

KAUNAS UNIVERSITY OF TECHNOLOGY

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APPROVED BY
Kaunas University of Technology
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INTRODUCTORY INSTRUCTION FOR CIVIL PROTECTION

I. GENERAL INFORMATION

1. Introductory instruction – primary provision of minimum knowledge of civil protection to every employee at the time of employment.
2. Measures of civil protection are mandatory to all institutions of public administration and municipal authorities, all entities and non-governmental organisations and all citizens.
3. Organisation of civil protection is based on Law on Civil Protection of the Republic of Lithuania. Law on Civil Protection of the Republic of Lithuania establishes the principles for management and performance of the system of civil protection of the Republic of Lithuania and its legal basis, competence of state institutions and offices, rights and duties of entities, institutions and citizens in terms of organisation of civil protection.

II. MAIN DEFINITIONS

4. **Civil protection** – activity, which includes preparation of citizens, entities, state and municipal authorities and institutions, other legal persons for emergencies, their actions in case of emergencies and elimination of their aftereffects, use of all state resources for survival of citizens, sustenance of vitality of country's economy, protection of property and environment from the effect of present emergency, with active participation of citizens in these processes.
5. **Emergency** – situation formed due to extreme event or terrorist attack, which can cause a sudden and high risk to life or health of citizens, their personal property, environment or cause death, injuries of citizens or damage.
According to the reasons of their infliction, emergencies can be: natural, technical, ecological, social, etc.
6. **Extreme event** – event of natural, technical, ecological or social nature, which reaches or exceeds determined criteria and causes risk to people, physiological or social conditions of their lives, their property, economy or environment.

III. WARNING AND NOTIFICATION OF CITIZENS

7. The following measures are used for warning and notification of citizens in case of emergency:
 - electric sirens;
 - state and territorial radio, television, Internet and other media;
 - special cars with equipment for sound amplification-transmission;
 - audible signal means used at the entities and institutions;
 - audible signal means for means of transportation;
 - means for telephone and radio communication;
 - messengers.

8. In case of disaster University's employees and students are warned and notified by telephones (landlines and mobile telephones), Internet, email, electrical calls, via press and messengers.

IV. SIGNALS OF CIVIL PROTECTION

9. For simplification of the emergency notification Government of the Republic of Lithuania approved eight signals of civil protection:

9.1. **"Attention everybody!"**. It is a warning audible signal, which is made by turning on electric sirens, audible signals of companies, locomotives, special cars and other signal means. It warns that people must turn on their radios and television receivers. There will be a signal of civil protection or a verbal message about the present emergency, containing specific instruction how to act. This signal can be announced in case of any danger.

9.2. **When citizens hear howling sirens, they must:**

- turn on their radio sets, radio receivers (1st and 2nd Lithuanian radio programs, radio station "Pūkas"), televisions and keep them on constantly;
- listen to the announcement about the event and act according to instructions and recommendations;
- inform their neighbours and co-workers about the announcement they heard.

9.3. **"Radiation risk!"**. This signal informs about direct risk of radioactive contamination or about contamination. The most possible risk of such contamination can occur after the accident at Ignalina NPP or in the NPP, which are close to Lithuania.

9.3. **"Chemical risk!"**. This signal informs about direct risk of chemical contamination or about contamination.

9.4. **"Hurricane risk!"** This signal informs about the risk of extreme hydro meteorological phenomenon.

9.5. **"Flood risk!"** This signal informs about the risk of flood, when level of the water in the rivers reaches a dangerous limit due to thaw or intense rainfalls.

9.6. **"Catastrophic flooding!"**. This signal informs about the risk of catastrophic flooding due to the accident at Kaunas HPP dam. KTU premises and other buildings, located in the city centre, are in the flooding zone.

9.7. **"Air risk!"** This signal informs about the risk of direct attack by the enemy.

9.8. **"Revocation of air risk"**. This signal informs that the risk of direct attack by the enemy has passed. When people hear this signal, they leave shelters and hiding places, and go back to their working (residence) places.

