
# ENSURING LIFE SAFETY IN EMERGENCY SITUATIONS AT ENTERPRISES TRANSPORT

**Yuldasheva N.P.**
**Abdazimov Sh.H.**
(Tashkent State Transport University)
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Ensuring life safety in emergency situations is a set of organizational, engineering and technical measures and means aimed at preserving human life and health in all areas of human activity.

The following can be considered as the main directions in solving problems of ensuring life safety:

- forecasting and assessing possible consequences of emergencies;

- planning of measures to prevent or reduce the likelihood of emergencies, as well as to reduce the scale and consequences

their;

- training the population in emergency response; - elimination of emergency consequences.

Let us briefly consider the content of each of these areas.

Forecasting emergency situations is a method of tentatively identifying and assessing the situation that develops as a result of natural disasters, accidents and catastrophes.

At present, seismic zones, areas and places of possible collapses and mudflows have been well studied and defined, the boundaries of zones of possible flooding in the event of dam destruction during floods have been established, and industrial facilities have been identified, accidents at which can lead to major destruction, injuries to people, and contamination of territories. This is a long-term forecast.

The task of forecasting in the field of life safety also includes an approximate determination of the time of occurrence of an emergency (short-term forecast), according to which operational decisions are made to ensure the safety of the population in all areas of its activity. At present, the efforts of many scientists and specialists are aimed at finding reliable methods for forecasting the process of formation and onset of an emergency. Real possibilities for forecasting the onset of some natural disasters have emerged. In this case, calculated statistical data on the cyclicity of solar activity, data obtained from artificial Earth satellites, as well as data from meteorological, seismic, volcanic, anti-mudflow, anti-avalanche and other stations are used.

Planning is the leading function, the central link in ensuring life safety in emergencies. It allows specifying the achievement of goals and objectives in terms of time, resources and performers.

It is based on scientific forecasts of the situation that may arise as a result of an emergency, on a comprehensive analysis and assessment of human and material resources, as well as on the achieved level of development of the theory and practice of protecting the population in emergency situations.

The final result of planning is the preparation of a certain type of document-plan. It should contain the following elements: specific indicators (types of work, events); deadlines for the execution of these works, resources required to implement the plan (types, quantity, sources); instructions to persons responsible for the implementation of each point of the plan; methods of monitoring the progress of the plan.

The feasibility of the plan is tested during training and exercises conducted in relation to the actual conditions of organizing work to ensure life safety in emergency situations.

The sustainability of the operation of national economic facilities (NEF) is understood as the ability to withstand the destructive impact of damaging emergency factors, produce products in the planned volume and range, ensure the safety of workers and employees, as well as the ability to restore their production in the event of damage.

The stable operation of the facility in an emergency can be achieved by carrying out a set of organizational, organizational-technical and other measures. These measures, first of all, should be aimed at protecting workers and employees from the damaging factors of an emergency; they are closely related to the measures for preparing and conducting rescue and other urgent work, since without human resources and successful elimination of the consequences of an emergency, it is practically impossible to carry out measures to ensure the stable operation of the NKH in this case. In addition, from the point of view of ensuring the safety of life of workers and employees, as well as the population living near the facility, an important place is occupied by measures to eliminate the occurrence of secondary damaging factors.

Among the whole range of measures to increase the stability of the facility's operation in emergency situations, we will consider only two that are directly related to the problem of ensuring life safety in emergency situations, namely: the protection of workers and employees, as well as the elimination or limitation of damage from secondary factors.

Protection of workers and employees includes the advance construction of shelters at enterprises in whose technological processes explosive, toxic and radioactive substances are used; development of work regimes for workers and employees in conditions of contamination with harmful substances; training of the facility's personnel to perform specific work to eliminate sources of contamination; organization and maintenance in constant readiness of a local warning system for workers and employees of the facility and the population living nearby about the danger emanating from the facility.

Elimination or limitation of damage from secondary factors in accidents. Secondary factors include fires, explosions, collapses of structures, leaks of toxic, radioactive and other harmful substances.

Under normal production conditions, a number of measures are taken at the facility to ensure accident-free and safe operation. However, in an emergency, these measures may be insufficient, so additional measures are needed to limit the effects of secondary factors in the event of an accident. Such measures include: reducing stocks of hazardous chemicals, explosion and fire hazards to a minimum and storing them in protected storage facilities; using devices that prevent spills of toxic, flammable and aggressive liquids; placing warehouses for wood, pesticides, and flammable liquids taking into account the direction of prevailing winds, installing fire breaks and fire passages, constructing fire ponds and tanks at the hazardous chemicals area and creating stocks of fire extinguishing agents; burying technological communications, power lines, etc. into the ground. The structure of territorial

subsystems corresponds to the structure of the executive authority, since, according to the law, the head of the executive authority of the relevant territory organizes the elimination of the consequences of an emergency and its prevention.

Functional subsystems consist of federal bodies that directly solve problems related to emergency situations.

The Ministry of Emergency Situations of the Republic of Uzbekistan solves the following tasks:

- informational - control;
- protection and life support of the population in emergency situations.

At the first stage, tasks are addressed to ensure emergency protection of the population, prevent the development or reduce the impact of emergency consequences, and prepare for emergency rescue and other urgent work.

The main activities for emergency protection of the population are: warning of danger; use of protective equipment; compliance with behavioral regimes; evacuation from hazardous areas; use of medical prophylaxis and provision of medical and other types of assistance to victims. To prevent the development or reduce the consequences of an emergency, accidents are localized, the technological process of production is suspended or changed, fires are prevented and extinguished. The main activities in preparation for the implementation of emergency rescue and other urgent work are bringing the control bodies, forces and means to readiness; reconnaissance of the affected area and assessment of the current situation. Implementation of emergency rescue and other urgent work is the main task of the second stage of emergency response. Emergency rescue and other urgent work is carried out continuously with the necessary change of rescuers and liquidators and compliance with safety precautions and precautions.

Emergency rescue operations include searching for victims, extracting them from rubble, burning buildings, damaged vehicles, evacuating people from dangerous areas, providing victims with first medical and other types of assistance.

Other urgent work includes: localizing and extinguishing fires, clearing rubble, strengthening structures that threaten to collapse, restoring utility and energy networks, communication lines and roads to ensure emergency rescue operations, conducting sanitary treatment of people, decontamination, etc.

During emergency rescue and other urgent operations, all types of support are organized. At the third stage, the tasks of ensuring the vital activity of the population in the areas affected by an accident, catastrophe or natural disaster are solved. At the third stage, work begins to restore the functioning of national economic facilities. The occurrence of certain types of emergencies can be predicted in advance. In these cases, in accordance with the plans, measures are taken to protect the population, prevent or reduce the consequences of emergencies and prepare for emergency rescue and other urgent operations. In order to protect the population, the population is notified and informed of the danger; protective equipment is prepared; control systems and equipment are checked for readiness; personal protective equipment and medical prophylaxis are prepared for issue or issued to the population; sanitary and anti-epidemic measures are carried out; evacuation is prepared, and, if necessary, evacuation is carried out from areas and sections threatened by danger. In order to prepare for the implementation of emergency rescue and

other urgent work, the emergency rescue service and other forces are put on alert, and stockpiles of material resources are created.

When receiving data on the threat of an emergency, measures are taken to verify the accuracy of the data received.

When implementing measures to protect the population and conduct emergency rescue and other urgent work, the characteristics of the consequences arising from various types of emergencies must be taken into account. It is taken into account that the main consequence of a particular emergency may be accompanied by other types of consequences. In such cases, protective measures must be comprehensive, covering all conditions of the current situation.

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