#### **Management of Emergency Situations**



#### **Center for Management in Crises Times**





#### Categories of Substances and Compositions (Table

Category	<b>Critical Quantity Threshold (tons)</b>
1. Flammable gasses, including MNQ 1 a/	200
2. Flammable liquids 1b/	50000
3. Highly toxic substances 1c/	20
4. Toxic substances 1d/	500 — 200
5. Oxidizers 1e/	500 — 200
6. Explosive substances 1f/	200 — 50
7. Flammable liquids 1g/ (while used in conditions of specific pressure and temperature)	200
8. Substances posing threat to the environment 1h/	200

#### Specific substances (Table 2)

Substance	Critical Quantity Threshold (tons)
1. Ammonia	500
<b>-2a.</b> Ammonium nitrate 2/	2500
B Ammonium nitrate, as fertalizer 3/	10000
3. Acrylonitrile	200
4. Chlorine	25
5. Ethylene oxide	50
6. Hydrogen cyanide	20
7. Hydrogen fluoride	50
8. Hydrogen sulfide	50
9. Sulfur dioxide	250
10. Sulfur trioxide	75
11. Lead-alkali	50
12. Phosgene	0,75
13. Methyl isocyanate	0,15

### Types of hazardous activities and transboundary hazardous effects of such activities

	Title of the Type of Hazardous Activities	Hazard effects
1	Explosive and incendiary industry. Oil refining	Occurrence of oil products in transboundary water bodies is probable
2	Transportation of oil by pipeline	Occurrence of hydrocarbons in transboundary water bodies is probable
3	Transportation of gasby pipeline	Occurrence of natural gas in air with the emergence of an explosive environment
4	Organic synthesis (production of propylene oxide, simple polyesters)	Occurrence of synthesis products (hydrocarbons, chlorine, hydrogen chloride) in transboundary water bodies is probable
5	Explosive and incendiary industry. Production of ethylene, propylene, high pressure polyethylene	Occurrence of products of hydrocarbons refining in transboundary water bodies is probable
6	Explosive and incendiary industry. Production of isopropyl spirit, butadiene	Occurrence of synthesis products (sulphur dioxide) in transboundary water bodies is probable
7	Explosive and incendiary industry. Production of chlorine and caustic soda by mercury cell process, production of sulphur dioxide	Occurrence of synthesis products (sulphur dioxide) in transboundary water bodies is probable
8	Explosive and incendiary industry. Production of sulphuric acid	Occurrence of synthesis products (sulphur dioxide) in transboundary water bodies is probable
9	Explosive and incendiary industry. Aluminium production	Occurrence of hydrogen fluoride in transboundary water bodies is probable

#### **MINISTRY FOR EMERGENCY SITUATIONS**

- was established on 16 December 2005;
- protection of the public and significant facilities' infrastructure during emergency situations of natural and technogenic origin;
- ensuring safety of operations in industrial and construction sectors, control on the use of small vessels and inspection of mining operations;
- possesses large human and material resources for the elimination of effects of emergency situations;
- s cooperates with international organizations, particularly with NATO.

## Hazardous types of activities

Hazardous types of activities (title)	Type of activities or identified substances / substances categories listed in Appendix I to the Convention
Explosive and incendiary industry. Oil refining	Occurrence of oil products in transboundary water bodies is probable
Oil pipeline	Occurrence of hydrocarbons in transboundary water bodies is probable
Gas pipeline transportation	Occurrence of natural gas in air with the emergence of an explosive environment
Explosive and incendiary industry. Organic synthesis (production of propylene oxide, simple polyesters)	Occurrence of synthesis products (hydrocarbons, chlorine, hydrogen chloride) in transboundary water bodies is probable
Explosive and incendiary industry. Production of ethylene, propylene, high pressure polyethylene	Occurrence of products of hydrocarbons refining in transboundary water bodies is probable
Explosive and incendiary industry. Production of isopropyl spirit, butadiene	Occurrence of synthesis products (sulphur dioxide) in transboundary water bodies is probable
Explosive and incendiary industry. Production of chlorine and caustic soda by mercury cell process, production of sulphur dioxide	Occurrence of synthesis products (sulphur dioxide) in transboundary water bodies is probable
Explosive and incendiary industry. Production of sulphuric acid	Occurrence of synthesis products (sulphur dioxide) in transboundary water bodies is probable
Explosive and incendiary industry. Aluminium production	Occurrence of hydrogen fluoride in transboundary water bodies is probable

#### Measures aimed at ensuring preparedness to emergency situations and elimination of effects of industrial accidents

- With a view to preventing accidents at potentially hazardous industrial enterprises and ensuring prepared ness to localization and elimination of their effects the Law on Technical Safety has been adopted. A number of measures are carried out in compliance with this Law. Action Plans on the elimination of emergency situations of technogenic origin and protection of personnel from harmful effects of emergency situations were developed at all hazardous industries.
- State policy of the Republic of Azerbaijan in the area of industrial safety is aimed at the implementation of an optimal system reducing risks, preventing accidents at hazardous industries and ensuring preparedness of enterprises operating hazardous industries to the localization and elimination of their effects.
- It is stated in the resolution of the Cabinet of Ministers on State system for preventing and taking actions against emergency situations that in case of industrial accidents or its imminent threat the state ensues taking urgent adequate measures on the elimination of the effects by using the most effective methods of restraining the impact or reducing it to a minimum.
- With a view to unification of documentation Regulations on protection of export pipelines have been prepared and are now undergoing a process of approval. Internationally compliant Human Health and Safety Management System has been developed and is now at the phase of introduction.
- Law on Gas Supply has been adopted, Regulations on Protective Area and Gas Supply Safety Measures have been revised and approved. Safety Regulations on the Use of Main Gas Pipelines have also been developed and are now at the phase of approval.
- All the above documents are of instructive nature and ensure the maintenance of adequate preparedness to emergency situations for the purposes of elimination of industrial accidents' effects.