V. PROTECTION MEASURES FOR CITIZENS

10. **Protection measures** – all personal, collective and administrative measures, aimed for prevention or reduction of harmful effect of emergency to persons, economy, property and environment.

11. **Individual protection measures**. They are used for individual protection of people from negative effect of toxic, radioactive or biological substances. They are divided into measures for respiratory and skin protection. Respiratory protection measures are insulating and filtrating. Insulating measures use air or oxygen, clean pressured or transferred through hose from another premises.

In case filtrating respirators are used, inhaled air is cleaned (filtrated) in the filtration boxes. Those measures are used only in cases when there is no less than 18% of oxygen in the air. Skin protection consists of various insulating costumes and footwear, but clothes also make a partial protection, particularly if they are made of waterproof material.

12. **Collective protection measures** – special buildings (typical shelters) and other buildings (residential or working premises, basements, underground passages, tunnels), which can be used for protection of people, when prepared properly. There are 4 types of shelters in

Lithuania, protecting from: effect of radiation (SJ); chemical substances and radiation (SJCh); radiation and avalanches (SJG); radiation, chemical substances and avalanches (SJChG). It is not recommended to hide in the shelter for more than two days.

Citizens can hide in their homes, basements, if they insulate premises in advance: plug ventilation openings, seal windows and doors with spacer tape.

KTU has two shelters of SJChG type. One shelter is located in the premises of the basement at the Faculty of Chemistry (Radvilėnų pl. 19); other shelter is located in the basement of privatized dormitory (Mickevičiaus str. 39). If needed, basements of chambers and dormitories would be used for hiding of employees.

13. **Administrative protection measures** – quarantine, treatment and vaccination, decontamination of the environment.

VI. POSSIBLE CONSEQUENCES OF EMERGENCIES AND ACTION OF EMPLOYEES

14. **Fire.** This is one of the most common emergencies. The main criteria for assessment of the fire - its intensity, scale and speed of spreading.

14.1. Main consequences:

- destructive effect to people and tangibles;
- when not stopped, it can spread.

14.2. Dangerous factors:

- high temperature and flame;
- high temperature, smoke, carbon monoxide (fumes), lack of oxygen;
- collapse of buildings, equipment, trees.

Each fire starts from ignition, which can be liquidated by one person. Measures for extinguishing: hand held fire extinguishers, water, sand, tree branches, outer clothes, tarpaulin or other covers.

14.3. Actions in case of fire:

- call fire extinguishers by emergency phone **112**;
- organize evacuation of students and employees to the non-hazardous place;
- try to extinguish the seat of fire; plug off electrical devices and throw out burning things. Not break glasses of windows and doors, because additional oxygen increases fire.
- be careful while extinguishing televisions, computers, refrigerators, because toxic substances are emitted while burning.
- go through the burning premises with all body covered by wet blanket, thick material or outer clothes. It is best to go through smoke bent or even crawl.
- while looking for the injured persons, it is important to remember that when children are scared, they hide under the bed, in the closet, in the corner or other places.
- it is not allowed to extinguish petrol, kerosene, organic oil and solvent electrical installations using water. Burning electrical installation can be extinguished only after making sure that power supply is disconnected.
- it is necessary to avoid cut off and burnt electrical wires, places where inflammable, explosive and toxic substances are kept.

15. **Contamination of the territory by hazardous substances.** Hazardous substances are the ones, which contaminate air, soil or water and cause risk to the person's health or life in case they get into the atmosphere in the form of smoke, gas or liquid. Contamination of the territory by hazardous substances is possible after industrial accidents at the companies or accidents on roads and railroads during transportation of hazardous substances.

15.1. Main consequences:

- pollution of environment's air;
- water pollution;
- pollution of soil and flora;
- people poisoning by hazardous substances;

- possible explosion or ignition;
- possible fatal human cases.

15.2. **Dangerous factors:**

- destructive effect of chemical substance;
- lack of oxygen;
- wave of explosion.

