dioxide and other harmful odors and gases released during the fire rise into the atmosphere in large quantities, disrupting the composition of the Air necessary for breathing. In addition, the worst of the damage from the fire is that many people are injured and may even die. All this forces the study of fire fighting measures, methods of safe execution of work that arise at this time, together with labor protection.

Fire prevention measures:

- constant inspections in organizations and institutions, immediate elimination of defects in which a fire escape causes explosions;
- unconditional implementation of special instructions on building standards and regulations, state standards;

-to carry out the instructions issued by the employees of Fire Protection agencies, the main thing is to carry out the work that will be done to eliminate fire-causing situations for the first time by Special Forces;

- to eliminate and avoid the shortcomings indicated by the state special inspection agencies in a regular way;

-know the measures to eliminate the fire, in addition, keep in mind that there will be enough 1 cup of water in 1st minute, a bucket of water in 2nd minute to extinguish the fire, and in 3 minutes a cistern water may not reach;

-it consists of regularly teaching the population to carry out fire prevention measures and also to demand from others;

Currently, industrial enterprises have carried out some kind of work on the reduction of the risk of combustion, the risk of fire leakage is reduced, and electrical equipment is being used that works completely safely. Industrial enterprises are squeezing flammable building materials from the structure of buildings and structures. Mechanized and automated systems of firefighting are becoming more widely used.

Fire protection activities of large objects:

1. Automatic alarm installation.

2. Installation of hydrants.

3. Increasing the number of fire extinguishers.

Technological processes and technical equipment can negatively affect a certain amount of environment during their activities, as well as the working staff itself. In order to prevent such cases, it is necessary to introduce modern equipment that does not emit waste in production and does not harm the environment, as well as technological innovations.

As we know, because of the inextricable relationship between fires and explosions, explosions can also occur as a result of fires that occur in all organizations, or, conversely, fires can occur as a result of an explosion.

The damaging factors of the explosion are: the moment of impact (shock waves), the scattering of broken fragments. These are primary cases, the secondary of which are explosions, fires, disasters, chemical and radiation damage, breakdowns of dams in a wide tone and the occurrence of floods, collapse of buildings.

Primary injury factors include:

Shock waves are caused by a high-pressure explosion that causes strong air waves to disintegrate and dissipate objects that are opposed by an air wave-style shock wave that propagates out of strong sound.

Broken pieces form broken fragments of broken objects in the fields (which leads to the breakdown, breakdown of the equipment of nearby enterprises, buildings).

An explosion is the discharge of liquids, explosives due to the fact that under the influence of force or heat it does not fit into the volume in which it is located. Detonating factors: chemical (explosives); nuclear (nuclear weapons); mechanical-style (Cracking of high-pressure liquid-casting-dispersing vessels); electromagnetic (spark charge, laser spark, etc.); Sonic and other powers.

On the territory of our republic, more than 15-17 explosions occur annually. These eruptions are mainly caused by improper use of gas in inhabited households, which are called apartment

explosions. The main reasons for their origin are non-compliance with the procedures for working with gas. In this regard, during 1998, there were more than 50 explosions in apartments, resulting in civilian deaths, dozens of people receiving various tan injuries, as well as an explosion in 1998 due to a malfunction in Shatlik-Khiva, Mubarak-Zarbulak high-pressure gas pipelines, killing many of our citizens and receiving tan injuries. As can be seen from what has been said, fires and explosions occur from a rooster and lead to the death of many people or severe bodily injuries.

Every citizen of our republic should keep and preserve the property of the public and the state as a guard of sight and care about its preservation, enriching it. Therefore, fire prevention and firefighting activities in industrial enterprises are carried out with the participation of every worker in the workshops, leaning on the general public. So we must always be alert, prevent any frustrations. It is the duty of every citizen of Uzbekistan to follow this.

The procedure for organizing fire prevention work in residential areas. The main of the complex methods and forms for conducting fire prevention work in residential areas in the activities of State Fire Control and public organizations are as follows:

1. To conduct a plan-based investigation of fire resistance situations of high-rise and high-risk low-rise living houses (bedrooms, two-storey houses with a V level of fire resistance, houses with farm rooms in the basement, etc).
2. Checking the fire resistance status of the housing stock before the onset of periods (winter heating season, summer months), when situations associated with fires in residential areas are exacerbated, with a wide involvement of all personal composition of fire safety parts, volunteer firefighting druzhins, employees of Housing use organizations.
3. To teach fire safety rules to tenants, owners of private apartments, country houses and their families.
4. Conducting a screening competition of the state of fire resistance of residential houses in cities, neighborhoods.
5. Leaflets, notes, booklets, which reflect the rules of fire safety in residential areas, distribute brochures to the population by printing them in many copies.
6. Organization of the activities of public fire safety guards under neighborhood committees and Housing use organizations, the selection of outposts and the implementation of their training.
7. To promote compliance with fire safety regulations among the population by establishing fire-technical points (fire safety rooms and corners) in neighborhoods, cities, districts and households.
8. Discussion of the results of fire and technical inspections carried out in residential areas with landlords and their family members, consideration of these issues in Citizens' self-government organizations, as well as the consequences of fires in residential areas and their consequences to the population.
9. Gross teaching of fire safety rules to citizens in cities, districts, settlements with extensive use of mass media (cinema, video, televedinie, Radio, fasts, propaganda machines).
10. In the fire departments, plenums of Volunteer Fire societies cover the balance of work on ensuring the fire resistance of healthy living spaces in cities and districts with the participation of activists of Volunteer Fire societies of state fire control bodies.

11. The widespread use of methods of material and spiritual stimulation of the heads of volunteer firefighting druzhinas and fire safety inspectors, who actively participated in the stabilization of the fire situation in the residential areas of Aqoli and achieved good performance.

12. Holding practical conferences on the problems of ensuring the fire safety of high-rise residential houses, bedrooms, boarding houses, as well as meetings of self-government organizations.

Organization of fire prevention work at production enterprises. Ensuring the fire safety of industrial enterprises should be carried out the following measures:

- carry out daily maintenance work on buildings and structures when equipping them with automatic fire extinguishers;

- to clean the top of details, aggregates and finished products and establish the use of fire-safe technical detergents on their degreasing plots instead of the flammable liquids that you are using for this purpose;

- determination of combustion and explosion parameters (indicators) of materials and tools used in the technological process and selection of electrical devices used in rooms according to the flammability and porosity classes of the production rooms;

- application of fire barriers, fast-moving blockers, valve-shivers and zoslonks in order to prevent the spread of fire in the production rooms and in the xavani haidash (ventilation) systems;

- to increase the fire resistance of the building structure, to isolate fire-hazardous debris and aggregates into individual rooms of the building or to release them into open spaces outside;

- ban on the use of various flammable materials for decoration on evacuation routes;

- establishing the use of anti-smoke systems in Fire-Hazardous production buildings and ensuring the continuous operation of previously installed smoke driving systems;

- workshops include equipping laboratories and warehouses with safety signs, regulating work related to fire, etc.

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