#### Measures aimed at the prevention of industrial accidents

- Organization and implementation of a country-wide state control on the compliance with safety requirements while using explosive and other hazardous and harmful facilities, industries and substances
- Investigation and analysis of causes of accidents occurrence, enhancement of state control on the compliance with requirements on safe operations
- Elaboration and implementation of measures on the prevention of accidents (in collaboration with regional and city municipalities, enterprises and organizations)
- Participation in the development of scientific-technical programmes on priority directions of safety in the industrial sector
- Control on the development and manufacturing of technical equipment, control and automation devices for potentially hazardous industries
- Control on the compliance with explosion safety requirements of technical processes, a state of equipping with systems of management and protection control
- Control on a timely inclusion of changes for safer operations into regulations and instructions regulating technical processes
- Control on the level of preparedness of enterprises and emergency agencies to the localization and elimination of potential accidents

#### List of licensed types of activities

- Transportation of hazardous cargoes
- Installation and use of natural and liquefied gas facilities
- Mining operations
- Installation, launch and repairs of energy equipment
- Manufacture, installation and repairs of lifting equipment, metallurgical equipment, reservoirs and chambers operating under pressure
- Diagnostics of equipment used at potentially hazardous facilities

#### Definition of «hazardous facilities»

Potentially hazardous facilities are those that deal with preparation, processing, transportation, use and eliminations of explosive, incendiary and poisonous substances, sources of radioactive ionized rays posing a threat to the public and the environment.

Types of control implemented by the State Agency on Control for Safe Industrial and Mining Operations of the Ministry for Emergency Situations of the Republic of Azerbaijan

- Inspection on Control for Safe Oil and Gas Industry Operations;
- Inspection of Control for Safe Use of Reservoirs, Lifting Equipment, Energy Installations;
- Inspection on Control for Safe Operations at Facilities of Natural and Liquefied Gas;
- Inspection on Protection of Subsoil and Mining Control;
- Inspection on Control for Safe Operations in Chemical, Oil and Chemical and Oil and Gas Refining Industries;
- Inspection on Control for Safe Operations in Cereals Processing Industries;
- Inspection on Control for Manufacture of Potentially Hazardous Equipment;
- Inspection on Control for Safe Metallurgical Industry Operations;
- Inspection on Control for Safe Transportation of Potentially Hazardous Cargos by Air and Sea;
- Inspection on Control for Transportation of Potentially Hazardous Cargos by Road Vehicles;
- Inspection on Control for Safe Technical Transport Installations Operations;
- Inspection on Control for Safe Transportation of Potentially Hazardous Cargos by Railway;
- Inspection on Control for Safe Operations at Main Pipelines;
- Inspection on Control for Radioactive Safety

#### **CHALLENGES**

- Lack of experience in management and actions in emergency situations in the country;
- Inability to coordinate actions of agencies eliminating effects of emergency situations from one center;
- Occurrence of complicated tectonic structures and a high probability of accidents of technogenic origin;
- Identification of types of hazardous activities;
- Solution of hazardous substances at industries;
- Improvement of the relevant legislation.

#### **PROSPECTS OF DEVELOPMENT**

- Enhancement of actions by governance bodies in emergency situations through the use of international experience;
- Enhancement of a system of the state governance to international standards;
- Prevention of a threat of terrorist actions, accidents of natural and technogenic origin in the country;
- Development of cooperation with NATO in planning and management of crises and emergency situations

# Preparation of mobilized forces

- At receiving an alarm on a threat of ES forces of SA carry out the following preparatory actions at places of their location:
- Verification of plans on bringing to readiness.
- Prepare themselves on the detachment to the target area.

Preparation of mobilized forces

- Submit applications for receiving materialtechnical (food and other) resources.
- Submit applications for transportation by railway, road and air.
- Determine the required quantity of technical, transport and material resources for carrying out rescue and other urgent actions.
- Prepare necessary documentation;

## Arrangements on advance protection of the public from ES

- Timely protection of the public from ES (TPES) is carried out with a view to ensuring a maximum life robustness of the targets and involved forces in conditions of occurrence and development of an emergency situation that might take occur at the covered area in peaceful and war times as well as timely forecasts of a threat of ES occurrence.
- Measures on timely protection represent a complex of organizational, engineering and technical actions aimed at ensuring a maximum life robustness of the targets and involved forces in conditions of occurrence and development of an emergency situation. Their content is determined by requirements of labor protection, safety, fire safety, rules of use of energy facilities, reservoirs under high pressure and so on.