15.3. **Main protection measures from hazardous substances:**

- restriction of presence of citizens in the contaminated zone, temporarily hiding in the shelters and sealed premises (when smoke or gas is lighter than air or path of toxic cloud prevents evacuation);
 - protection of respiratory organs and skin by personal protection measures;
 - provision of medical aid to the injured;
 - evacuation or eviction of citizens from the dangerous zone;
 - restriction or prohibition to use contaminated foods and their destruction;
 - protection of drinking water from direct effect of hazardous substances.

15.4. **Actions in case of chemical accident:**

- after hearing sirens stop working and act according to the manager's instructions;
- warn colleagues about the danger;
- turn off energy supply, turn off water, gas, close windows and ventilation openings;
- put on personal protection measures;
- hide in the shelter or other premises provided and adapted for protection;
- evacuate under the manager's instruction.

15.5. It is forbidden to take off protection measures, smoke, eat and drink in the contaminated territory. It is possible to protect oneself from ammonia smoke, which effect is short-term, in the premises (preferably, on lower floors) by sealing them. It is not possible to hide from chlorine in the lower places, because its effect lasts longer there.

16. Radioactive contamination. People are constantly exposed to ionizing radiation. We do not feel, hear or smell the effect of radiation, but it has a very significant effect on living organisms. Risk of radiation can occur after the accident at Ignalina NPP or in the NPP, which are close to Lithuania.

16.1. **Main consequences:**

- external irradiance from passing radioactive cloud;
- internal irradiance by inhaling radioactive aerosols;
- irradiance, when radionuclides get on open skin;
- external irradiation, when radionuclides fall on the surface of earth and objects of environment;
- internal irradiation due to the use of contaminated food and drinking water.

16.2. **Hazardous factors:**

- damaging effect of ionizing radiation.

16.3. **Actions in case there is a risk of radioactive contamination:**

- preparation of premises (shelters, basements, cabinets) for hiding of people;
- preparation of reserves of food and water;
- inspection of ventilation and sanitary units;
- maintenance of television and radio receivers.

16.4. **Actions in case of radioactive contamination:**

- avoid being in the open place, hide in sealed premises;
- use preparations of stable iodine;
- use personal protection measures;
- do not use contaminated food;
- medical aid;
- evacuation, if needed;
- deactivation of clothes.

16.5. After the instruction to evacuate:

- turn off the electricity, gas, water, heating devices, lock the premises;
- dress themselves and dress their children in synthetic raincoats, coats of polyethylene film, overalls, leather or rubber footwear, cap;
- take personal protection measures, documents, valuables, money, toiletries, reserves of food and clothes.

17. Hazardous hydro meteorological phenomena: The most common hydro meteorological phenomena: hurricane, tornado, freezing rain, heavy rain, flood, thick fog, etc. These emergencies cannot be controlled, but their occurrence, their nature, scale, intensity, and direction can be forecasted. Approach of threat is announced on radio and television.

17.1. Main consequences:

- provocation of other complicated situations;
- demolition or damage of buildings;
- injuries of people of fatal cases;
- impeded or impossible conditions for transportation movement;
- disruptions of electricity, water, heating and gas supply;
- disruptions of provision of communication services.

17.2. Hazardous factors:

- destructive power of the phenomenon;
- fallen trees, buildings, falling things;
- high or low temperature;
- reduced visibility, etc.

17.3. Actions:

- after hearing a notification, inform managers and co-workers;
- cancel trips to nature, package tours and immediately inform those, who have already left;
- terminate works on roofs, high-rise constructions, stop other works outside;
- terminate works inside buildings due to possible electricity disruptions;
- when leaving premises, close the windows and lock the doors.

If hurricane caught you outside, hide in the stairways of the closest houses and other hiding places. It is not allowed to stay outside, because cover of the ripped roof or things carried by the wind can cause injuries. If there is thunder and lightning, it is prohibited to hide under isolated trees and close to electricity lines.

17.4. Actions in case of the risk of flood:

- turn off electricity, close the windows, lock the premises;
- take the documents, valuables, money, reserves of food and clothes;
- at work take documentation, computers and other valuable things to the upper floors;
- evacuate from the flooded territory.

