



INDUSTRIAL FIRES AND EXPLOSIONS

IN THE EVENT OF FIRES OR EXPLOSIONS OCCURRING IN INDUSTRIAL FACILITIES, PEOPLE ARE EXPOSED TO THE FOLLOWING DANGERS:

- shock and heat waves;
- the fire spreading to residential areas;
- combustion of various products;
- falling structural materials or machinery;
- low oxygen levels.

SAFETY MEASURES:

- build solid protective barriers which will hinder the spread of a fire;
- make sure that industrial plants which represent a potential fire or explosive risk are not located in or near built-up areas;
- create a permanent emergency team.



The most destructive fire ever to occur in an industrial plant occurred in the KamAZ enterprise. It destroyed over 420 thousand square metres of the factory.

Virtually every Russian city has one or more facilities which manufacture, store or transport explosive or highly flammable materials. Under certain conditions these substances are liable to explode or burst into flames. Such factories include oil and chemical processing plants, pipelines, oil storage tanks, gas stations, powdered

sugar factories, flour mills, wood processing plants etc. Fires and explosions occur most frequently at factories which use large quantities of gases such as methane, ethane and propane.



ACCIDENTS AT HYDRO-ELECTRIC POWER PLANTS



Water discharge at a dam



A dam represents a potential danger of flooding

Dangerous hydro-electric power plants require artificial dams, dykes and other hydro-electrical equipment.

SAFETY MEASURES:

- restrict the construction of dams in built-up areas which might be flooded in the event of a dam-burst;
- the erection of earth banks around built-up areas;
- the construction of reliable drainage canals and reinforcement of water reservoir walls;
- reinforcement and water insulation of buildings;

PROTECTIVE MEASURES:

- work out evacuation routes in advance;
- try to move to high ground;
- when the water begins retreating, stay clear of torn or hanging electric cables;
- drink only clean water;
- use only battery operated flashlights for illumination.



TRAFFIC ACCIDENTS



SAFETY MEASURES:

- both driver and passengers should tense up before impact;
- do not leave the vehicle before it has come to a complete stop;
- do everything possible to avoid a head-on collision;
- passengers should protect their heads with their arms and roll onto their sides;
- if there is a child in the car, hold it tightly to your body and roll onto your side;
- the driver should push his feet against the floor, hold tightly to the steering wheel and drop his chin onto his chest;
- stay calm and do your best to stay in control of the vehicle until it reaches a complete standstill;
- if the car is submerged by water – climb out through an open window;
- drivers and passengers will be up to three times more likely to be killed in a head-on collision if they do not have head-rests and seat-belts, and are five times more likely to be killed without them if the car overturns.

Every year the number of cars in cities is growing. The main causes of traffic accidents are the violation of traffic regulations; speeding; drunk driving and poorly maintained cars and roads.

All of these reasons lead to a rising number of road accidents and increased road fatalities.