17.5. Actions in case of the risk of catastrophic flood:

- immediately evacuate from the flooded places;
- if you failed to evacuate on time, go to the upper floors or on the roof and wait for the rescuers.

If you have time:

- turn off electricity, close the windows, lock the premises;
- take the documents, animals, valuables, money, reserves of food and clothes;
- at work take documentation, computers and other valuable things to the upper floors. Disconnect supply of water, electricity, gas and heating to the buildings.

18. Air risk. After hearing this announcement:

- leave the residential building, office building as soon as possible; hide in the shelter of civil protection, other hiding place. It is possible to hide in the tunnels, underground passages, roadside ditches, other excavations, behind low brick walls.

- before leaving turn off the gas, electrical devices, take the documents, money, valuables, personal protection measures, first aid kit.

19. Earthquake.

19.1. Main consequences:

- damaging effect to people and tangibles;
- phenomenon is unpredictable and cannot be forecasted.

19.2. Dangerous factors:

- destructive force of the phenomenon (fluctuation of the surface of the earth);
- fallen buildings, trees, falling things.

19.3. Actions:

- leave the building immediately;
- do not use lifts;
- if you failed to leave on time, hide in-between the doors and in the corridors;
- try to avoid falling bricks, plaster and other things;
- remain calm and reassure others;
- in case the building fell, provide help to the injured and call the ambulance;
- in case there is fire or other emergency, call emergency services;
- prepare for repeated impacts.

20. **In case of epidemic and epizootic** it is mandatory to observe strict quarantine, restrictions and requirements of personal hygiene, imposed by Public Health Centre and Food and Veterinary Service.

21. **In case dangerous findings are detected**, do not touch them, do not allow others to touch them, immediately inform the police.

VII. EVACUATION PROCEDURE

22. Taking into consideration the scale of emergency and its danger to the citizens, decisions regarding evacuation of citizens are made by chiefs of district, mayor of the city's municipality and managers of entities, State Fire and Rescue Service, police officers.

23. After instruction to evacuate, University's employees must:

- take their personal protection measures, documents, valuables, money, toiletries, reserves of food and clothes;
- turn off the electricity, gas, water, heating devices, lock the premises;
- when Head of Department is leaving the premises, he/she must make sure that all employees have left;
- employees go to the specified collection places (points) by specified routes;
- from collection points employees go to a non-hazardous place on foot or by transport in an organized manner.

VIII. MANAGEMENT OF CIVIL PROTECTION AT THE UNIVERSITY

24. For insurance of preparedness for emergencies and successful management of liquidation of the aftereffects of emergency, Centre for Management of Emergencies is established in KTU and approved by the Rector's order. It is led by chairman of Centre for Management of Emergencies – Vice-Rector for Infrastructure. A person responsible for civil protection is appointed at the University. Head of Department or persons appointed by the Head of Department are responsible for civil protection at every Department.

IX. RIGHTS AND DUTIES OF KTU EMPLOYEES IN TERMS OF CIVIL PROTECTION

25. **Employees' duties in terms of civil protection:**

25.1. to comply with requirements of the legislation regulating civil protection and civil protection legal acts;

25.2. to honestly perform the duties assigned to them in the area of civil protection;

25.3. to know civil protection signals and how to act when they are heard;

25.4. to be able to use personal and collective protection measures, to preserve them.

25.5. to know how to provide medical aid to themselves and other injured persons during accident or disaster;

25.6. to inform civil protection and rescue services about the present emergency or the risk of such situation;

25.7. to perform instructions of civil protection officers and actively participate in liquidation of the aftereffects of emergencies, to protect people's health, to save property and to maintain order in the place of disaster;

25.8. to transfer emergency information about accidents, catastrophes, approaching or occurred disasters to the closest neighbours. To help old people, disabled, children, who are left at home alone, and patients.

26. In case of emergency or risk employees have a right to:

26.1. receive information about present or possible danger;

26.2. protection of life and health;

26.3. receive material and financial support.

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